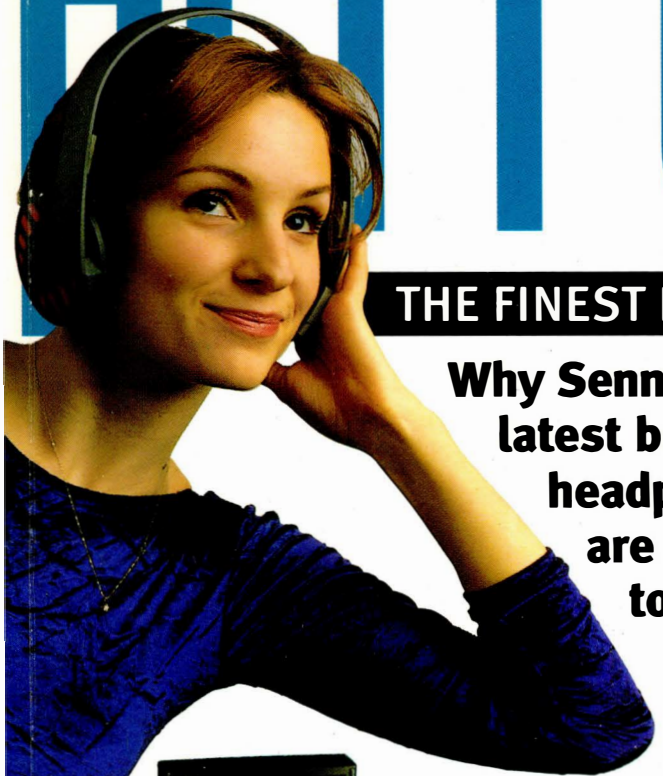


WIN! WIN! GREAT PRIZES! ORELLE HI-FI WORTH £3,000! WIN! WIN!

HI-FI CHOICE

THE FINEST HI-FI MAGAZINE IN THE WORLD



Why Sennheiser's latest budget headphones are the ones to beat, page 65

CD-R vs MD vs DCC vs Super DAT

Our experts tell you the best new digital recorder to buy, page 58



Home cinema made easy — Toshiba's Dolby Pro Logic TV on test



TESTED: 8 TOP CD COMBOS

We pick the best two-box CD players



AUGUST 1994 £2.95 US \$6.95

EXCLUSIVE

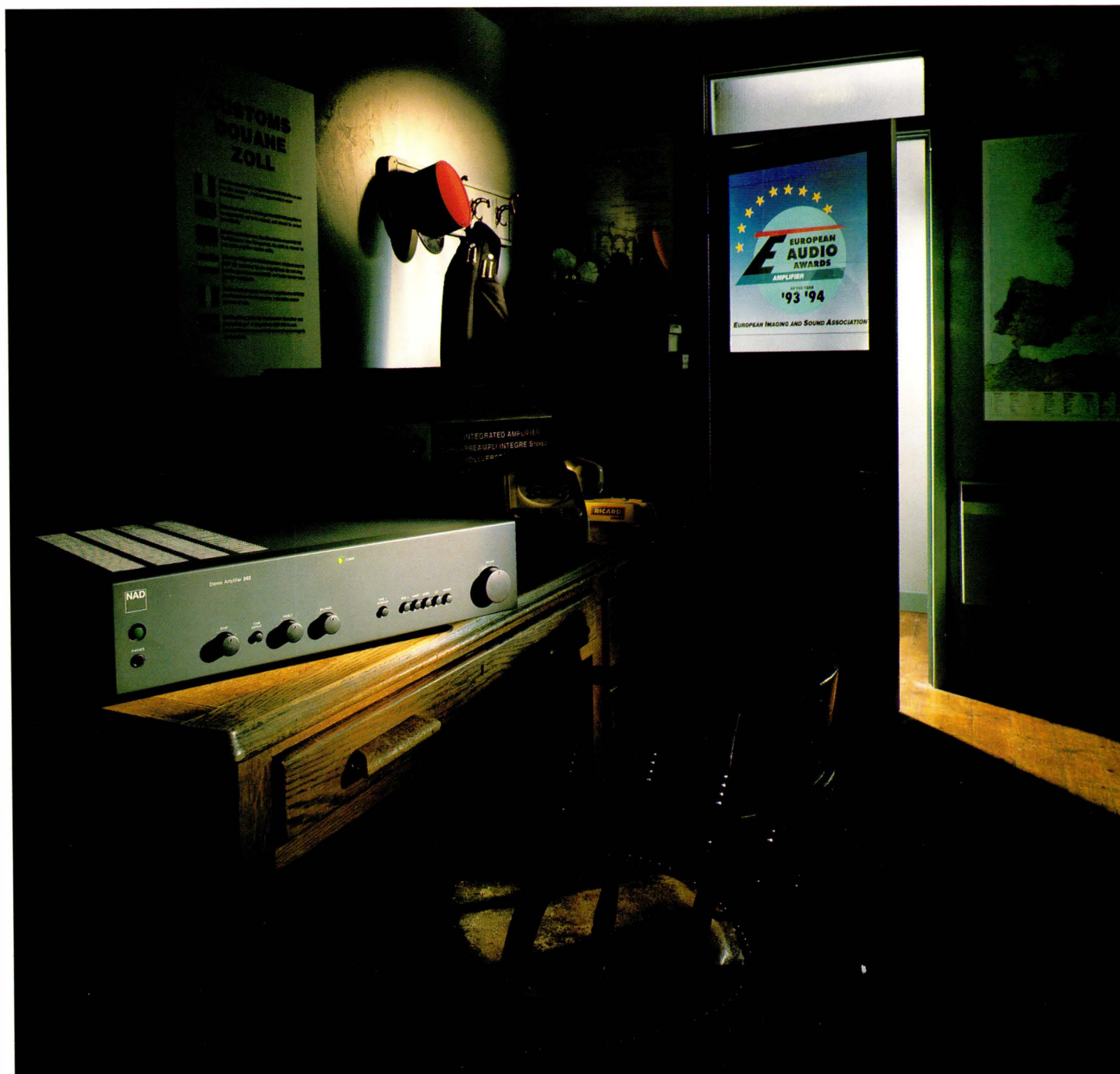
We take Sony's 100 disc CD changer for a spin



Comprehensive listing of over 3,000 products **800 models tested and rated** **32 pages of specifications and data, see page 87**



D E S E R V E S
C L O S E R I N S P E C T I O N



NAD 302. European Amplifier of the Year '93-'94

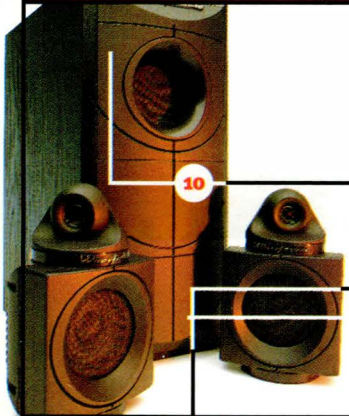
“An amazing design which can bring true Hi-Fi performance to those unable, or unwilling, to spend a fortune.”



BRITISH BY DESIGN

CONTENTS

August 1994 No. 133



THE FRONT END

4 Update

Read all about it! All that's new in the world of hi-fi.

10 Sessions

A stonking line-up; something for all from tellies to speakers.

18 Statements

£6,000 Tannoy Studio Monitors and a shiny amp from Musical Fidelity.

23 Help!

In need of assistance? We offer a light at the end of the tunnel.

29 Write On

Rant, rave and look extremely groovy in a *Choice* sweatshirt.

32 Aspirations

Blumlein heck! We visit the son of the father of stereo.

38 Competition

Prize possessions — £3,000 of Orelle hi-fi up for grabs.

COLUMNS

2 Edit Point

Simon's last stand and a Chinese *Choice*.

31 21st Century Fox

Frank and to the point, Barry says what he thinks.

152 Personal Messages

Paul falls in love — looks like there's a new Audiolab amp.

THE REVIEWS

44 Two-box CD players

Paul Miller looks at the latest summer combinations.

58 Digital Recorders

The digital formats line up for a critical comparison.

65 Headphones

Alvin does the can-cans again.

CHOICE MATTERS

37 Coming Up

An action-packed September issue. You shall have music where ever you go.

41 Subscriptions

Get *Choice* on your mat.

81 Reader Classifieds

A chokka page of small ads.

82 Reader Offers

Quality bits and bobs to buy.

BUYER'S GUIDE

87 The Hi-Fi Choice Buyer's Guide

If its hi-fi and it's in the shops, it's here. The most comprehensive guide you can buy.

123 The Hi-Fi Choice Directory

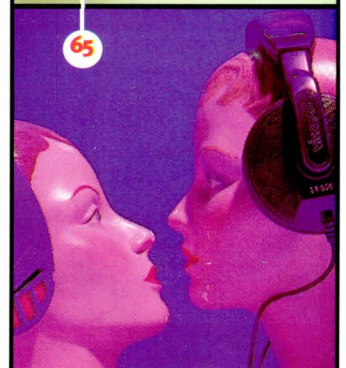
All products previously tested by *Choice* and still current appear here.

Best Buys and Recommendeds

Products that make the grade are awarded *Hi-Fi Choice's* unique Best Buy or Recommended accolades. This sets them apart as being capable of a higher standard of fidelity than average at a particular price.

A product carrying the **Best Buy** swing tag is significantly better than the alternatives in its price band. It is of excellent quality and very good value for money. Watch out for this logo. It is your guarantee of quality.

Recommended products are also very good, but not quite in the same league as Best Buys. Despite being runners up, they are definitely worth considering, as they may prove more compatible in some systems.





ISSUE 133 AUGUST 1994

EDITORIAL

FAX: 071-323 3547

Editor Simon Davies

Consultant Editor Paul Messenger

Art Editor Asim Syed

Deputy Editor Jason Kennedy

Production Editor Lisa Nickson

Reviews Editor Alan Sircom

Contributors Richard Black, Paul Fisher,

Barry Fox, Alvin Gold, Jimmy Hughes,

Paul Miller, Rob Tribe.

Photography Chris Richardson

ADVERTISING

TEL: 071-631 1433 FAX: 071-636 1640

Group Advertisement Manager Phil Jennings

Advertisement Manager Rob Debenham

Sales Executives Marcella Smith, Jennifer Phillips

PRODUCTION

TEL: 071-631 1433 FAX: 071-580 6430

Group Production Manager Simon Maggs

Deputy Group Production Manager Mike Robinson

Advertisement Production Robin Ryan

CIRCULATION & PROMOTIONS

TEL: 071-631 1433 FAX: 071-636 5668

Circulation Director Sean Farmer

Circulation Manager James Burnay

Mail Order Manager Julia French

Marketing Manager Paula Nulty

Publisher Andy Benham

DENNIS PUBLISHING LTD

Publishing Director Bruce Sawford

Managing Director Alistair Ramsay

Chairman Felix Dennis

Published by Dennis Publishing Ltd, 19 Bolsover Street,

London W1P 7HJ. Tel: 071-631 1433

Company registered in England.

Origination by those nice people at Graphic Ideas Studios.

Printing by Riverside Press, St Ives Plc.

Distribution by SM Magazine Distribution,

6 Leigham Court Road, Streatham, London SW16 2PG.

Tel: 081 677 8111



A DENNIS PUBLICATION

PRODUCTS AND EDITORIAL SUBMISSIONS

Hi-Fi Choice welcomes all information on new and upgraded products and services, for possible coverage within the news and reviews pages. However, the publisher respectfully points out that the magazine is not obliged to either review or return unsolicited products. The editor is always pleased to receive ideas for articles, preferably sent first in outline form, with details of the author's background, and - where possible - samples of previously published work. He cannot, however, accept responsibility for unsolicited copy and would like to point out that it may take time for a reply to be sent.

PERMISSIONS & REPRINTS

Material in Hi-Fi Choice may not be reproduced in any form without the written permission of the publisher. Please address any such requests for re-use of copyright material to Andy Benham, 19 Bolsover Street, London W1P 7HJ.

SUBSCRIPTION ENQUIRIES

Hi-Fi Choice is available on subscription. The standard rates are (UK) £25.00 (1yr), £42.50 (2yr); rest of Europe £30.00 (1yr), £68.00 (2yr); rest of world £51.50 (1yr), £84.50 (2yr). Please address all subscription enquiries to Hi-Fi Choice Subscriptions, Tower House, Sovereign Park, Market Harborough, Leicestershire LE16 9EF, or telephone (0858) 468888. Back issues of the magazine are also available. Please refer to page 85 for full details of how to obtain copies

THE GET OUT CLAUSE

While every care has been taken in the preparation of this journal, the publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from it. Readers should note that all judgements have been made in the context of equipment available to Hi-Fi Choice at the time of review, and that 'value for money' comments are based on UK prices at the time of review, which are subject to fluctuation and are only applicable to the UK market.

This edition © 1994 Felden Productions, ISSN 0955 111 5. Member of the Audit Bureau of Circulation.

HI-FI CHOICE

EDIT POINT

Clearly, a better Choice

After over a year in the hot seat, the time has come for me to hand over the reigns of *Hi-Fi Choice* to my colleague on *Home Entertainment*, Stan Vincent, as I move on to pastures new.

The past 14 months have seen some remarkable developments in the world of hi-fi. Top quality separates have become ever more affordable, while the movement towards better home-cinema systems has led to many specialist hi-fi companies entering the arena and broadening both the quality and scope of combined hi-fi and audiovisual products.

We have also seen the coming of age of MiniDisc with the second generation players from Sony (see page 58 for a full test of Sony's new full size domestic machine pitched against its digital competition), while both Pioneer and Matsushita (Panasonic/Technics) are talking about the possibility of a 'super' CD format to extend the performance envelope of replay-only CD systems.

The development of new technologies has stimulated interest in hi-fi not only in the UK (the circulation of *Hi-Fi Choice* has risen to an all-time high of 30,048 copies per month for the period July to December 1993) but also in the emerging markets of the Far East. To cater for this new market, the first Chinese edition of *Hi-Fi Choice* has just been published, bringing the acknowledged strengths of the *Choice* test procedure to a population eager for fair and impartial buying advice.

The publishers of *Hi-Fi Choice* (China) were hugely impressed by our blend of solid technical testing allied to independent subjective assessments of hi-fi components by a totally impartial 'blind' listening panel. They quickly recognised the strength of this

formulation, and we are happy to supply them with our findings for hi-fi enthusiasts in the emerging markets of China and the Far East.

We are also happy to supply them with solid buying advice that is often unavailable elsewhere. Our loudspeaker cable supplement given away free with this edition of *Choice* is a case in point. We never lose sight of the fact that quality hi-fi is as much a matter of getting the little points right as choosing the best kit.

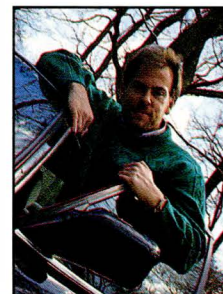
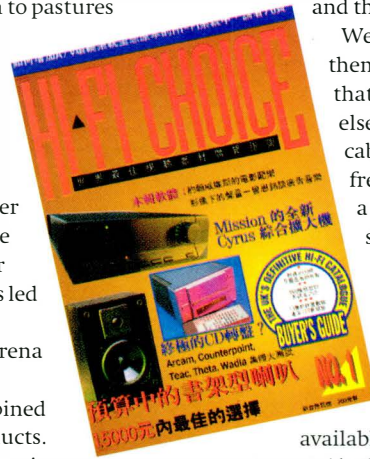
Speaker cables are vital to the well-being of any hi-fi system but the choice available is quite bewildering. Enter *Cable Choice*. This handy pocket-sized guide to the best speaker cables on the market offers invaluable advice to anyone trying to improve the sound of their system without

changing major components. Whether you are upgrading from supplied cables or changing add-on cables that have outlived their usefulness, this is the guide you need.

Whatever the subject matter, let *Hi-Fi Choice* be your guide to better sound. Our experts are music enthusiasts first and foremost and recognise that, whatever

the budget, *Choice* readers are looking for reliable and consistent advice. That policy will continue and develop under Stan and the *Choice* team, making this magazine the publication for music lovers who care about quality. It's been a great year and it's going to get better.

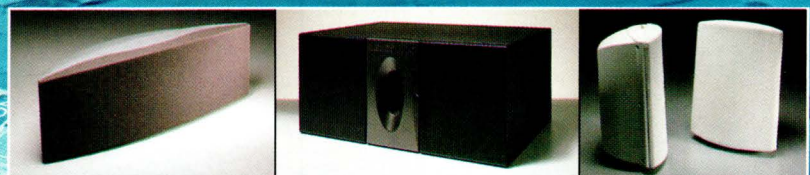
Simon Davies



MUCH MORE THAN YOU BELIEVE

The dynamic new AV speaker series from Celestion is, literally, unbelievable.

The 'Little 1' surround speaker, 'Centre 2' centre channel speaker and 'CSW powered subwoofer' are the obvious speaker choice for those who demand hi-fi speaker performance and are passionate about design and style. Each model a masterpiece. Together much more than you'll believe.



CELESTION
CINEMAstyle

For further information and your nearest stockist call Celestion on 0473 723131

UPDATE

Choice news from around the world

Go with Goertz

The unique Goertz cable from America is now available in the UK. The importer, Townshend Audio, claims this impedance-matched cable will transform even the most humble

Goertz, it's terephthalate tastic dude.

hi-fi system. Goertz cable is designed to be impedance matched to the loudspeaker. Unlike typical cables whose impedances vary between 60ohms and 470ohms, Goertz claims an impedance of four ohms.

According to transmission line theory, if there is a dramatic impedance mis-match at the termination of a speaker cable, the signal will reflect back upon itself. Popular audio opinion is that this theory has never been significant at audio frequencies; however, Townshend suggests that the sound of Goertz proves otherwise.

Goertz is made from two solid ribbon conductors, each jacketed in a polyester terephthalate dielectric. These are sandwiched together and sheathed in Lexan. Goertz is available in two sizes: 10mm by 1mm *MI 1* and 20mm by 1mm *MI 2*. *MI 1* costs £20/m and *MI 2* is £40/m in copper, while the silver versions cost £256 and £475 per metre respectively.

Because such a low impedance results in a highly capacitive cable those with Naim amplifiers, or other designs that find high capacitance cables problematic, such as will need to use a termination unit, (an additional £87).

☎ (0784) 455866

Roll out the Technics'

Following on from last month's cassette and CD multi-changer announcements, Technics is launching another truck-load of new hi-fi components in time for the Autumn.

DCC is still in the frame, with the new £400 *RS-DC8* home deck plus a £1000 *SC-CH909D* component mini system. There's also a strikingly elegant slimline 'lifestyle' type audio system which is unusual in incorporating a completely new kind of signal source. A built-in ROM memory replays various sound effects, simulating the background sounds of beach, babbling brook or forest environments. Instant ambient house or what!

The *SL-PG360A* and *SL-PG560A* are full-feature budget CD players at £140 and £180 respectively. The *SL-PG360A* is a 'player on a chip' design, a cost saving

feature that's claimed to enhance sound quality. The *SL-PG560A* has a four-DAC MASH converter and full remote control plus shuttle search.

There are two new budget amplifiers, the 40W £150 *SU-V300* for hands-on use and the 50W £180 *SU-V500* with remote volume control and input selection. Both are full feature devices with Technics' 'New Class A' circuitry.

The *ST-G350* is the new £140 budget tuner. It can memorise 30 stations across FM and AM bands, has a rotary style tuning knob, and may be remotely controlled if used with the *V500* amp. ☎ (0344) 862444

The *RS-DC8* incorporates Super-Advanced MASH D/A conversion and a new tape transport mechanism to get the best from your DCCs.



What an Arion

Eos and *Elektra* (no relation to Musical Fidelity's namesake) are the first two valve amps from Northern Ireland-based manufacturer Arion Acoustics, priced at £899 and £999 respectively. The *Eos* is a power amp with volume control and the *Elektra* is a line-level integrated amp. Both are rated at 18W/channel, use 5881 pentode output valves and are built with top quality components such as Audio Note-designed transformers and Rhodestein capacitors. There's also a mains filter, the £125 Titan, plus a range of cables.

☎ (0868) 748632

Arion's chunky *Eos* power amp has a volume control for single input purists.



ATC's heavyweight

Speaker builder ATC, practitioner in both hi-fi and pro-audio, has pre-sold a number of its new giant studio/domestic monitors (no home should be without a pair — Dep Ed), before production is properly under way.

The *SCM200* and *SCM300* have been available with an electronic crossover for some years. Now the full active drive packages are being introduced, at £10,995 and £11,995 respectively, each with four power amplifiers delivering 850W per channel. Combine this with equivalent sensitivities of 91dB/W and 94dB/W and we're talking seriously realistic loudness levels.

Twin 12in/15in bass drivers are loaded by massive and capacious 'soffit' style (for studios) ported enclosures.

☎ (0285) 760561



ATC *SCM-300*: just how big are your bookshelves?

Pioneer fits Dolby S on five new decks

Five out of a total of seven new Pioneer cassette decks now feature Dolby S, the latest high performance noise reduction system.

The two least expensive models don't qualify for the S treatment, but the £170 *CT-S330* single and £180 *CT-W503R* twin decks are still well supplied with useful features.

But the real S-type price-buster is the £199.95 *CT-S430S*, which brings Dolby S-type noise reduction to the sub-£200 sector for



Pioneer brings Dolby S to the masses with low-cost recorders and high-end machines in five of its septet of new analogue cassette recorders.

the first time. Cassette dubbers can also now enjoy low noise recordings at a modest price too, with the £230 *CT-W603RS* twin deck machine.

Moving up to £300 brings some enticing extra features in both single and twin deck configurations. The *CT-S630S* single deck has a three-head transport for instant off-tape monitoring, whereas the *CT-W603RS* twin features

remote control operation.

Finally, the £500 *CT-S830S* incorporates many of the top features previously

only found in the ongoing flagship *CT-95*, yet costs only half the price of that model.

☎ (0753) 789500

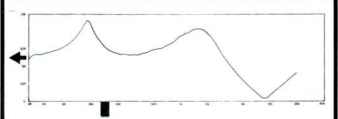
IN BRIEF

Platform 7 is the curious name of a Wembley-based company which is launching an isolation platform called — you've guessed it — Platform 7. Made from marble composite, it weighs 10-12kg, costs less than £50 and is intended to substitute for the top boards in equipment supports, providing extra immunity from vibration. And of course it's green.

☎ 081 904 2646

Gremlins infected our review make-up last month (issue 132), causing the wrong impedance graph (but the correct caption) to appear on our review of the **Impulse H6**. The correct graph is shown below.

☎ 081 769 5726



Breaking with its *Hardcore* solid-core tradition, **Path Premier** is adding new *Superstrand* multi-conductor speaker cables to the popular *IXOS* range.

At £1.99/m, *Superstrand 603* is a two-conductor flat profile cable, while the £5/m *Superstrand 604* carries four conductors (for bi-wiring), all housed within a round-section sheath.

☎ (0494) 441736

Quantum Audio has begun manufacturing the £900 *Minstrel* amplifier, a hybrid valve/transistor, line-level integrated, zero feedback design which has classically simple lines but top quality components and finish. The ultra-linear valve output delivers 20W (8ohms) when fitted with 6L6 valves, and 30W using EL34s.

☎ (0563) 71122

Maxell is launching a new range of DAT (digital audio tape) tapes featuring an improved hub lock mechanism, and anticipates adding the first ever three hour running time tape (*DAT 180*) soon.

☎ (0923) 777171

Hama has two new ranges of headphones, priced from £1.99 up to £34.99, the budget *Star Line* being ultra-lightweight designs ideal for portable applications.

The more expensive *Studio Line* are bulkier but have extra foam cushioning — just like the L'Oréal hairdressing namesake. Also new, the £12.99 *MB 20* pocket-size mini-speakers are intended for connection to personal stereos, and hence are fitted with jack sockets.

☎ (0256) 708110

Baby boomer

Mordaunt-Short's award winning *MS10* loudspeaker now has a baby brother: the £109.99 *MS05*. Described as an ultra compact design, the *MS05* consists of a 100mm MCS (moulded cone and surround) mid/bass unit and a 10mm tweeter, mounted on an injection moulded baffle.

A reflex design, the *MS05* has front firing ports which means that it is suitable for wall or shelf mounting. Among the speaker's key features are the use of a minimalist first order crossover, a phase plug where a dust cap would normally be colouring the aural picture, and last but not most important a claimed 'design focus' on musical performance.

The *MS05* was created with the aid of CAD (computer aided design) and 'many hours of critical listening'. ☎ (0705) 407722

Are small ones really more juicy? Just ask Mordaunt-Short.



The latest Thule kit — Danish amps and DACs from Essex.

Power Thule

Europe is a big place, so it's never surprising to learn of a new Continental brand making a play for the UK.

Essex-based Virtual Reality Audio Systems is distributing the Danish Thule (pronounced Tooler) range of mid-priced electronics, and *Hi-Fi Choice* has already carried out a quick check on the £599 *IA50* integrated amplifier (Sessions, issue 131). The more powerful *IA100* costs £899, while the £799 *DAC200* will convert your CD digits to analogue.

Key features include minimalist and symmetrical circuitry with balanced connection options and it's expected that the range will expand to encompass separate pre-/power amps and CD transports in the future.

☎ (0277) 227355

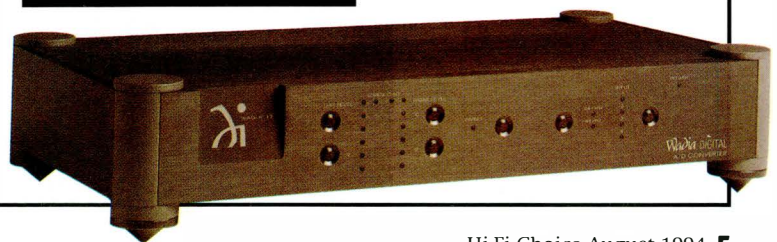
Seven grand for a CD player? Wadia on about?

Although it's a lot less expensive than some of the company's earlier CD disc drives and DACs, Wadia's new type 16 CD player still costs an extraordinarily extravagant £7,375. It comes complete with on-board DAC, digital volume control and bristles with inputs and outputs. The 16's disc drive mechanism, based on a new Teac CMK-3 drive, is available without the DAC as the model 20 transport (£4,370).

Wadia also has a new analogue-to-digital converter (ADC) unit, code named model 17 and priced at £3,545. The idea is to use this in place of a conventional preamplifier to digitise all the analogue sources of a system, passing the digits on to the model 16 CD player.

☎ 081-840 6305

This is Wadia get for £3,545? The new model 17 ADC.



Here's what the UK's leading publications have to say about the new Q Series.

Q10

"ALL ROUND THE USER-FRIENDLY Q10; LOOK LIKE WINNERS FOR KEF - AND MUSIC LOVERS SHORT ON SPACE."

What Hi Fi?, February 1994

Q30

"WHERE THE KEFs REALLY SCORE IS IN THEIR ABILITY TO BRING EVERY SEGMENT OF THE MUSIC TOGETHER IN A HIGHLY INVOLVING MANNER."

What Hi Fi?, February 1994

Q50

"THE OPENESS, CLARITY AND SPEED OF THE Q50... MAKE IT PRE-EMINENT OF ITS TYPE."

Alvin Gold, Audiophile, June 1994

Q70

"...THE Q70s WILL DELIGHT YOU WITH THE SHEER TOGETHERNESS OF THEIR MUSIC MAKING."

What Hi Fi?, June 1994

SEE YOUR NEAREST DEALER FOR A DEMONSTRATION.

ABERDEEN	
HOLBURN HI FI	0224 585713
ALLOA	
McMICHAEL BROTHERS	0259 724230
BIRMINGHAM	
MUSIC MATTERS	021 429 2811
(3 BRANCHES IN WEST MIDLANDS)	
BLOXWICH	
SOUND ACADEMY	0922 473499
BRISTOL	
RADFORD HI FI	0272 428247/8
(7 BRANCHES IN THE SOUTH WEST)	
CARDIFF	
AUDIO EXCELLENCE	0222 228565
(4 BRANCHES IN THE SOUTH WEST)	
CHELTENHAM	
SEVENOAKS	0242 241171
(12 BRANCHES IN THE 5TH & MIDLANDS)	
COLWYN BAY	
ELECTRO TRADER	0492 548932
CREWE	
NORMAN AUDIO	0270 211091
(ALSO IN LANCASHIRE)	
CROYDON	
ZEBRA	081 688 2491
EDGWARE	
MUSICAL IMAGES	081 952 5535
(ALSO IN HOUNSLOW)	
EDINBURGH	
IN HI FI	031 225 8854
GLASGOW	
BILL HUTCHINSON HI FI	041 204 4433
(5 BRANCHES IN THE NORTH)	
GUERNSEY	
MELODONIA	0481 56647
GUILDFORD	
P J HI FI	0483 504801
HUDDERSFIELD	
READYVISION	0484 532294
JERSEY	
BASE HI FI	0534 58518
KNUTSFORD	
WILMSLOW AUDIO	0565 650605
LEEDS	
AUDIO PROJECTS	0532 304565
LEICESTER	
LEICESTER HI FI	0533 539753
LONDON	
HI FI EXPERIENCE	071 580 3535
K LEISURESOUND	071 486 8262/3
AUDIO CONCEPT	081 567 8703
MANCHESTER	
D & T ELECTRONICS	061 445 2694
NEWCASTLE	
J G WINDOWS	091 232 1356
NEW MALDEN	
UNILET	081 942 9567
NOTTINGHAM	
NOTTINGHAM HI FI	0602 786919
OTLEY	
DOUG BRADY HI FI	0943 467689
PETERBOROUGH	
THE HI FI COMPANY	0733 892231
(ALSO IN LEAMINGTON SPA)	
READING	
B & B HI FI	0734 583730
(5 BRANCHES IN BERKS/BUCKS)	
SHEFFIELD	
SOUND WITH STYLE	0742 737893
(ALSO IN DONCASTER)	
SHREWSBURY	
CREATIVE AUDIO	0743 241924
SWINDON	
AUDIO T	0793 538222
(7 BRANCHES IN THE SOUTH)	
ROCHDALE	
JOE KOCZUR	0706 42107
THAME	
THAME AUDIO	0844 215431
TWICKENHAM	
RIVERSIDE HI FI	081 892 7613
WILMSLOW	
SWIFTS OF WILMSLOW	0625 526213
WORTHING	
PHASE 3	0903 245577

THIS DOES NOT CONSTITUTE A FULL DEALER LIST. FOR A COMPLETE DEALER LIST PLEASE CONTACT KEF ON 0622 672261.



The experience of sound

KEF and Uni-Q are registered trade marks. Uni Q is protected under GB Patent 2 236929 - worldwide patents pending.

It's that
KEF
feeling
The
NEW Q series



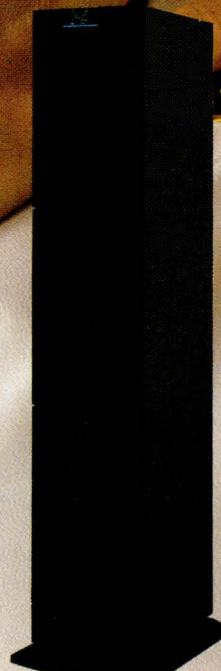
Q10



Q30



Q50



Q70

Goodmans loudspeakers are dressed to kill — in rosewood



Goodmans Loudspeakers Ltd (GLL) has upgraded its loudspeaker range and introduced a rosewood veneer as one option in its range of finishes. The £119.95 Maxim, £159.95 Mezzo and £199.95 Magnum models have new woofers and refined crossovers with higher grade components.

In addition the Mezzo has grown a compliance ring cone and the Magnum has been working out — its cabinet now features extra bracing. ☎ (0705) 492777



Born in the USA, bred in Muswell Hill.

You got it! Home Alón

You want the convenience and compactness of a decent quality mini system, but can't come up with the whole £1,000 in one hit? Denon may have just the thing.

The company's new *D-F10* is a mini system. It's also a collection of separate mini components that may be purchased separately, yet which still offer remote control and the simplicity of interactive operation when linked together as a system.

The full four-component package is priced at £1,000, with optional partnering speakers for an extra £150. However, the individual components are priced between £240 and £280, more than Denon's

budget full-width separates.

Except for the real red mahogany speakers, each component is finished in Denon's attractive champagne silver, and there's a refreshing absence of button clutter. The system remote handset comes with the 2 x 50W amp, the tuner has RDS for station identification, and the single cassette deck has a horizontal loading tray.

Additional components (a CD changer and surround processor) are said to be in the pipeline.

☎ (0753) 888447



Have a champagne lifestyle, try the Denon *D-F10*.

Sound Image Ltd of Muswell Hill is importing the Acarian Systems speakers from the USA. Designed by Carl Marchisotto, who was with Dahlquist for many years, the *Alon 1* is a compact floorstanding three-way with open baffle mounting for midrange and tweeter, and is expected to sell for £1,300.

☎ 081 807 8006

DPA top DAC

DPA has launched its top of the range, £6,000 *PDM ten twenty-four* digital-to-analogue converter. Big brother of the *PDM 256* (page 47), the *PDM 1024* features DPA DX128 processing (128 times digital filtering), allowing for a simple analogue stage, containing two resistors, two capacitors and a balanced DPA op-amp.

The *PDM 1024*'s casework reflects its price, being built from gold plated 3mm copper plate, with more inputs and outputs than you can shake a clutch of digital interconnects at.

The £495 *DSP200S* phono stage, switchable for MM or MC cartridges and utilising DPA's DHOA32 hybrid op-amps is also new.

☎ (0222) 795621

IN BRIEF

Korean giant **GOLDSTAR** is introducing a new micro system, the two-piece £170 *FFH 100L*, which combines CD and 3-band tuner sources with a 4W/channel amplifier. Cassettes are not accommodated.

☎ (0753) 691888

Accessory maker **BIB** is launching a battery powered, motorised CD cleaning machine at a very tempting £14.99.

☎ (0442) 233233

European turntable maker **PROJECT** has introduced a number of improvements on its top model. After changing the suspension, damping, mat and arm wiring, the *Pro-ject 6.1* still costs £435. A 78rpm adaptor to fit all Pro-ject turntables is now available for £10.

☎ (0753) 889949

Hounslow and Edgware AV retailer **MUSICAL IMAGES** is raising £1,000 a month for Save The Children charity by combining donations from customers with those from suppliers and the shops themselves. It hopes to reach a £10,000 target by *Live 94*.

☎ 081 952 5535, 081 569 5802

Celebrating the nine hundredth anniversary of the cathedral name-sake, **CASTLE** has introduced an alternative version of the popular compact *DURHAM* speaker. The £299 *Durham 900* is re-voiced and re-balanced to give a more open and explicitly informative sound, and to balance better when placed close to walls.

☎ (0756) 795333



A perfect speaker for anthems and psalms — the *Durham 900*.

PEDESTAL is a bespoke audio furniture specialist which uses native hardwoods and carved hamstone to produce stylish and sonically isolated platforms for your kit. The isolation side of the equation is taken care of by sorbothane mounts. Pedestal also produces matching CD racks.

☎ (0460) 242310

FARADAY SOUND, the concrete loudspeaker specialist, is looking for someone to inject a bit of business acumen. Critically successful but commercially underdeveloped, Faraday is run by Peter Walters in Norwich. Anyone interested in putting a toe in the audio water should contact Peter on:

☎ (0603) 762967



GET YOUR FINGER ON THE PULSE

LOOK

THEA



Take your senses for a trip to LIVE '94, the UK's most exciting consumer electronics event.



See the latest hi-fi. TV. Video. Computers. Games. Camcorders. In-car. Musical instruments. Cameras. Telecoms. Satellite. Home automation.



Experience Capital Radio Live at LIVE. Capital Gold concerts. Dolby Home Cinema Promenade. Real Hi-Fi Village. TV Times Live Television Studio. Young Newspaper Feature. BPIA Future of Photography. Yamaha/TES National Youth Rock & Pop Awards. Games Arena. Computer Shopper PC Village. Focus on Multimedia.



Get your hands on a ticket. Phone the LIVE hotline or return the coupon now.

LIVE '94
THE CONSUMER ELECTRONICS SHOW
EARLS COURT • LONDON
20-25 SEPTEMBER 1994

**LIVE HOTLINE:
0 8 9 1 5 0 0 1 0 3**

Calls cost 39p per minute cheap rate and 49p per minute at all other times.

Please tell me more about LIVE '94 and how I can get a ticket to the UK's most electrifying event.

Name.....

Address.....

.....

..... Postcode.....

HFC
Please return this coupon to:
LIVE '94, News International Exhibitions Ltd.
Europe House, World Trade Centre,
St Katharine-by-the-Tower, London E1 9AT.

Choice SESSIONS

The latest products, the best recordings and our own point of view on the most interesting developments to hit the hi-fi scene. Concise reports by the Choice team.

MULTI-DISC CD PLAYER

Sony CDP-CX100

£800.00

- ▲ A niche product; about as good as such players get; too bad if you've 101 CDs.
- ▼ Clunky disc handling; sound quality not as natural as the best single disc players at this price.

SOUND ★★★★★

VALUE ★★★★★

Most CD players accept one disc at a time, while a few take two, three or even a handful. Here, though, is a player which accepts a collection of one hundred discs. It uses an internal circular holder reminiscent of a Kodak Carousel projector slide tray.

The disc holders are non-interchangeable, so you can't keep separate trays of discs loaded up for different purposes. However, there is hidden flexibility (in an almost undocumented feature) which allows three separate CDP-CX100 players to be operated by a single remote control.

The most powerful operating feature is the so-called Custom Files, which can be

used to store a title, list of tracks to be skipped and even an output volume level for each disc. Individual discs can also be allocated to groups (categories like jazz and classical), which makes light work of programming your fave tracks for background listening at a party, or sequential play of all the Barry Manilow titles you can handle.

But who would want to invest £800 in an outsize 100 disc CD player? My first reaction was that the Sony would be a natural in studios where a number of discs need to be held on tap. Pirate broadcasters will probably also welcome

a player such as this; clubs, restaurants and pubs certainly will. However, the Sony lacks such attributes as studio-friendly balanced outputs, fast cueing and even the solid build expected of professional equipment. The unit is limited to a Toslink optical digital feed and two line-level electrical outputs, one fixed, the other variable.

Performance is unexceptionably good. Like other recent models from Sony, the CDP-CX100 is a slick sounding design that extracts a full measure of detail from discs, most of which reproduce with real refinement. The treble is slightly

obtrusive, and the bass is if anything just the opposite, yet any departures from the straight and narrow are minor. Stereo soundstaging is positive, there is plenty of lateral positional information, yet the sound doesn't always show adequate depth and solidity.

Alvin Gold

Sony UK Ltd, Sony House, South Street, Staines, Middlesex TW18 4PF.
☎ (0784) 461688

TURNTABLE

Dual CS505-4 UK

£1,190.00

- ▲ Detailed, pacy sound; well built.
- ▼ Bright, flat soundstage; ultimately tiring.

SOUND ★★★★★

VALUE ★★★★★

The £200 CS505-4 UK marks Dual's re-entry into the British turntable market. The mouthful of a name reflects the company's aim to engineer the deck to suit 'UK' audiophile tastes.

Outwardly, not a lot has changed from the Dual 505 series, apart from the inclusion of a felt platter mat and an Audio Technica AT95E moving magnet cartridge.

A steel chassis floats on springs within a plastic plinth, which itself sits on four solid



How Many discs? More albums than Des O'Connor has recorded, that's for sure.



Could this be a gem of a turntable from Dual? The CS505-4 UK, flying the flag for patriotism.

feet. As with predecessors, this makes for a well isolated deck, both sonically and physically. The design also benefits from auto switch-off and a speed changer — unlike some of its challengers.

Overall, the build quality is very high, although there were some blemishes which spoiled the plastic finish of the review unit. Setting up was remarkably easy as the cartridge is pre-installed, and there are only a few locking bolts to release.

Unfortunately, the sound quality proved to be rather a mixed bag. Although there was plenty of detail and focus across the horizontal plane, and instruments certainly held their own, none really took command when they should have done. This problem was compounded by a lack of depth to the soundstage which meant that any detail there was could be lost in busy rock sections and that percussion, in particular, became rather ragged.

There was no question of the music not being up-front — it was almost frantic at times. Although this can be appealing with hard rock tracks, natural peaks and timing are sacrificed if you're in the mood for something more sophisticated.

My most serious criticism, however, is of the overall brightness which tended to make the deck tiring. I managed to alleviate this feeling slightly by pushing the speakers nearer to the wall, but the sound continued to lack warmth. This is not a turntable that lets the music breathe and all too often I found myself listening to the deck's failings rather than to what it was playing.

At this price Dual is competing directly with the Rega Planar 2 (£185 without cartridge), whose

excellent big brother, the Planar 3, is only an extra £60. I would certainly give these a listen at the same time as the Dual.

Paul Fisher

RAM Projects, Unit 27, Stretford Motorway Estate, Barton Dock Road, Stretford, Manchester M32 0ZH.
☎ 061-866 8101

PREAMPLIFIER

QED Vector

£250.00

▲ Fully remote, active or passive operation.

▼ Doesn't look much, conservative sound.

SOUND ★★★★★

VALUE ★★★★★

At £250 the QED Vector reads like a lot of product for the price. It's a fully

remote, passive or active

preamplifier with a decent motorised volume pot and microchip control.

The reason it's so competitively priced is that like another successful QED component, the Digit DAC, it inhabits a very plain and small box with not a knob or switch in sight. Power comes from a plug-top transformer (though for another £150, the Vector Reference includes a transformer within a more snazzy case. However, it does have an LED display which tells you which input is selected, whether it's in active or passive mode, if it's muted and what the

volume level is. The latter is shown graphically, with a circular array of lights that resembles the EEC flag. All options are handled by the remote, which can also be used with any Philips-based CD player.

The Vector's unique selling point is the fact that it combines the purist appeal of passive operation with the couch potato appeal of remote control. Passive operation does not necessarily have an advantage, it depends very much on the in and output impedances of the various components in the system. Passive preamps rarely work well with valve amps for instance. Which is where the Vector's active side comes in handy, you may find that some sources sound better in the other mode, with the remote it's pretty straightforward to find out.

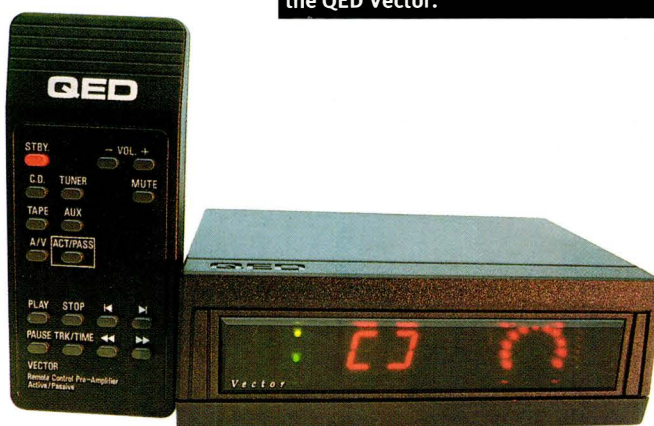
Using it in place of a Michell Argo HR preamp with Alecto monoblocks I didn't discern a great deal of difference between active and passive modes. In both it was a little defocused and soft compared to the £1,300 Argo, but it did keep tempo well and had generally good resolution. Next to a similarly priced passive preamp it lacked energy and clarity, sounding a little shut in and electronic, but not aggressive.

And though the Vector is no high-end component, it's a good-quality, user-friendly product with sonic capabilities in line with its price.

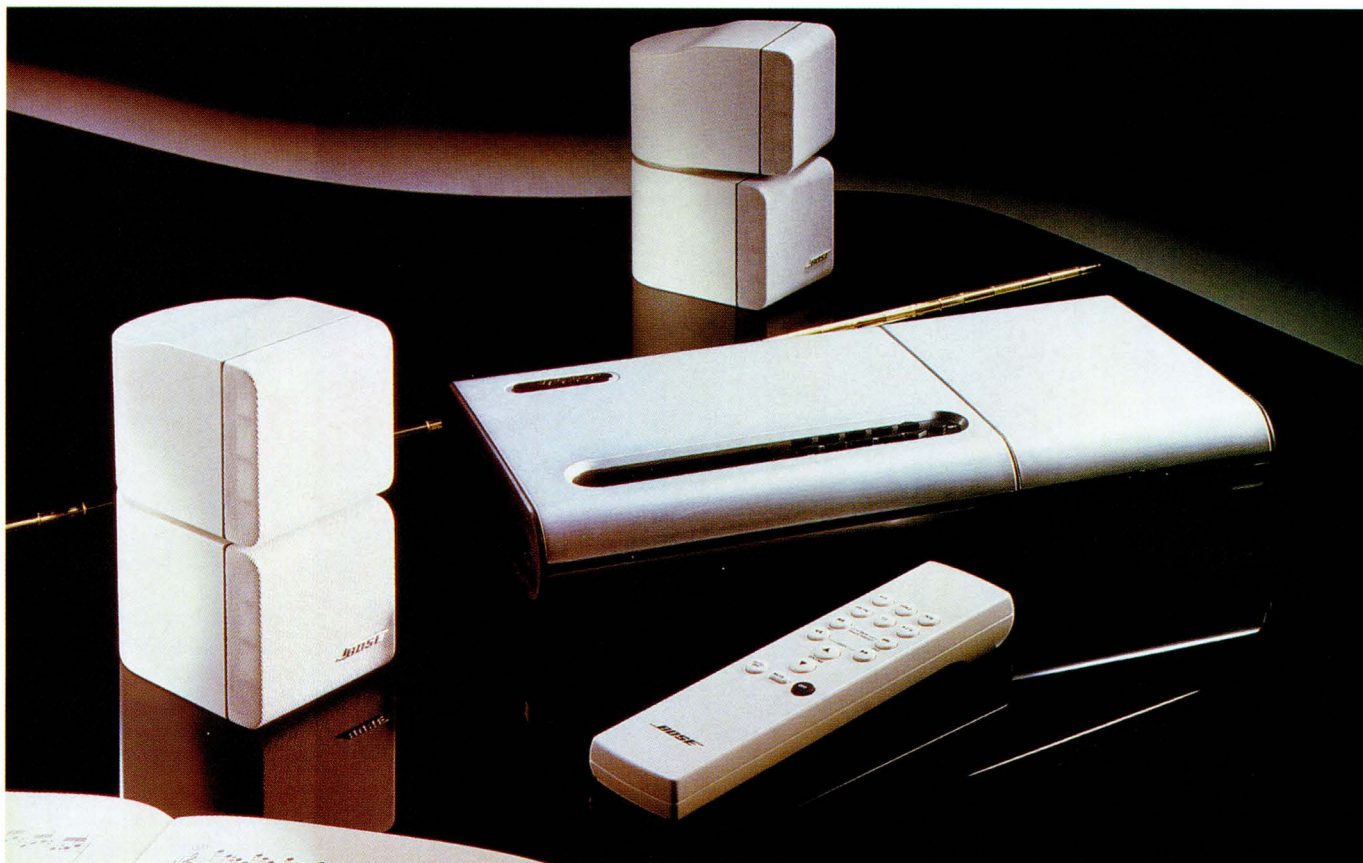
Jason Kennedy

QED Audio Products Ltd, Ridgeway House, Ridgeway Close, Lightwater, Surrey GU18 5XU. ☎ (0276) 452211

A couch potato's flexible friend, the QED Vector.



Spend one minute to have music for a lifetime!



Lifelike sound.
Elegance. Simplicity.

Born from a new
system technology.

Now
you can get
an award winning
music system!



Now is the time for change:

Fill your home with music instead of bulky, complicated components. Listen to stereo throughout your listening area. Enjoy lifelike sound at any volume level. Use it as easily as your telephone.

Control your entire music system from anywhere in your home – even through walls!

Choose a revolutionary new Lifestyle® music system – and GET MORE!

Ask for a demonstration!

GET MORE...

from your music system!

“The sound is incredible, the illusion compelling and the design is *seriously* sleek. Irresistible.”

Arena

“The Bose Lifestyle Model 10 is light years ahead.”

What Hi-Fi

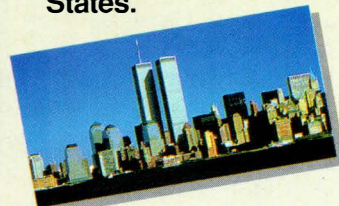
“I am greatly impressed by the Bose Lifestyle music system. The sound of individual instruments is as true a reproduction as you can hear. The speakers have great clarity yet are warm at the same time. What’s more it is certainly excellent value for money.”

Julian Lloyd Webber, Cellist

BOSE
Better sound through research.

**BOSE LIMITED,
TRINITY TRADING ESTATE,
SITTINGBOURNE,
KENT ME10 2PD
TEL: (0795) 475341**

*** Win a trip to the United States.**



* Limited offer.
Check with your participating dealer.

CALL NOW FREE **0800 317942** FOR A FREE INFORMATION PACK

For a FREE Brochure and full details on Bose® Lifestyle® music systems and the GET MORE offer fill in this coupon and send to Bose Limited, Trinity Trading Estate, Sittingbourne, Kent ME10 2PD

Name: _____

Address: _____

Postcode: _____

Tel. No: _____

HFC 8-94

If you do not wish to receive future product information from Bose® or our appointed dealers please tick this box

BOSE
Better sound through research.



With better speakers, this Aiwa is a sound prospect for the 'second-room' system.

SYSTEM

Aiwa NSX-540

£400.00

▲ **Compact (if messy looking); decent performance of main electronics.**

▼ **Gimmicky; disappointing spatial sound system; needs a speaker transplant.**

SOUND ★★★★★

VALUE ★★★★★

The latest batch of mini systems from the prolific Aiwa stable includes the £400 *NSX-540*. This consists of two rather garish loudspeakers and rather less than a cubic foot of electronics. The feature rollcall includes a three-disc CD player; a twin auto-reverse Dolby B cassette deck; a 32-preset, three-band radio tuner; and an amplifier that purports to deliver 55 watts per channel, (direct comparisons with established hi-fi amplifiers suggests this is probably nearer 20 watts).

A karaoke voice-over feature is included, and the system makes a nod in the direction of enhanced stereo reproduction thanks to a front surround speaker which contains extra drive units to promote a feeling of spaciousness. The system also boasts a timer (record or play) feature, plus a wide range of tone bending and some rather crude DSP effects. However, the Aiwa has nothing so obvious as

tone controls.

To spare the blushes of my neighbours, the karaoke function went untested, but not so the rest of the system. Hi-fi it ain't of course, and here much of the blame must be shouldered by the speakers which are rough and sometimes even aggressive when driven by an unequalled signal. Bass is notable mainly by its absence, though the upper bass takes on a congested, rather tubby presence when the 'T-bass' boost feature is engaged. Swap the speakers for a pair of decent compacts — I used Celestion *Ts* — and the Aiwa's electronics are revealed as likeable and even quite musical, though this meant loosing the front surround feature (no great loss), and presupposed that the DSP and other tone benders were switched out.

If the criticisms sound familiar, well that's because Aiwa has faithfully followed the mores of packaged system design. Yet Aiwa enjoys economies of scale which enable them to make equipment that is decent (speakers apart) and even quite stylish. The system doesn't have the wherewithal for serious exploration of the outer edges of musical expression, but it is fun, flexible — and a sound bet as a second room system.

Alvin Gold

Aiwa (UK) Ltd, Unit 5, Heathrow Summit Centre, Skypoint Drive,

West
Drayton,
Middlesex
UB7 0LY. ☎
081-897 7000

LOUDSPEAKERS

ProAc Response One 'S'

£999.00

▲ **Stunning bass from a small box; almost panel-like transparency; a world-class speaker.**

▼ **Must be used with Target R1 stands; demands the best equipment.**

SOUND ★★★★★

VALUE ★★★★★

I have been a fan of the ProAc *Response One 'S'* since its launch some two years ago,

and have used the speaker regularly in my listening line-up. I still maintain that it is *the* loudspeaker for high-end systems in small rooms, Sonus Faber notwithstanding.

However, time and science move on. ProAc has introduced a substantial modification to the speaker, using a new transparent driver from SEAS and a modification to the crossover. The new driver incorporates a far stiffer well-damped cone, and an improved cone surround to improve the bass performance. This has slightly increased the price of the *R1S* to £999, and is retrofittable. The upgrade costs £150, which includes fitting and return carriage in the UK.

For those unfamiliar with the design, the *R1S* is not much



Could Alan possibly be more enthusiastic about these speakers? — Not really!

Doing a fair impression of a pricier combo, the Rory Bremner of CD players, Linn's Mimik.

larger than a *BBCL53/5a*, and is a two-way rear-ported design with a soft-domed tweeter. It is bi-wirable and designed to be used in free space on the exceptionally heavy £260 Target *R1* stands.

However, the specifications don't prepare you for the sound quality of the *R1S*. It produces clean, seamless music with a bass that makes you play 'hunt the subwoofer'. In the right room and with the right equipment, the *R1S* is capable of making a big sound that would not be out of place from a four-foot tall floorstander.

The new modifications dramatically enhance the bass depth and midband transparency of the *R1S*. This makes the speaker sound as close as you can get to electrostatic transparency from a traditional box design. Even at high SPLs, the speaker is still coherent and dynamic, not even messing up the KLF's *It's Grim Up North* at full blast.

Although you need to use the best components for the best performance, I can find no fault, given the speaker's size. Its treble is slightly tipped up, but this simply sounds detailed and never zingy. Although it will fill some surprisingly large rooms with sound, it really shines in a small listening room.

If a grand seems like an absurd amount of money to pay for what seems like a bookshelf speaker, think again. The old *R1S* was the finest small monitor

speaker I'd heard, but the competition was fierce. The upgraded version pushes the envelope: the best just got better.

Alan Sircom

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

CD PLAYER

Linn Mimik

£789.00

- ▲ **Clean and focused sound; ideal as part of a Linn hi-fi system.**
- ▼ **May be too small sounding for everybody's taste; flimsy CD tray.**

SOUND ★★★★★

VALUE ★★★★★

Following the critical acclaim for the Linn *Karik* CD player-cum-transport and *Numerik* digital-to-analogue converter, Linn have introduced a cheaper integrated CD player, the £798 *Mimik*. The *Mimik* is intended to sound as similar as possible to the aforementioned combination, at a lower price.

One of the key cost-cutting areas is the CD tray itself. The *Karik*'s CD drawer is a thin but solid single chunk of alloy, while the *Mimik*'s drawer is a flimsy, wobbly sliver of plastic. Although I'm sure that it's every bit as reliable as the *Karik*'s drawer mechanism, it doesn't inspire confidence, especially in an £800 player. Over all, however, the *Mimik* seems well made, in Linn's

inimitable style.

While the *Mimik* lacks the synchronisation system that keeps the timing of the *Karik*/*Numerik* combination so tight, it does use a *Delta/Sigma* DAC chipset and BNC connection for an external decoder. The player is designed to mesh with Linn electronics and the company's forthcoming *Knekt* multi-room system.

The electronic engineers at Linn have a very distinct idea of what constitutes music. This fact will polarise opinion about the *Mimik*, as it does about the rest of the electronic range from this famous stable.

Those who favour the Linn sound will praise a tight, focused performance, the fine, glare-free treble detail and an absence of artifice. They may also enjoy its tight sense of rhythm, especially on easy-going rock music. However, others will find the same performance too dry, lacking in imagery and light in the bass.

It isn't an intrinsically bad sound, however. I played the *Mimik* back to back with the similarly priced Meridian *506* in a variety of systems, to several people visiting my listening room. Opinions were divided, some found the *506* too bland and overblown, others classed the *Mimik* as small-scale and lightweight. In the context of a complete Linn system, such a sound is fine, but outside of a Linn system, its results are unpredictable.

Ultimately, the *Mimik* is

absolutely impossible to recommend without a serious audition. Although it's not the player for me, as I find its music just too small and arid for my tastes, I can totally understand why

someone would opt for its lean, tight performance.

Alan Sircom

Linn Products Ltd, Floors Rd,
Waterfoot, Eaglesham, Glasgow,
G76 0EP. ☎ 041-644 5111

ACCESSORIES

Ortofon Plateau baseboard

£49.95

- ▲ **Well made and attractive appearance; adds space and detail.**
- ▼ **Can add emphasis to sibilance; tends to push the music forward.**

SOUND ★★★★★

VALUE ★★★★★

Back in the seventies, trying to tweak a system with cables and supports would arouse the attention of white-coated individuals carrying jackets with long arms and buckles at the back. In these enlightened times the opposite is true.

The *Plateau* baseboard, now distributed by Ortofon in the UK, is charcoal grey and costs £49.95. It's made of a polymer composite top, separated from an MDF baseboard by sorbothane pads. All sits on four soft

Album review

Cinema sound on a plate with the Toshiba 2539DB Pro-Logic television.

rubber feet.

The baseboard can open out a performance, especially the treble. Playing a rough mix of Bob Marley's *Exodus* through a Meridian 506 CD player, it was far easier to hear the poor panning in the treble and it defined the sounds of the hi-hat far better than before.

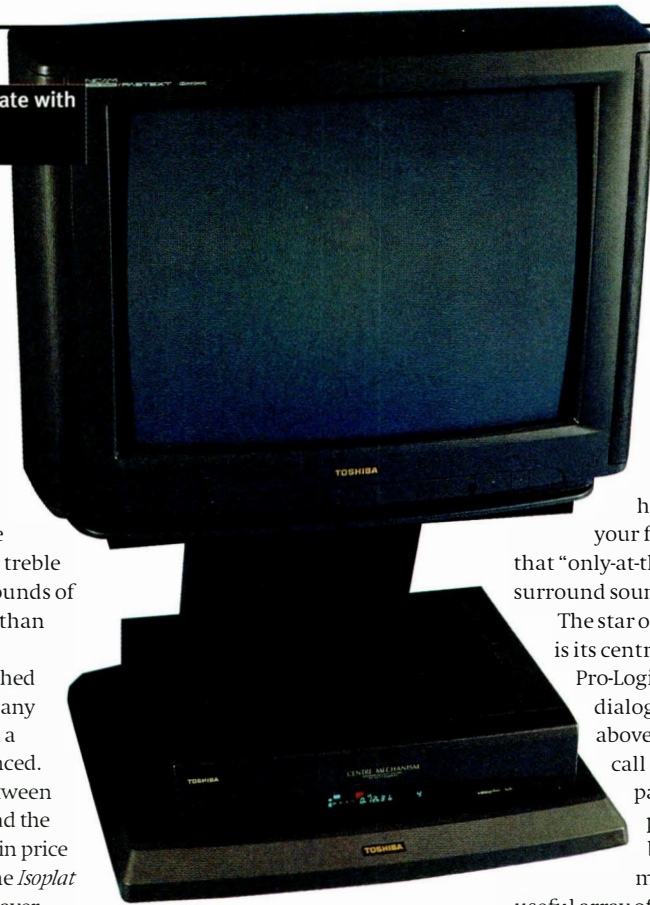
Vocalists were pushed forward slightly and any sibilance inherent in a recording was enhanced.

The *Plateau* lies between the Mission *Isoplat* and the Base *Baseboard*, both in price and performance. The *Isoplat* helps divorce a CD player from its surroundings, yet it doesn't intrinsically improve the performance. The *Plateau* does bring about some definite improvements, but these are not as dramatic as those possible with the Base, the Seismic Sink or any of the Mana tables.

The *Plateau* is good value and would be great for those who like to wring out the last ounce of treble detail, or alternately to brighten up a tonally dull system. But for an already balanced system, it may open out the soundstage at the expense of some extra brightness.

Alan Sircom

Ortofon UK Ltd, Chiltern Hill,
Chalfont St. Peter, Bucks SL9 9UG.
☎ (0753) 889949



consumer friendly Toshiba 2539DB Pro-Logic television. What you get for your money is a good 25inch telly and all the necessary hardware to fill your front room with that "only-at-the-movies" surround sound.

The star of this Toshiba telly is its centre speaker that, in Pro-Logic mode, offers dialogue precision above and beyond the call of duty in a package of this price. Apart from a brilliant Pro-Logic mode it offers a

useful array of different sound effects ranging from Stadium Theatre for when *Middlemarch* beckons.

There are, however, a couple of drawbacks; the main one is with its subwoofer. Just one amplifier is used to drive both the centre speaker and the subwoofer. Unfortunately, this means that both speakers can't be driven at the same time which can be frustrating in Pro-Logic mode as there is very little bass. The addition of an active subwoofer would be a suitable solution to this problem.

On a smaller scale, people with large lounges may find that the amount of cable supplied for the rear speakers is not enough to carry them comfortably around the walls to the back of the room; on the other hand, it is easy to add extra wire.

In conclusion, then, if you want to amaze your friends with surround sound, but wish to leave your hi-fi unsullied by Dolby Surround Sound this set is an ideal choice.

Rob Tribe

Toshiba UK, Frimley Road, Frimley,
Cumberley, Surrey GU1 65JJ.
☎ (0276) 62222

TELEVISION

**Toshiba
2539DB
Pro-Logic**

£789.00

▲ **Superb value for money.**

▼ **Not enough bass.**

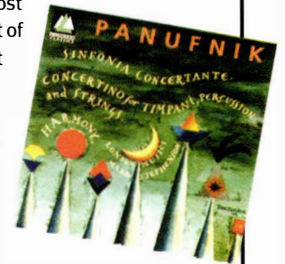
SOUND ★★★★★

VALUE ★★★★★

First you buy your telly, then a Pro-Logic amp, main speakers, centre speaker, speakers for the rear and, maybe, a subwoofer. But what if the whole lot won't fit with your existing system?

An alternative to this unsatisfactory scenario is provided in the shape of the less expensive (£800), more

Sir Andrzej Panufnik, who died in 1991, is among the most interesting and approachable of modern composers. Yet his music makes little attempt to be fashionable or catchy. Few of his works can be wholly assimilated at first hearing; you need time and patience, an open mind, and a willingness to suspend prejudices. His *Sinfonia Concertante* for flute and harp is a very rewarding piece. The first movement is remarkably spare, almost to the point of austerity. It begins simply, yet commands attention despite an almost Zen-like



calm. Its droning basses remind one of Britten's 'night' music, albeit in lofty and spiritually aloof guise. The middle movement is fast, and rhythmically lively, rising to a sharp flashing climax before ending abruptly. The short finale breathes similar air to the first movement, acting as a brief epilogue.

Panufnik's ear for sonority is very apparent in the *Concertino* for Timpani, Percussion, and Strings. Again the music is austere, but more intense than the previous piece. The use of pitched chimes redolent of tolling bells, contrasted with powerful strings, leads to tensions that are unresolved until the rhythmic *Intermezzo*. This leads to a spacious slow movement, *Canto 12*; strings intoning a quiet but tender theme against a shimmering backdrop of pitched percussion. The finale is violent and agitated, with strings playing a spiky theme bolstered by hard aggressive percussion. The disc ends with *Harmony*, subtitled *A Poem for Chamber Orchestra*, which starts quietly but rises to a passionate climax. In one movement, it lasts about 15 minutes and explores an ever-growing interrelationship between strings and woodwind.

Engineered and produced by former Decca engineer Tryggvi Trygvason using Technics/Panasonic DAT machines, the sound is clean, detailed, and lifelike. Clarity is always good, though Panufnik's scoring helps by keeping textures transparent and open. A word too about the excellent performance of London Musici under Mark Stephenson, which sound secure and authoritative; one could hardly hope to hear this music played better.

Reaching for a new *Plateau* the tweak to try from Ortofon.

THOROUGHLY RECOMMENDED...

"...best you can buy for sensible money"
Q, September '93

"foot-tapping, likeable and exciting sound - five star performance"

RECOMMENDED

What Hi-Fi, October '93

"... 'Suona' magnificamente e costa accettabile"

RECOMMENDED

Suono (Sound, Italy)

"Lively coherence, splendid dynamic range"

RECOMMENDED

Hi-Fi Choice, April '94

"...throws the window wide open and makes a system sing"

RECOMMENDED

What Hi-Fi, April '94

"can't believe for under 100 bucks you
can get dimensionality, depth and
musicality that's unheard of in the land
of big bucks cable"

Satisfied U.S.A. customer

Used and recommended also

by Audiolab, Naim Audio,

Mission Cyrus,

Nakamichi UK and

Rega Research.

For advice, sales and service or simply a brochure - call, fax or send
the coupon

NAME _____

ADDRESS _____

POSTCODE _____

Interconnects Speaker Cables Speakers Please tick required box



30A Sarum Business Park,
Portway, Salisbury, SP4 6EA.

Tel: 0722 331674

Fax: 0722 411388



Distinctive speakers, but I'm sure their mother loves them. The first fruits from a new style Wharfedale.

SATELLITES AND SUBWOOFER

Wharfedale Modus Vivendi Micro and Sub-Bass

£99.00/£139

- ▲ **A return to form; the quick and dynamic presentation will make many friends.**
- ▼ **Bass lacks dynamics; light and bright system balance.**

SOUND ★★★★★

VALUE ★★★★★

It is no secret that Wharfedale has been through some lean years, culminating in a recent takeover by the group that includes Mission Electronics. First fruit of the new regime is the modular *Modus Vivendi* hi-fi-cum-home-theatre speaker range which, by all accounts, is already a

considerable success, both here and in the Far East.

A pair of *Micro* magnetically shielded satellite speakers and a *Sub-Bass* passive subwoofer were selected for test. The *Micro* is a true miniature with an 'airflowed' low diffraction, low-resonance enclosure and a rotatable tweeter housing. The bandpass subwoofer has two fully enclosed drive units. Styling is interesting, but will not attract universal praise.

The sound quality is unexpectedly good despite a residual quackiness and unevenness in the midband. The overall frequency balance is bright, giving a forward feel, and the treble lacks refinement. But the colorations are a static phenomena, mostly at a low level, and are eventually filtered out by the ear and brain.

The Wharfedale combination is articulate and airy, with a truly surprising range and dynamism. The unusual lack of compression made the listening experience a great deal more vivid and lively than expected.

The subwoofer also worked quite well. The enclosure is not

big or solid enough to give a genuinely weighty bass, but the reach was good even if the lowest frequencies were muted.

It was capable of reaching most of the organ pedal stops, though it wasn't up to generating trouser trembling sound pressure levels without obvious compression, especially at high volumes. Attenuation of unwanted midrange artefacts was very effective, which helped the subwoofer to mesh with the satellites.

The sheer vitality and lack of midrange and treble compression meant that the system was genuinely engaging, to the point where it made much of the competition sound mean spirited.

Alvin Gold

Wharfedale International Ltd.,
Crossgates, Leeds LS15 8AL.
☎ (0532) 601222

AMPLIFIER

Crimson 610B & 620B

£790

- ▲ **Detailed, rhythmic sound; good value for money.**
- ▼ **Dated styling; lack of inputs a worry; for solid-core fans only.**

SOUND ★★★★★

VALUE ★★★★★

Checking back issues of *Hi-Fi Choice*, I found a *Crimson Elektrik610/620* combination was tested in *Hi-Fi Choice* exactly 100 issues ago. The long, matt-black cases sported the absolute minimum of front-panel controls, and the design is the same today, though now it looks dated.

The current £395 *Crimson 610B* preamplifier is severely lacking in inputs, with only

enough for a turntable, CD, tuner and tape recorder. The matching *620B* power amp at £395 is a 40 watt stereo affair, although there are also a pair of monoblocks. *Crimson's* tie-in with *Virtual Reality* means that the amplifiers can be a part of 'the great upgrade', with maximum trade-in against DNM amplification.

Wire the system up with DNM solid-core interconnects, speaker cables and even mains cables, and it really begins to sound clean and detailed. There is a touch of the *Naim* amp about its sound, with some power and grunt to the bottom end, with a sweet mid-range and a forceful top. Using it with multi-strand cables tends to thicken the mix.

Outside of this, it has a good balance of detail and coherence and it bops along happily. Aside from the lack of inputs, my only real criticism is that the phono stage is a touch hissy, especially on MC cartridges. In absolute terms, the amp is neither the most refined nor transparent of amp combinations, but its low price weighs heavily in its favour.

The *Crimson* is cheap and cheerful, yet has a sound quality that is exceptionally good for the money. It's not too fussy about positioning and synergy and is deceptively powerful for a 40W amp. At a price populated by range-fillers and products low on absolute sound quality, the *Crimson* is a budget audiophile's dream.

Alan Sircom

Virtual Reality, PO Box 383,
Brentwood, Essex CM14 4GB.
☎ (0277) 227355



Crimson 610B and 620B pre and power amplifiers — a good sound at a very decent price.

Tannoy 215 DMT II

Into the studio with Paul Messenger this month, as he witnesses 60 inches of Tannoy diaphragmed speaker power.

This is not a hi-fi speaker, although it won an important prize in Japan for such a role a couple of years back. It's not a PA speaker either, even though it would handle your local cinema or disco. It will stand out like a turbo-charged twin-tub in your traditional lounge, but has its own hi-tech elegance nonetheless.

This is a speaker with attitude: 'I ain't no namby pamby hi-fi component; I'm a real loudspeaker, for real people who make real music, not just listen to it!' Indeed, a significant proportion of your recent record purchases could well have been made using a pair.

The Tannoy 215 DMT is a pukka, full size studio monitor, the biggest in the company's Monitor Series catalogue, designed to look right and do the business among the hi-tech paraphernalia of today's recording studio environment. You won't therefore find them on dem down the hi-fi store. The price, probably on the right side of £6,000 per pair, will be negotiable between you and a serious Pro Audio dealer.

The in-flight catering trolley shape is dictated by a long established recording studio standard, enabling 215 DMTs to be 'dropped in' to existing cut-outs in studio dummy walls which leave the front baffle flush. And its Far East success might well have something to do with the Japanese predilection for building everything into an equipment 'wall'.

Even standing free they're much less visually intrusive (and less expensive) than, say, Tannoy's *Westminster Royal*, the *Living Voice Air Partner* or *Townshend's Sir Galahad*. The largest dimension here is only a metre – which doesn't sound too much at all – but the smallest is two thirds of that, which translates into more than half a cubic metre of sheer bulk and a couple of very useful surfaces for pot plants, magazines and so on. The 85kg weight is very impressive too, especially if you don't have a fork-lift truck and do have a bad back.

Tannoy's industrial-strength 215 DMT II studio monitors – suitable for home use?



The legend 215 DMT actually means something. The 215 bit translates as two 15in drivers, giving a diaphragm area many times that of the typical hi-fi speaker. One is just a bass unit, the other is a dual concentric, whose main cone can be configured to cover bass and midrange or midrange only, and which has a 'tulip wave-guide' horn-loaded tweeter firing through its centre.

The DMT in the name stands for Differential Material Technology. Tannoy defines this inspirational buzz phrase as 'the study of different materials and their relative behaviour when in intimate contact' – which could be applied to almost anything in mechanical engineering, without giving any real clues to the what or how thereof.

Under wraps

The 215 DMT is a complex and subtle combination of massive sculpted 36mm MDF baffle and back, linked by a skeletal frame and filled by inset high pressure laminate wrap panels. Elaborate internal bracing and lossy couplings help control and absorb the very considerable energies involved, while three enormous ports provide reflex-tuning. All the ingredients are lavishly over-engineered, with bi-wire terminals on both front and rear.

The measured performance is awesome. The basic balance is very like a typical modern compact floorstander – except that sensitivity is roughly 9dB higher (97dB/W). This is equivalent to exchanging your typical 50W amp for a 400W leviathan. Take advantage of the 150-500W recommended amp power and you can consider yourself a fully paid up member of the fantasy loudness league. Or maybe it's the perfect partner for that 3W single-ended triode valve amp you've always fancied.

I would have liked to have been able to boost the relative treble a few decibels to 'open out' the top end, and in normal sized rooms the bottom end does favour midbass over low bass. But the net energy averaged over 20-100Hz is about right, and extension is a respectable -10dB in-room at 20Hz.

Macho, rude and brutish?

The macho styling and drivers prepare one for something pretty rude and

brutish, and with enough amplification and a rude enough source I dare say the 215 would oblige. But given a few days to settle down onto Foundation *Isobarik* style stands and the floor beneath, and fed a diet of high class material, it was the model of polite good behaviour as well as considerable excitement and enjoyment.

The over-riding impression is of almost infinite headroom and dynamic range, giving a freedom from stress and strain which somehow makes low level listening just as entertaining as the other sort. A shade too analytical for some perhaps, this speaker doesn't paper over any cracks or present a rosy view of your various recordings, and there's not the romantic midband of the Alnico magnet dual concentrics.

This latest DMT variation is certainly sweeter and more coherent at the top end. It has better overall broad-band dynamics, and superior midband phase accuracy, especially when the full range DC driver is protected from large excursion by rolling it off at the bottom end (a network option).

Dramatic monitoring

The 215 is a highly effective monitoring tool. I particularly liked the way it laid bare the construction and sound effects of BBC radio drama.

While the combination of wide dynamic range and bandwidth alongside a smoother and better balanced performance than most large loudspeakers can manage, repeatedly brought new, yet listenable, insights into the mechanics of modern multi-track recording techniques.

I've tried a lot of very large and expensive speakers this past few years. All have some or other exceptional qualities, usually accompanied by equally noticeable weaknesses.

The greatest strength of the 215 DMT II is that the latter are notable by their absence – unless you count the styling. It's not perfect, but it is exceptionally good in almost every respect, and also realistically priced considering the extravagant performance envelope and engineering quality. Pro-oriented it maybe, but that Japanese audiophile award was fully justified.

Tannoy Ltd, Rosehall Industrial Estate, Coatbridge, Strathclyde ML5 4TF.

☎ (0236) 420199



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

Musical Fidelity F18

Alvin Gold finds out if Musical Fidelity's latest power amp can take on the big American names.

Like other amplifiers in the Musical Fidelity F-series, the £3,999 F18 stereo power amp is a hybrid design. A tube-based linear cascade triode input provides much of the voltage gain. The output section is bipolar, using no less than eight pairs of transistors (not MOSFETs) running substantially in class A, which provides lorry loads of amps as well as volts. Two massive power transformers are specified, but rather than allocate one per channel, the F18 splits them between the input and output stages.

The rest of the story is fairly simple: inputs are unbalanced (phono) or balanced (XLR), and output is presented on bi-wirable brass terminals. Power output is 220W into 8ohms, or 370W into 4ohms, with stability maintained for impedances down to the 1 ohm level.

One curiosity is that other than fuses, no output protection circuitry has been included. The class A circuit is essentially self-limiting, and nothing less than a complete short circuit should cause real damage—and only a fool would crowbar the output sockets. According to Musical Fidelity's Anthony Michaelson, output protection has been omitted because of its sonic shortcomings. Well maybe, but my guess is that Anthony, who doesn't countenance fools gladly, is simply being true to form by, er, refusing to countenance fools.

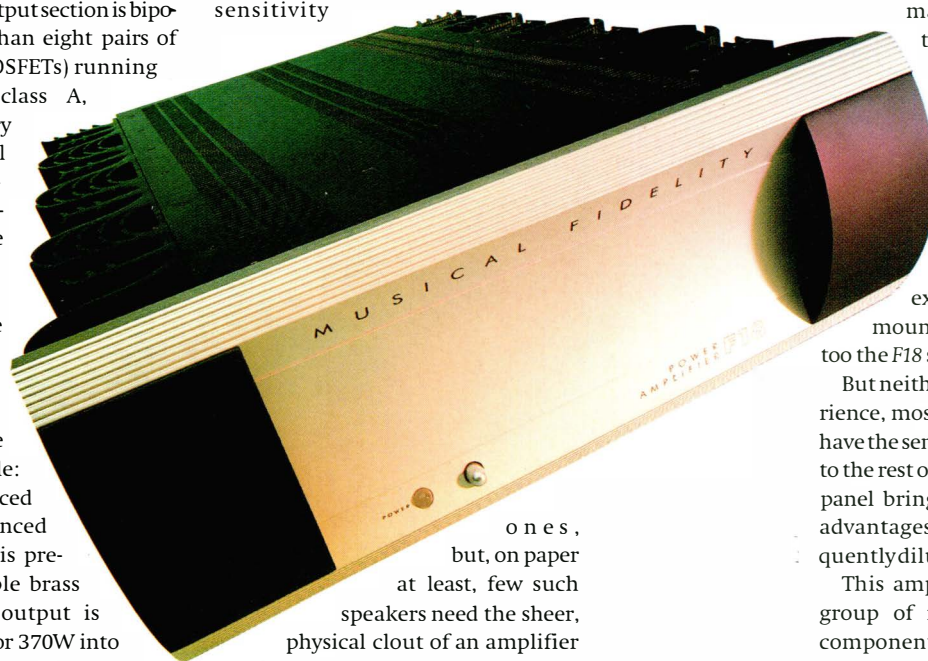
In other respects, the amplifier is perfectly practical. Just remember the golden rule: to connect up first, and switch on last. The F18 has a substantial quiescent current consumption and runs hot, but it warms up quickly and, even for quality-critical use, doesn't need to be left running constantly.

In the flesh, the F18 is a truly impres-

sive object that both looks the part and, at 54kg, feels it too. But big amplifiers don't always live up to expectations.

The F18 is clearly a design that represents overkill in many respects. It's not primarily intended to be used with ultra-difficult (reactive) loads, of which the big Apogeos and Martin-Logans are good examples. The F18's prodigious voltage and current yield makes it more suitable for moving coil loudspeakers, especially big, low sensitivity

Wembley scores again, courtesy of Musical Fidelity's F18.



ones, but, on paper at least, few such speakers need the sheer physical clout of an amplifier such as this. In principle, Metallica aficionados may well approve of the qualities an F18 can bring to bear, while Monteverdi-heads will probably be left unmoved. But that is before actually sitting down to listen in anger, as it were.

Muscular (fi-)delicacy

In many ways, the reality is quite contrary to expectations. I wouldn't go so far as to suggest that Metallica fans will be disappointed, but Monteverdi is remarkably well served by an amplifier that brings a rare sense of ease and transparency to its task.

There is no lack of delicacy and grace from an amplifier that combines the muscularity and control of a solid state amplifier with the seamless, treatment of music of a tube design, while avoiding the negative qualities of both. Above all however, F18 brings consistency to the way music is treated, irrespective of frequency, content or level.

An obvious analogy can be found in the world of cars, in the way that a truly high performance car makes everyday

high speed driving so much easier and more secure than a more conventional car, which is necessarily operating much closer to the limits of its performance envelope.

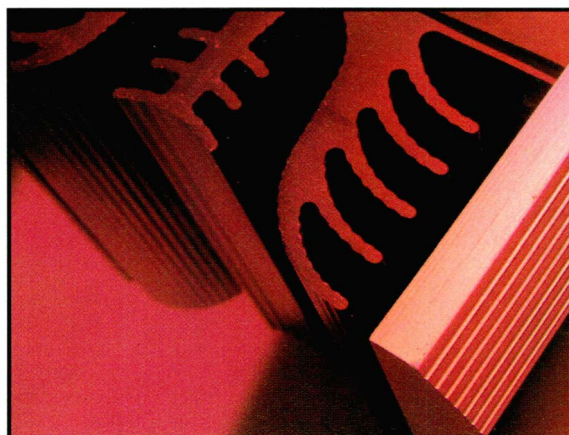
The F18 is barely breaking into a sweat at any volume level that sensible folk will feel inclined to coexist with, and the free-breathing quality and complete lack of strain at high volumes is all but physically palpable.

To an extent, the findings I present may have been coloured by the fact that the most capable speaker I had available was an electrostatic panel (a recently updated version of the Martin-Logan CLSIIz). I had various dynamic speakers too, including Mission 753s and the Totem Mani 2, an exotically engineered stand mounted compact. With these too the F18 sounded utterly at ease.

But neither speaker nor, in my experience, most other dynamic speakers, have the sensitivity and responsiveness to the rest of the system that a top class panel brings to bear. Therefore, the advantages of the F18 were consequently diluted to a degree.

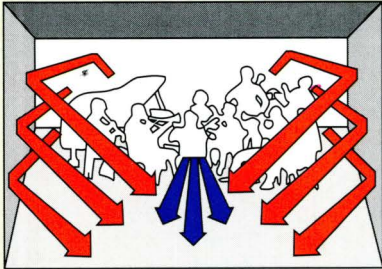
This amp belongs in the rarefied group of refined, high resolution components and systems. In such company, the F18 stands revealed as a true world class amplifier. It is in a different league to most British amps, except in terms of price, and the equal of all but the most exotic of American super-amps, again except in terms of the price-tag.

Musical Fidelity Ltd, 15-16 Olympic Trading Estate, Fulton Road, Wembley HA9 0TF. ☎ 081-900 2866

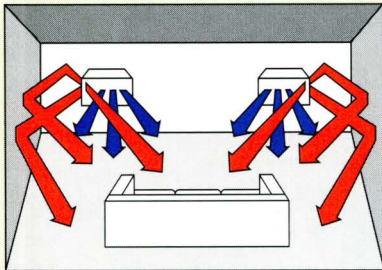


GET MORE...

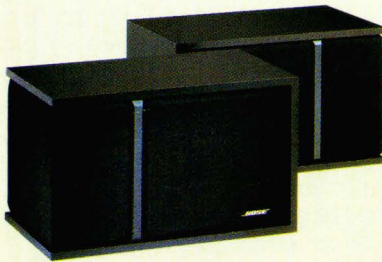
from your stereo!



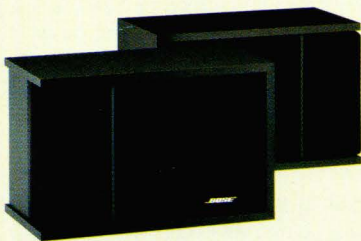
Sound distribution in a live concert



Bose® Direct/Reflecting® speakers



Bose® 301®



Bose® 201®

Ask for a demonstration!

* Get a free Bose® polo-shirt with purchase!



* Limited offer. Check with your participating dealer.

BOSE® Direct/Reflecting® speakers

Don't get stuck in one spot!



Finally listen to Stereo Everywhere®

At a live concert you hear mostly reflected sound. Conventional speakers produce mostly direct sound, so they cannot achieve the realism of a live performance.

Only Bose® Direct/Reflecting® speaker

technology delivers the lifelike balance of direct and reflected sound – **you experience the exciting atmosphere of a great live concert!** And finally you listen to Stereo Everywhere®! It's time to GET MORE from your stereo!

BOSE
Better sound through research.

BOSE LIMITED, TRINITY TRADING ESTATE, SITTINGBOURNE, KENT ME10 2PD
TEL: (0795) 475341

CALL NOW FREE **0800 317942** FOR A FREE INFORMATION PACK

For a FREE Brochure and full details on Bose® Direct/Reflecting® speakers and the GET MORE offer fill in this coupon and send to Bose Limited, Trinity Trading Estate, Sittingbourne, Kent ME10 2PD

BOSE
Better sound through research.

Name: _____

Address: _____

Postcode: _____

Tel. No: _____

HFC 8-94

If you do not wish to receive future product information from Bose® or our appointed dealers please tick this box

HELP!

Our experts solve your hi-fi queries

May the force be with you

Q I have a Rega Planar 3/RB-300/Super Bias, Pioneer A-400X amplifier, Royd Minstrel speakers and Cable Talk 3 speaker cables. Which CD player should I add in the £300 to £350 price band? My dealer warns that the Rotel RCD-965BX (my favourite at present) will sound too forceful in my system – do you agree?

A The Rotel should sound okay; like most Bitstream players it's not overly forward or bright. Why not see if you can borrow a Rotel to hear at home before deciding? Also audition the player your dealer thinks might be best for you, and see how that sounds by comparison.

Hi-fi is not an exact science and although with experience one can often predict how certain combinations are likely to sound, sometimes the end result can be very different from your preconceived expectations.

The Systemdek IIXE/900AP would

Is the Systemdek IIXE/900AP a Rega-beater, or should you save up for the Rock?

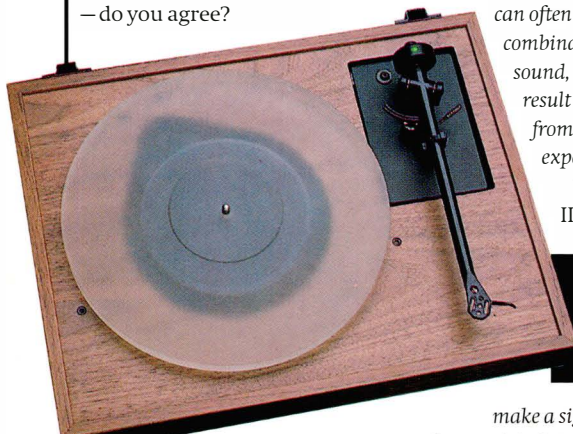
make a significant upgrade, but it might be better to go the whole hog and get a Rock 3, have a listen and see what you think.

At this point, look at one of the better add-on phono stages like the Michell Iso, the Audio Innovations P2 or the new Audiolab 8000PPA.

In the meantime check out DNM's Ringmat. At about £30 it will give you a very worthwhile improvement in clarity and detail on the Rega.

Is the Systemdek IIXE/900AP a worthwhile upgrade? My dealer advises me to leave the Rega until I can afford a Linn LP-12 or Townshend Rock 3. He says the Rega isn't outclassed by my system and the Systemdek is a sideways move.

C Johnson, London.



Query of the month



You could win Isoda cable!

Each month we're giving away a one metre pair of Isoda interconnect cables to the writer of the most interesting letter. If you've any system queries send them to: Hi-Fi Choice (Help!) Dennis Publishing Ltd, 19 Bolsover Street, London W1P 7HJ.

Front end challenger

Q I am aware of the accepted belief of the 'front-end' hierarchy.

However, I found that new speakers gave the most immediate and noticeable improvement.

My system comprises an Arcam Alpha CD, QED C300/P300 pre/power combination, and a new pair of Mission 753 speakers.

Since replacing the speakers, I've tried a number of front end variations. However, I am disappointed with what can only be described as very minor improvements in sound quality. Do you still advocate the old emphasis towards the front end, and if so why?

C Martin, Northampton.

A The need for a quality front-end is self-evident, but if the sound of your source is

entirely adequate for the rest of the system further 'improvements' may not seem very significant. It may be that a better amplifier in tandem with an improved CD player and/or DAC would give the sort of breakthrough you're looking for.

Speakers tend to produce more obvious differences in tonal colour and bass/treble extension than CD players or amplifiers, but in the right system adding an outboard DAC (say) can sound subjectively as significant. Your experience only proves how dangerous it is to apply strict rules to building a hi-fi system; any system is only as good as its weakest component.

Don't knock paper

Q My system consists of Moth Series 30 passive-pre/power combination, a Rotel RCD-965BX CD player, and Linn Index II speakers. I wish to upgrade the speakers to Audio Note AN/Js but am concerned by the fact that they use paper cone drive units. Is this a bad thing?

Speaker manufacturers like Linn and KEF insist on plastic-coned drivers to keep up with modern technology. Are paper drivers out of date?

A Abou-Shaqra, Saudi Arabia.

A Presumably you've heard the Audio Note AN/Js and liked them – otherwise why change? The use of paper cone drivers should impart a lighter, faster, more lively presentation, albeit perhaps at the expense of a little added coloration.

The comparatively light weight of a paper cone also help to make a highly efficient speaker – useful with your excellent, low-powered Moth amplification. The important thing is that you hear these speakers and like their sound; the type of drivers used is surely irrelevant.



Are Audio Note AN-J speakers behind the times?

Billy Vee

SOUND SYSTEMS

248 Lee High Road
Lewisham London SE13 5PL
Tel: 081 318 5755 & 081 852 1321
Fax: 081 318 0909

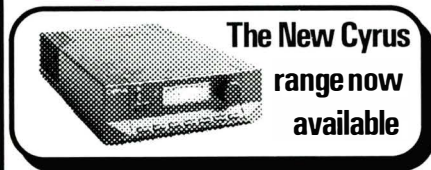


Join us for an evening with
June Tabor plus Support
at Blackheath Concert Halls
Tickets £10.00 (Con: £8)
Please telephone for details



Offer open from 20th June 1994 to 2nd August 1994

Superb Performance



Cassette

Aiwa ADF 850 *(F/T)	£229.00
Aiwa ADWX 929	£219.00
Denon DRM540 (NEW)	£159.00
Denon DRS610	£199.00
Denon DRW760 *(F/T)	£249.00
NAD 602 (NEW)	£199.00
Nakamichi DR 3	£329.00
Nakamichi DR 2 *(F/T)	£549.00
Nakamichi DR 1 *(F/T)	£759.00
Yamaha KX 260	£129.00

* (F/T) = Free TDK SA Cassette Tapes.

Loudspeaker

KEF Q10	£179.00
Linn Keilidh	£595.00
Mission 760se*(F/C)	£149.00
Mission 780se*(F/C)	£239.00
Mission 751*(F/C)	£299.00
Mission 753*(F/C)	£699.00
Monitor Audio 201	£249.00
Ruark Swordsman2	£299.00
Rega Kyte	£198.00
Rega XEL (NEW)	£1040.00
Roger LS2a/2	£229.00
Tannoy 605/2	£169.00
Tannoy 607	£219.00

*(F/C) = Free Mission or Cabeltalk cable



THE CHOICE IS YOURS

We demonstrate everything we sell
so you can be sure that any of the
products you see advertised here
are on display and available for
audition.

Our helpful and experienced staff
are on hand every day (except
Thursday and Sunday) to help
explore the possibilities open to
you. We welcome your visit.

- Two listening rooms
- Two year minimum guarantee
- Free 24hr delivery service
- 0% Finance available, see below
- Part exchange service available
- Outstanding product range from:

AIWA - ARCAM - AUDIO TECHNICA - CYRUS
DENON - HEYBROOK - JPW - MARANTZ - LINN
PRODUCTS - MISSION - NAD - NAIM AUDIO
NAKAMICHI - POLK - QUAD - ROTEL - REGA
RUARK - ROGERS - SOUND ORG - SPENDOR
TARGET - TANNOY - WOODSIDE - YAMAHA

Come and Listen

FREE 24HR DELIVERY

For most stock items
Please call for details

Source

Arcam Alpha 5 *(F/L)	£449.00
Linn Mimik (New)	£798.00
Marantz CD53 (New)	£199.00
Marantz CD 63 (New)	£249.00
Niam NA CD3	£898.00
Rotel RCD 965BX Dis *(F/L)	£375.00
Rega Planar 2	£198.00
Rega Planar 3	£260.00

*(F/L) = Free Chord Cobra PP2 Interconnect

Amplifier

Arcam Alpha 5	£229.00
Arcam Alpha 6	£329.00
Cyrus 3 (New)	£499.00
Denon AVC 3020	£729.00
Denon AVC 1530	£479.00
Marantz PM44se	£179.00
NAD 302	£159.00
Rotel RA960BX/2	£299.00
Linn Majik - Line Level (New)	£524.00
Naim Nait 3 (New)	£499.00

Tuner

Arcam Alpha 5	£219.00
Cyrus FM7 Tuner (New)	£399.00
NAD 402 (NEW)	£169.00
Naim NAT 03 (NEW)	£499.00
Rotel RT950AX	£199.00

0% INTEREST FREE CREDIT

Up to £1000 Instant Credit available to personal Callers

10% Deposit, Balance over 6 or 9 months. (£350 min)

0% A.P.R. Please telephone for details. Written details supplied on request

(e.g. System: Marantz CD63 / Marantz PM 44se / Mission 780se. Total Price £599.00

Deposit: £59.90. Plus 9 equal payments of £59.90. Price includes VAT and all leads).



➔ Tel: 081 318 5755 & 081 852 1321 ←

Opening times : 10.00am to 6.30pm Monday to Saturday (Closed Thursday)



Will Pioneer's Stable Platter keep things quiet in Newburn?

Hounding down a needle

Q I have a Systemdek IIX turntable fitted with a Linn Akito arm and an aged Audio Technica AT-155 MM cartridge. The amplifier is an first series Audiolab 8000A, driving Castle Chesters.

As it seems unlikely that I will be able to replace my old AT stylus, I'm looking for recommendations on a suitable replacement cartridge. My budget is up to £200, and I can consider MM or MC types.

N Hambridge-Muedd, Essex.

A £200 is probably a bit excessive given your turntable; you should be able to get a good moving magnet cartridge for under £150. Linn's K-9 would be a good starting point, as it's crisp and detailed without being too bright. Goldring's 1042 is a decent alternative that works well in Systemdek turntables.

Hyper sensitive

Q My current system consists of a Linn Axis/LVX/K9 turntable, an A&R A60 amplifier (late model), NAD 4225 tuner, NAD 6050C cassette deck, and a pair of Mission 761s on Mission stands with Supra cable.

I have at last decided to face up to the inevitable and am going to buy a CD player, but don't know which one. Will a typical player be suitable for the A60's auxiliary socket with its 100mV sensitivity?

C Fox, St Albans.

A A good choice would be Arcam's Alpha 5, a clean but lively player that sounds very immediate and involving. If you wanted to spend less look at Rotel's excellent RCD-965BX, or the highly regarded Marantz CD52II SE. There should be no compatibility problem with the A60 despite the apparent mismatch of 2V output into a 100mV input, however: the former refers to maximum output, the latter to a minimum requirement.

Video fights back

Q I've had my system — Marantz CD-52II SE CD player, Technics SU-A600 amp, and Mission 760i speakers — for three months now, and it was excellent until I connected my Philips Nicam video to the amp. Now I keep getting little electric shocks when I touch metal parts.

I asked my dealer who phoned Philips, and they said it's normal for this video to have a current running through its casing. But why is this so? Is there any way of solving the problem?

J Johnson, Liverpool.

A Some of the items in your system — the CD player and probably the video too — have a detachable figure of eight reversible mains lead. Try reversing the lead to the video and see if there's an improvement. If your system isn't earthed to the mains you could also try running a wire from the earth pin in the mains plug to the grounding post of the amp; with luck your problem should be solved. If you're in any doubt about what to do, consult a qualified electrician.

Torn and frayed

Q I have an Arcam Alpha 5 CD player, Linn analogue interconnects, an Arcam Delta 290 amplifier and Linn Index speakers (old type)

connected with Linn K20 loudspeaker cable. I decided to go for a Delta 290 having bought an Audiolab 8000A, as I found the latter's 'neutrality' made CD sound fatiguing.

The Arcam's laid-back presentation is more listenable, though there is some loss of clarity. Would I get an improvement in clarity by changing cables, without losing out and making the system sound more fatiguing?

H Cooper, London.

A Going for a simple solid core speaker cable, like DNM or perhaps the recently introduced Chord Flatline, should improve clarity without introducing too many problems. Of the two, Flatline is likely to give the most balanced treble/bass performance, being fuller and less sharp than the DNM. Both should sound cleaner, if less rich, than your Linn K20.



Rural peacebreaker

Q I wish to add a CD player to my system, but need one which produces little or no mechanical noise. Over the years, I've tried a number of players from Marantz, Sony, Yamaha, and Technics, but physical noise has marred the performance of each, even though the basic sound was tolerable. I live in a rural setting and tend to play music at low volume levels. Budget is about £600, or slightly more if the improvement is worthwhile.

P Hodson, Newburn.

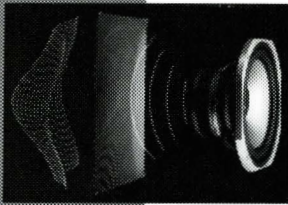
A Players that use Philips-type mechanisms with the swing-arm laser pickup tend to be noisier than machines which use linear-motor-driven pickups. Some players produce a faint swishing/hissing noise while operating, others may give a ticking/clicking sound.

It's important to realise that physically-clean CDs (no scratches, dust, or thumb-prints on the playing surface) can help reduce mechanical noise. If you treat your discs casually, and allow them to get soiled, expect noise. Pioneer's Stable Platter CD players tend to be pretty quiet, especially the PD-77 which has a fantastic transport.

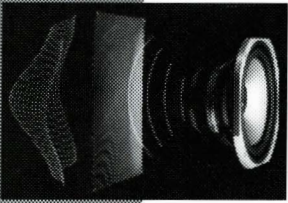
Unfortunately the PD-77 is outside your budget, but you might find a secondhand PD-75 at the right price. Otherwise, give the PD-S901 a try.

You can relieve fatiguing hi-fi with a new set of loudspeaker cables.

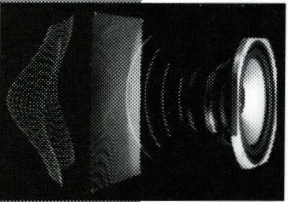




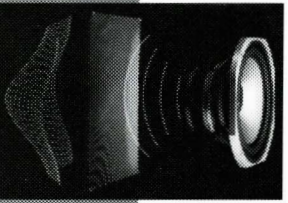
AUSTRALIA 613 429 2199
661 8 346 6444



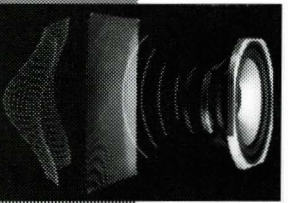
SOUTH AFRICA 333 9735



CANADA 314-691-2584



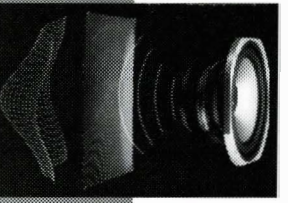
GERMANY 0208/35977
2961/51640



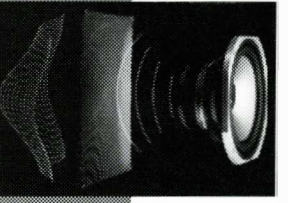
GREECE 301 8064802



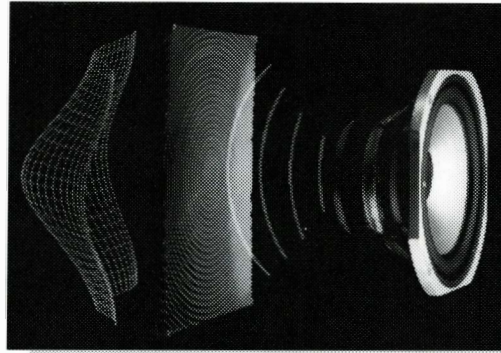
MALAYSIA/SINGAPORE



SOUTH AMERICA



U.S.A. 608-831-3433
415-669-7181



U.K. DISTRIBUTOR (0625) 500507

DEFLEX[®] acoustic PANELS

"...A marked improvement was obvious from the first few bars of REM's *Automatic for the People* album ..."

"...Vocals took on an air of presence that was stunning compared to what had gone before ..."

"...Rhythm was more definite and seemed to 'glue' the musical experience together ..."

Hi Fi News & Record Review - March 1994

"...The special surface pattern reduces standing waves to cure boxiness and resonance without killing the vitality of the sound ..."

"...expect tighter cleaner bass, crisper articulation, and an increase in liveliness without loss of control ..."

"...The result was sharper imaging, wider dynamics and a more natural sound ..."

Hi-Fi Choice - January 1994

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

Audiophile - January 1994

interested?

For further details and a comprehensive information pack - contact:

Spectra Dynamics
(0745) 571600



Will Rogers speakers prove too laid back with rock music?

Dynamism shortage

Q My system consists of an Arcam Delta 270 CD player, an Audiolab 8000A amplifier, Audiolab 8000T tuner, and Rogers LS-7 speakers.

Although I am satisfied with the sound of classical music, rock lacks the dynamism that came from the Rogers LS-4s and Epos ES-11s my dealer used during demonstrations. My 30ft by 12ft listening room is well over twice the size of the demonstration room, and I'm concerned these small speakers would sound inadequate. Would Epos ES-14s suit my room better than the ES-11s?

L Pettitt, Worcester.

A It's often the case that dealer demonstration rooms produce a bright, forward sound; the same system used under typical domestic conditions will usually sound richer and warmer. That said, your Audiolab amp and Rogers LS-7s are on the smooth and laid back side compared to some amps and speakers. The ES-14s could well be the answer, but ask to try them first before committing yourself. The danger is, getting a sharp lively attacking sound for rock might not suit classical music!

Bass mandate

Q I am going to dedicate a small room to music and, due to limited space, have decided to buy a pair of little speakers. However, I really need the bottom octaves, so a subwoofer would seem mandatory. Having read a recent *Hi-Fi Choice*, the REL Strata looks like what I want, but I have no idea of what main speakers to use with the subwoofer.

A Rice, address supplied.

A Most conventional subwoofers incorporate some form of bass roll-off for the main speakers, to avoid both subwoofer and main speaker system covering the same frequency area. REL subwoofers are different; your main speaker system is fed with a full-range signal and the subwoofer is adjusted to come in below it, filling in the lowest frequencies only.

You can therefore choose your main speakers by listening and comparing till you hear a sound that pleases. Try a full-sounding small speaker like the Arcam Delta 2, which gives good bass for its size.

prove adequate?

I listen to rock and want substantial bass capability, but crisp, clear mid and treble. Any advice on either of the two CD players? The MCD sounded great, but the latest Meridians seem pricey these days.

P Denman, Oxford.

A It's always hard to say how a complete replacement system will fare against a different blend of components, but chances are your proposed system will sit on the warm/full side of neutral. That said, your previous CD and speakers were not among the most lively either.

The Technics amp has plenty of muscle, unless you're a real headbanger. Try Orelle's CD-480 CD player against the Marantz models; its livelier, more detailed/dynamic sound should be better for rock.

A It depends on whether spending £140 (probably more, if carriage to and from Holland is included) is painful to you. This is certainly a very cost-effective upgrade for any reasonably decent player. Ring Trichord on (0684) 573524 for details.

Wind power

Q My system consists of a Meridian 206ΔΣ CD player, Linn Axis/Akito turntable and bi-wired Ruark Broadsword speakers with a Musical Fidelity Typhoon power amp. I feel the Typhoon is struggling to drive the Ruarks, and wonder if adding a second Typhoon (as suggested by my dealer) would be the most cost-effective upgrade. Or should I go for another combination, like the Audiolab 8000C/P?

A Crisp, Dorset.



Two Musical Fidelity Typhoons — a bridge too far?

Rockin' replacement

Q To replace stolen John Bowers Active One speakers and a Meridian MCD CD player I propose Monitor Audio MA 1200 II Gold speakers, a Marantz CD63 or CD-72SE CD player, and a Technics SU-A900 amplifier. Given the choice of loudspeakers and their 100W maximum power handling, will the Technics amp

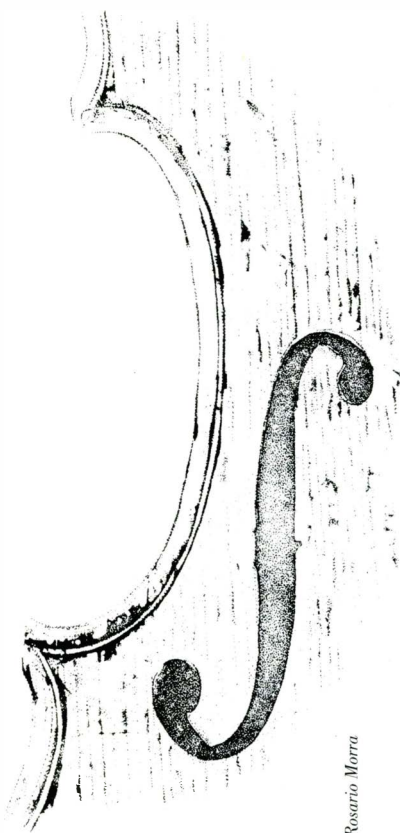
No pain, plenty gain

Q In issue 128 of *Hi-Fi Choice* I read about a middle-aged Philips CD-850 being re-clocked. I have such a player and am very interested in this process to transform the sound of my unit — is it painful? If not, can you give me the address or phone number of Trichord Research in the UK?

S J Winders, Holland.

A Adding a second Typhoon would give you two options: you could go from bi-wiring to bi-amping, driving each half of the speaker separately; or you could bridge them for an increase in power. You'll notice a big increase in liveliness and gain. The sound will seem more dynamic and alive even at low levels. Double bridged Typhoons should better the Audiolabs, as well as costing less.

Guarneri Homage



Rosario Morra

Sonus Faber has created a masterpiece. The **Guarneri Homage** is a unique lute-shaped loudspeaker with the strong tonal personality of a Guarneri violin.

Giuseppe Guarneri del Gesù was a master violin maker in **Cremona**, Italy, making a mere 150 instruments. His violins and violas were intensely sculpted acoustic masterpieces characterised by their unique ability to combine tonal strength and body with sweetness. **Sonus Faber** has followed the path of this overriding passion for tonal character in researching its fabulous Guarneri Homage. Each cabinet comprises 42 handsawn pieces of solid wood bonded using organic glues and heat in the manner of the great violin masters. Ten coats of natural varnish give an unsurpassed finish. Mature walnut, maple and lime woods are chosen for their differing strengths and densities permitting fine tun-

Sonus Faber's unique acoustic monitor dedicated to the memory of Master Violin Maker Giuseppe Guarneri del Gesù (1698-1744)



ing of the cabinet structure. This is damped internally with copper and lead. A silk dome tweeter with its own solid maple acoustic chamber is integrated with a highly linear mid-bass driver to produce a musical instrument with exceptional extension and dynamics but which retains a uniquely passionate timbre—sweet and accurate. A musical monitor so rare is destined for the discerning. The first pair is installed in the **Violin Hall** in **Cremona** to replay the sounds of the Amati, Stradivari and Guarneri instruments in that collection. Pairs 2 and 3 are to be presented to the internationally renowned violinists **Salvatore Accardo** and **Uto Ughi**.

Please contact **Absolute Sounds** in the first instance for personal dealer referral to discover the truth and beauty of a real musical instrument.

Details of the complete **Sonus Faber** range—including the celebrated **Extrema**, the £898 **Minuetto**, the **Minima Amator**, **Electa** and **Amator** loudspeakers and the **Quid** integrated amplifier are available on request.

Sonus faber®

Absolute Sounds
58 Durham Road · London SW20 0DE
Telephone 081-947 5047
Facsimile 081-879 7962



WRITE ON!

Tell us what you think about hi-fi and music

In support of CDs No. 1

Your letter of the month for June, *The Digital Trade Off*, can't be allowed to pass without comment from Teac as we, rather flatteringly, were singled out as the leading example of digital technology in the letter.

If it isn't the specific CD player (the one mentioned was the Teac VRDS-10) but digital technology that is the problem for Mr Bradbury, then why is it that so many 'audiophile' recordings are not only recorded digitally but are also mastered digitally?

Teac can speak on this matter with some authority, being one of the biggest manufacturers of professional digital recorders in the world. Such recordings would surely lack 'feeling' from the start of the process irrespective of the analogue or digital nature of the end user's medium. Surely no one is suggesting that this is the case?

Dave Hatton, Marketing Co-ordinator, Teac UK Ltd.

In support of CDs No. 2

The notion that vinyl sounds "better" than CD is a matter of opinion. True, some people may prefer vinyl, but this is not an indication that it is a more accurate representation of the original sound source; in fact the opposite may be true.

During the recording process, the signal for a vinyl record must be greatly compressed, because the medium simply cannot support the dynamic range required to record most musical sources. Given that compression is often used for effect in some types of recording, it is only natural that the compressed sound of vinyl may be more attractive to some listeners. Because of the mechanical nature of the recording process, there are a considerable number of points in the reproduction process where

the audio waveform becomes distorted. But this is harmonic distortion, and may make the sound more appealing. In short, vinyl may sound "better" because it has less accurate reproduction than CD! Anyone of who prefers the sound is a distortion junkie — they just don't realise why they like vinyl.

Brian Adams, senior technician, Educational Computer Unit, County Antrim.

Music to our ears

Recently I was lucky enough to be able to replace my four-year-old budget system. I had a budget of £1,100 and was in need of advice so I turned to *Choice*. I was very sceptical about how much I could improve the sound of my old system, but how wrong I was.

After auditioning a number of separate components in a variety of combinations, I finally settled on a system that sounded fantastic in the listening room; and after adding ballast to the stand, bi-wiring the speakers and using decent interconnects (your advice again) I was ready to go.

What a sound — I really hadn't imagined what I was missing (literally). The stereo imaging, definition, clarity of treble, mid and bass in comparison to my old hi-fi system was as different as a Rolls Royce to a Reliant *Robin*. Now I want to know: how much better does it get?

Chris Dale, Tadley, Hampshire.

Black is black, I want a coloured DAC

I can't understand why manufacturers go for black all the time. It's depressing to look at, and after several days it looks as though it hasn't been dusted for months. I nearly purchased a Marantz CD in champagne gold but it cost an extra £50, so I settled

Letter of the month

Each month, we're giving away a fabulous Hi-Fi Choice sweatshirt to the writer of the most interesting letter we receive.

So get scribbling and send in your views on anything to do with hi-fi or music to: The Editor, Hi-Fi Choice, 19 Bolsover Street, London W1P 7HJ, or send a fax on 071-323 3547.



Hairy hi-fi

As a reputable hi-fi magazine I believe you should encourage your readers to smoke marijuana. As you hi-fi reviewers are undoubtedly aware, it greatly enhances the listening experience.

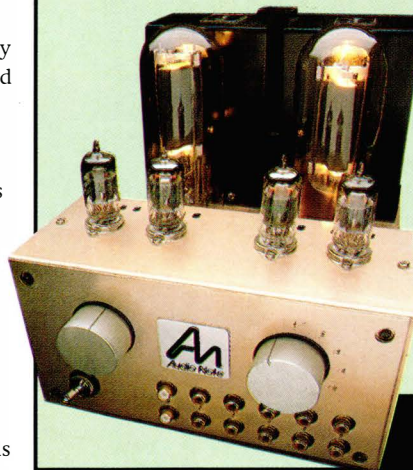
A firm round of applause also

for your *EAR* publication. It could well fill a niche. But please remain high-end. If I want to look at a £200 amp I can go next door and see my neighbour's. Lots of people buy exotic car magazines not to look at Ladas and Ford Escorts, but to drool over Jaguars and Aston Martins.

And finally, if this letter wins me a sweatshirt, could I swap it for an Audio Note *Ongaku*? I appreciate the price difference is rather dramatic, but I promise to buy Paul Messenger an Acme Deluxe Beardtrimmer. My son thinks Paul looks like his grandfather. Unfortunately, my son's 42 years old. So how old is Paul?

Bryan Palmer, Derbyshire.

Here's your *Ongaku*. Paul says he's not much over 21 and a beard trimmer would be lovely.



for the *CD52SE* in black only.

Another point I'd like to make is to do with the attitude of some hi-fi shops. I often find that they try to sell you components that they have been stuck with. Also, some can be quite rude if you decide not to make a purchase — I was once told to go home and look through hi-fi magazines to see if I could buy something cheaper in another store.

Very often it is difficult to

listen to a lot of components in one listening session, as most hi-fi shops don't have the room; and sometimes it seems if they do get hold of a specific component you have to have it, be it good or bad.

That's what's so good about hi-fi shows, as there is no pressure to buy and you feel very relaxed when listening. Unfortunately, there aren't as many big shows as there used to be.

GA Hewes, Leicester.

GET YOURSELF CONNECTED.....



reson[®]
DNM
THE ORIGINAL
SOLID CORE

Virtual Reality
audio systems

P.O. Box 383, Brentwood, Essex, CM14 4GB
Telephone: 0277 227355 Fax: 0277 224103

Audio Scene
Chesterfield
0246 204005

Brentwood Hi-Fi
Brentwood
0277 221210

Hi-Fi Excellence
Aberdeen
0224 322520

The Music Mill
Edinburgh
031 555 3962

Stirling Audio
Stirling
0786 479958

Doug Brady Hi-Fi
London WC2
071 279 4010

KJ West One
London W1
071 486 2262/3

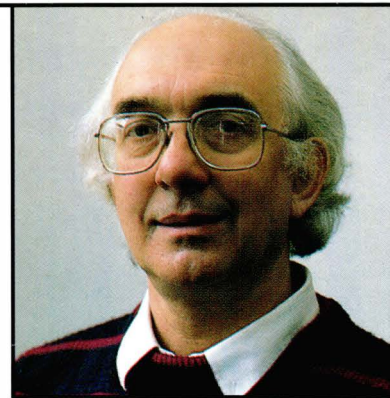
The Cornflake Shop
London W1
071 631 0472

Grahams Hi-Fi
London N1
071 226 5500

Hi-Fi Matters
Glasgow
0277 227355

21st Century Fox

Never one to shy away from the awkward questions, Barry Fox ponders the logic behind the self-effacing manual accompanying Sharp's new MiniDisc recorder. He also speaks up in favour of piping down while chewing on the subject of omnipresent muzak.



Sharp's new portable MiniDisc recorder, the *MD-M11*, is scheduled for launch in the UK this July, at a price of around £450. It's very small, but packed with many features, meaning that its functions must be selected and controlled with a few tiny buttons. Each of these serve several different purposes, depending on when and for how long they are pressed.

This wouldn't matter if every piece of domestic electronic equipment had its basic buttons labelled in the same way, and performed basic functions with similar key sequences. But, of course, they do not. Each manufacturer expects the user to learn and remember completely different controls for different machines.

In practice, many people take one look at the instruction manual, lose it and for ever more use only the most basic stop and start controls. They never even know what advanced features are buried inside their high-tech gadgets, let alone use them.

A dedicated minority of people do plough dutifully through the entire instruction book and try out most of the features, but even they will have forgotten all but the basics within a couple of days. The whole point of DCC was that it would be easy to use, because it builds on thirty years of familiarity with the analogue cassette. But I still have to keep the manual for the Philips *DCC900* deck handy, to remind me how to record on part-blank tapes, using arcane functions such as Append Play, Start Marker Write and Reverse Marker Write.

The same is true of AV amplifiers, DSP surround-sound decoders, memory bank equalisers, programmable CD players, timers, alarms, radio and TV tuners, infra-red remote controls and VCRs. All use completely different control logic, depending on the maker.

Compare this with the car industry: although rival manufacturers offer competitive features, the basic driving controls and dashboard lay-out are always the same. When you buy, borrow or hire a car, you can drive it away after only a few minutes' familiarisation.

Likewise personal computer, which uses either the Apple Mac or Microsoft DOS/Windows operating system. Once learned, DOS is always useful as the bedrock on which individual PC manufacturers build features and facilities.

But it's still not too late for the electronic industry trade bodies (BREMA, EIA, EIAJ et al) to draft a set of basic recommended control sequences and control labelling for all classes of consumer electronic equipment. Manufacturers could then build their competitive advanced features on top of this basic vocabulary. The public would vote with its feet against manufacturers who ignored the recommendation and used completely different logic.

Bewilderingly honest

Which brings us back to the Sharp *MD-11*. Will UK users get the same instruction manual as their American cousins? The latter is really the most extraordinary document, written as if someone from Philips wanted to highlight all the disadvantages of the MiniDisc system. Every section is peppered with notes and warnings that point up limitations. Here are just two excerpts:

"The display of the remaining disc time may be somewhat different from the actual remaining time..."

"If strange sounds, smell or smoke come out of the unit..."

And that's not to mention a whole

You need a good memory to keep abreast of domestic electronic devices. Barry Fox still struggles with the Philips *DCC900* and he's an expert...



page under the the bold heading: "MiniDisc System Limitations"

Another section warns that "when you do this (erase a track that is already recorded), all of the tracks and track names that follow the newly-recorded track will be erased".

Between the lines I read a clear message: Sharp is saying that the MiniDisc standard format could have been much better thought through, if Sony had not been in such a mad rush to get the first-generation players onto the market ahead of DCC.

Wrigley's Spearmint schtum

On a totally different note, I recently joined Pipedown, "the campaign against piped music". (6 Kingsley Mansions, London W14 9SG.) For an annual subscription of £10 you get the comfort of good company (George Melly, Kingsley Amis, Spike Milligan, John Lill etc), a car sticker, a couple of 'anti-Muzak' signs and a bundle of printed cards which you can give to any pub, restaurant or hotel which inflicts lo-fi piped music on people who would far rather have silence.

The cards all have very polite messages like "Why not turn it off?" or "The lack of piped music offends almost nobody... so please turn it off". Being rude, after having had a meal spoiled by musical drivel or overblown distortion, would usually be counter-productive.

Pipedown might also like to pass on a story about big-band trumpeter Bunny Berigan, told years ago by Al Rose and now reprinted in Miles Kington's *Jazz Anthology* (Harper Collins). Berigan always carried several packets of chewing gum. When he went to a bar for a quiet drink and found there was a jukebox, he would quietly put several sticks of gum in his mouth and wander purposefully to the record machine, to all intents and purposes selecting a song to play. Instead of putting a coin in the slot, however, the trumpeter would pack it full of Wrigley's and push the slide in.

This kept the bar quiet for at least as long as it took to have a couple of drinks.

Back when King Kong was a box office smash, Alan Blumlein's dream was to produce sound in stereo. Sixty years later, his son Simon continues the family tradition in Petersfield. Alan Sircom uncovers the Blumlein legacy.

Simon Blumlein is the owner of a tiny specialist music shop in Petersfield, Hampshire. This shop stocks all things musical, from sheet music to guitar strings, CDs to boxer shorts printed with musical notes. Upstairs from this musical emporium is a small hi-fi shop, stocking a small selection of quality hi-fi equipment.

So what? Simply that Simon Blumlein is the son of one Alan Dower Blumlein, inventor extraordinaire and the man who is widely considered to be the father of stereo.

During his career at the Columbia Gramophone Co, Alan Blumlein developed a magnetic recording system and later, after the company had been merged into the then new Electric & Musical Industries Ltd (EMI) in 1931, he produced a classic patent outlining the basic framework of modern stereo recordings. Blumlein also designed and built equipment to produce the first stereo recordings, some of which exist to this day. The record company Symposium recently presented Simon Blumlein with a stereo 78 recording made by his father in the mid-Thirties.

In his shop, Simon proudly displays a certificate awarded posthumously by the Audio Engineering Society, suggesting that his father's stereophonic work should rank alongside that of other top audio pioneers.

Simon has many wry anecdotes from the Thirties and Forties concerning his father, even though he died

Blumlein biography

If the hi-fi industry had an Einstein, it would have been Alan Dower Blumlein. By the time of his death, aged 38, he had been granted 128 patents, in everything from telephony to television, radar to measurement. His house in Ealing sports the only blue 'famous resident' plaque in the area — the only one awarded to a 20th Century electronics engineer.

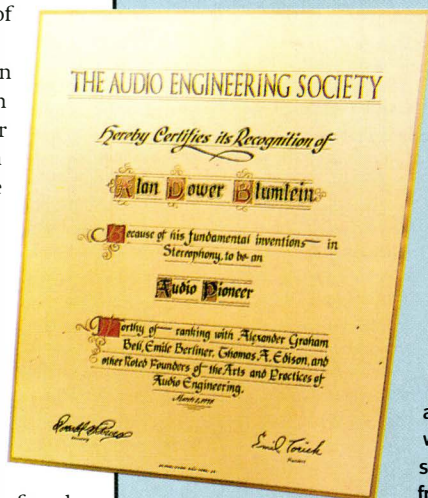
Alan Blumlein died on 7th June 1942 in an air crash. He was flight testing the then new H₂S airborne radar system in a Halifax bomber, when its starboard engine caught fire and burned through the main wing spar.

This airborne radar system was later used against German U-boats with such success that Nazi submarines were removed from active service in the Atlantic conflict.

It is for his pioneering work on stereophonic recording methods that Blumlein will be remembered. His work for EMI in 1930/31 developed the first practical stereo recordings. Keller of Bell Telephone Labs also investigated stereophonic recording, but his system was radically different to Blumlein's — although the system needed far more post-war development before it could be commercially successful, it was Blumlein's ideas that were put into practice in the late 1950s.

He was also heavily involved in the development of EMI's 405-line television, that was adopted by the BBC over the earlier, largely static and mechanical system designed by Baird.

The name of Alan Dower Blumlein is not as well-known as it deserves to be; it should be up there with John Logie Baird and Thomas Alva Edison.



when Simon was just six years old. He distinctly remembers those days at the family home in Ealing: "It was a marvellous education, while it lasted. My father had me tapping into the mains when I was six and I was always encouraged to experiment."

His father also cultivated Simon's love for railways, once describing in detail the how the trains shunted in the Guinness factory at Park Royal. In fact, one of the first stereo recordings was made of a train outside the EMI factory in 1933. The memory has stayed with Simon, who is now a veteran member of the Swiss metre-gauge rack and pinion enthusiasts club.

Though he was only a year and a day old, Simon saw the first televised coronation. This was not Elizabeth II in 1952, but George VI in 1937. As he was so young, he can't remember the event, but he does have a certificate signed by a dozen witnesses to prove that he is one of a very select band to have seen more than one coronation on television.

Simon continued in his father's engineering tradition, spending nearly 30 years manufacturing lenses for spectacles before he was made redundant. During this time, he made the graduated reading glasses that, like his ever-present bow-tie, sit permanently on the bridge of his nose.

Having left the world of optics behind him, he spent most of his time browsing through the racks of classical CDs and talking about different methods of recording. One day, his wife turned to him and suggested that as he was so enthusiastic about music, he should make a living from it. Not one to flinch at a challenge, he set up his music shop three and a half years ago. "It couldn't have been a worse time to set up a shop — right in the middle of a recession. But if you can prosper in lean times, it gives you a good grounding for when things get better."

As an owner of a specialist record shop, Simon offers advice to people regarding classical recordings, and often plays discs on his Denon D-110 system played through Rogers LS3/5a speakers in the shop. Many people in the area asked where they could get

In the name

Petersfield's Mr. Music, Simon Blumlein is often found relaxing with a tree and a Quad remote control in his demonstration room — when he can get away from his tiny, packed music shop (inset, right).



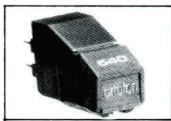
of the father

Great tracking

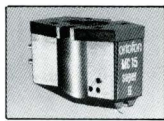
Ortofon is famed the world over for the tracking capability of its cartridges. Cartridges which will breathe new life into a cherished LP collection, divulging detail as never before.

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

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



500 Series
Moving magnet
cartridges from £30-£100



MC Series
Moving coil cartridges
from £60-£110



Q Series
Moving coil cartridges
from £140-£500

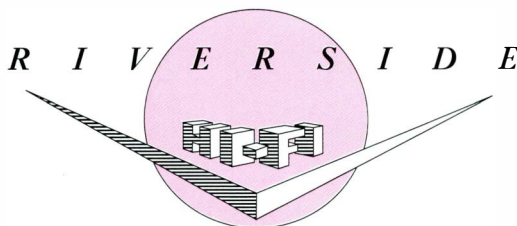


1000 Series
Moving coil cartridges
from £600-£1500

ortofon

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

Tel: 0753 889949.



**422 Richmond Road
East Twickenham
Middlesex TW1 2EB**

at the foot of Richmond Bridge

**Tel: (081) 892 7613
Fax: (081) 892 7749**

OPEN: Mon-Sat 10am-5.30pm

Thursday 10am-7pm

Later by appointment



Recommended Systems

System 1	Aura VA 100	£329.95	System 4	Musical Fidelity F22	£999.95
	Marantz CD83	£249.95		Musical Fidelity FX90	£1099.95
	Mission 761	£299.95		Musical Fidelity FCD	£1499.95
	Mission Stands	£99.95		KEF 104.2 Bk Ash	£1595.95
		<u>£979.80</u>			<u>£5195.80</u>
System 2	Audiolab 8000A	£479.95	System 5	Audio Research LS3B	£2250.00
	Arcam Delta 270	£799.95		Audio Research D200	£2800.00
	Castle Chester	£649.95		Audio Research CD1	£3280.00
		<u>£1929.85</u>		Apogee Slant 6	£2400.00
System 3	Copland CSA14	£999.95			<u>£10,730.00</u>
	Meridian 600	£799.95			
	Sonus Faber Minuette	£898.95			
	Target R2 Stands	£289.95			
		<u>£2988.80</u>			

Facilities

- fully equipped hi-fi listening rooms
- 1 fully equipped home cinema and surround listening room
- home installation service
- multi room design and installation
- export enquiries welcome
- 0% and low cost finance facilities available
- BADA bonded dealer
- 2 year parts and labour guarantee.

Products stocked: Apogee • Arcam • Audio Alchemy • Audio Innovations • Audiolab • Audio Research • Aura • B&O • B&W • Bose • Castle • Classé Audio Copeland • Denon • Exposure • Jadis • KEF • Krell • Marantz • Martin Logan • Meridian • Michell • Micromega • Mission • Monitor Audio • Musical Fidelity • NAD Nakamichi • Pioneer • Project • QED (Systemline) • Quad • Rotel • Suonus Faber • Sony • Tannoy • TDL • Theia • Totem

Accessories from: Audioquest • Beyer • Jecklin • Sennheiser • Stax • Van den Hul



Discover the Quad experience in Simon's main demo/listening room.

such a nice-sounding system and it seemed logical that he should set up a hi-fi department.

About four months ago, he finally turned two rooms above his tiny music shop into a hi-fi demonstration room. It is still comparatively unsullied by the ravages of hi-fi pretension, stocking the barest minimum of products from Denon, Rotel, Castle, B&W/Nakamichi and Quad.

Blumlein has yet to develop a large hi-fi clientèle, but his band of loyal and avid music collectors are slowly begin-

This is one of a handful of stereo 78s made by Blumlein Sr. in the 1930s.

ning to discover the joys of hi-fi.

As Simon spends about 12 hours a day in his shop, with all the time, energy and music that entails, he seldom has a hi-fi system at home. His main listening system is also in the main demonstration room and comprises a Nakamichi DR-3 cassette recorder; Quad 67 CD player; 66 tuner and pre-amplifier; 606 power amplifier and either Quad ESL-63 or Castle Howard speakers, depending on the demonstration schedule.

His stance toward system tweaking is resolutely based on engineering principals. He feels that Peter Belt, green pens and even fancy cables have no valid basis in physics or engineering. This philosophy is reflected in his system which all runs from the same mains plug, with no frills, no valves, no luxuries — just refined, conservative engineering, built to last a lifetime.

On his business card, Simon Blumlein has a logo that demonstrates the original crossed microphone arrangement first developed by his father. It also proudly states "Blumlein — The First Name In Stereo", one of the only claims in hi-fi which is wholly without contention.

A plethora of patents

Alan Blumlein issued (or collaborated on) 128 patents — one for every six weeks of his working life. The patents touched almost every aspect of electronic engineering between the wars. A selection of his more important patents include:

- 334652, June 1929.** Telephone loading and phantoming coil (using the 'closely coupled inductor ratio-arm bridge' technique).
- 3509984, March 1930 (with HE Holman).** Cutting head for gramophone recording (electromagnetic damping arrangement).
- 394325, December 1931.** Stereophonic recording and reproduction (the system description and details of techniques).
- 425553, September 1933 (with HAM Clark).** Negative-feedback power amplifier (with both current and voltage feedback).
- 429022, October 1933.** Stereophonic sound (use of differently spaced microphones for different frequency bands).
- 448421, September 1934.** Cathode follower for increasing input impedance of valve.
- 456444, February 1935.** Arrays of microphones with outputs mixed to give various polar diagrams (these ideas derived from the techniques used in stereophonic sound).
- 474607, April 1936 (with ELC White).** Stabilised HT supply (using series triode).
- 496883, June 1937.** 'Ultralinear' amplifier circuit (screen tapped in on output transformer, to improve linearity).
- 503555, October 1937.** High-definition television system compatible with a low-definition system (a fine spot is used, and carefully synchronised spot wobble allows extra detail to be received on special receivers).
- 515684, March 1938.** Tube with longitudinal slot, used as a slotted aerial or as a feeder.
- 592503, October 1942 (with ELC White and FC Williams).** Radar system for searching (in range) and locking onto any echo found.

"It was a marvellous education, while it lasted. My father had me tapping into the mains when I was six and I was always encouraged to experiment."



CREATIVE AUDIO

9 DOGPOLE, SHREWSBURY, SHROPSHIRE. Fax: (0743)271010 Tel: (0743)241924 (Closed Mondays)



Hobson's choice

It pays to consider all your options – here we have four excellent CD players, each with its own sonic signature. There is no single blanket “Best Buy” – the correct choice for Mr. Hobson is the player which sounds best to him. He will decide by auditioning them all side by side in our dem-room. This is only possible because our policy has always been to stock competitive products rather than to simply “tow one company line”.

So, when it comes to making that vital upgrade, will your dealer be offering you Hobson's choice?

Ring us now for a free CREATIVE AUDIO information pack

Authorised retailer for:

ARCAM • AUDIOLAB • CELESTION • CYRUS • DENON • EPOS • KEF • MERIDIAN
MISSION • NAIM • QUAD • REGA • ROKSAN • ROTEL • SOUNDSTYLE • TRIPODS

Not to be missed: next month's action packed, bumper issue of

HI-FI CHOICE

THE FINEST HI-FI MAGAZINE IN THE WORLD



Free supplement

Music on the move — just in time for the bank holiday. We suss out the top portables and personals to take on a picnic or to the test match.



Power shower

Eight of the latest affordable amplifiers tested and rated.



Hidden strengths

In search of big sound from small boxes? A satellite/subwoofer outfit could be ideal. On test: four of the best.



Driving ambition

Four in-car systems you'd love to slot in your dashboard. We find out the top gear.



Competition

Sensational Sennheiser giveaway: Your chance to own the headphones of your dreams.



Digital airwaves

Choice takes a look at a new digital radio from Amstrad — just one of the many products up for review in our Sessions pages.



September's issue will be out on sale on Friday, August 12, 1994.

(All contents subject to change because of circumstances beyond our control)

COMPETITION

In this month's great £3,000 competition, you have the chance to win a CD, DAC, amps or speakers from Perivale's finest hi-fi manufacturer, Orelle.

Orelle is one of the champions of high-end hi-fi without high-end price tags. We have split the system you see on the right into four parts, so that several of you have the chance to hear what Orelle components are all about. The first correct set of answers out of the hat will win Orelle's top-flight £899 CD-260 integrated CD player. Based around Philips multi-bit technology, the CD-260 features no less than 15 regulated power supplies. The next name out will receive the DA-180 digital converter. This £599 18-bit, eight times oversampling converter is considered by some to be one of the best converters, regardless of price. Like all Orelle's digital components, the DA-180 uses independent transformers for the analogue and digital power supplies.

The third lucky winner will get the £399 SC-200 stereo preamplifier and an SP-150 stereo power amplifier, valued at £499. The SC-200 is a seven input preamp, with moving coil and moving magnet options for vinyl users. The SC-200 features Holco precision resistors and silver plated switches. The 75watt SP-150 uses polypropylene capacitors, metal film resistors and van den Hul internal wiring.

Finally, you could win a pair of the £699 Orator two-way bass reflex loudspeakers, in black ash. These use a 25mm soft dome tweeter with a 170mm woofer, making for a speaker that is 88dB efficient, yet can still deliver bass down to 35Hz.

1. What chipset is used in the CD-260?

- a) MASH
- b) Philips BitStream
- c) Philips Multi-bit
- d) Crinkle-cut

2. Where is Orelle based?

- a) Perivale
- b) Portsmouth
- c) Petersfield
- d) Pinner

3. How many watts does the SP-150 deliver?

- a) 150w
- b) 60w
- c) 100w
- d) 75w

4. What kind of tweeter does the Orator use?

- a) titanium dome
- b) metal dome
- c) soft dome
- d) pleasure dome

5. What internal wiring is used in the stereo power amplifier?

- a) van der Valk
- b) Cardas
- c) van den Hul
- d) Audio Note



How to enter

To win one of these superb prizes, simply write the answers to the five questions on the left on the back of a postcard, or sealed-down envelope. Please do not seal the answers within the envelope.

Send your completed entries to: Orelle Competition (HFC408), *Hi-Fi Choice*, Tower Publishing Services Ltd, Tower House, Sovereign Park, Market Harborough, Leicestershire LE87 4AU.

Entries must be received no later than first post on Monday, 22nd August, 1994.



WIN!
ORELLE GEAR
WORTH
£3,000

Competition rules:

The Editor's decision is final and no correspondence will be entered into. All winners will be notified by post. The competition is not open to employees of Dennis Publishing Ltd, Orelle hi-fi, their suppliers, agents or associates. We regret that the competition is open to UK residents only. No cash alternative will be offered. Submission of entry will be taken as proof of receipt. Please notify us if you do not wish to be informed of any other special offers or promotions from *Hi-Fi Choice*.

close your eyes and see



the Arcam Delta system

Close your eyes and see Arcam's Delta system of state-of-the-art hi-fi components.

Ignore the fact that the Delta 290 is our finest integrated amplifier, the recipient of a coveted Design and Engineering Award from the world's pre-eminent consumer electronics show, the Chicago CES. Don't be swayed just because the UK hi-fi press agree, giving it "a compelling and enthusiastic Recommendation"⁽¹⁾ and describing it as "an amplifier with real clout, able to deal with virtually any level of musical complexity".⁽²⁾

Next cast a jaundiced eye on the Delta 280 tuner. Again, disregard the pleasing aesthetics and the convenience of remote control*. Don't even be led by reviews revering its sound as "lucid", "warm" and "attractively open".⁽³⁾

Then, visit your scepticism on the Delta 270 CD player. "Solidly built", it "strikes a balance between smoothness and punch" to gain a class leading, 5 star recommendation.⁽⁴⁾

If that's not enough, take a sideways look at our remarkable two-box CD player, the Delta 250 CD transport and Black Box 50 DAC. "To justify their significant cost, two-box systems really have to offer that little bit extra in terms of sound quality; but Arcam's combination does just that - and more".⁽⁵⁾

Next, move on to the Delta 100 cassette deck. Try to dismiss once again its 1992 Chicago CES award and the reviewer who gushed, "In the beginning, I called for a round of applause for Arcam's bravery in producing a British-made cassette deck. At the end, I'm asking for a standing ovation".⁽⁶⁾

Finally, muster up your best disinterest for the "extraordinarily well engineered"⁽⁷⁾ Delta 2 loudspeakers, "a firm, positive sounding design with bold bass and mid and a firm grip on the musical architecture".⁽⁸⁾

In fact, ignore everything anyone else tells you. Ignore even what your eyes tell you is true. Just let your ears decide.

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

1. Hi-Fi Choice. March 1993. 2. Audiophile. February 1993. 3. Audiophile. April 1993. 4. What Hi-Fi? Awards issue 1993. 5. What Hi-Fi? November 1993. 6. Hi-Fi World. April 1992. 7. What Hi-Fi? Awards, 1991. 8. Hi-Fi News Buyers Guide. November 1993.
* CIR200 System Remote Control handset to operate all the electronics listed here is an optional extra



For your free copy of our brand-new 'Soundscapes' brochure with full details of the Arcam Delta range and the name of your nearest dealer, complete and return this coupon to us. In addition, if you would like independent reviews of any of our hi-fi equipment, please state which products and we'll be happy to send you the relevant material. Arcam, Pembroke Avenue, Waterbeach, Cambridge CB5 9PB. Or telephone: (0223) 440964 (24 hours)

I am interested in reviews on (please state product(s)): _____

Title _____ First Name(s) _____ Surname _____

Address _____ Postcode _____

We blow our own trumpet

So you can play our Cornet's

We have spent the past 25 years developing loudspeakers to meet the demands of the most discerning consumer and with the Cornet range we have created a series with a stylish timeless design. The technical excellence within the loudspeakers allows for the production of light, transparent and perfectly uncoloured sound.

The Cornet Range - The Total Listening Experience



Jamo

"The Sound of Excellence"

Jamo

Blowing Trumpets

DEALER	TOWN	TELEPHONE
Andys Electronics	Muswell Hill	(081) 8838969
Audio Vision Services	Fordingbridge	(0423) 654488
Audiocraft	Northampton	(0804) 36291
B&B HFI	Reading	(0734) 583730
Barnstaple Sony Centre	Barnstaple	(0271) 45429
Barretts	Ashford	(0233) 629119
Barretts of Canterbury	Canterbury	(0227) 767576
Camberley Sony Centre	Camberley	(0276) 682000
Capital Cameras	Crawley	(0293) 543555
Carvells	Hinckley	(0445) 239390
Cashes	Cork	(021) 276771
Caters	Brownhills	(0543) 373168
Chesterfield Co-op	Chesterfield	(0246) 220200
Chris Pettit	Grantham	(0476) 593464
Churchers	Worthing	(0903) 821595
Collingwood Radio	Barnstead	(0737) 351365
D.Eckerley	Gr. Manchester	(0942) 882235
Dawson	Bournemouth	(0202) 764965
Deram Audio Visual	Dudley	(0384) 233191
Empire Electro Centre	Leeds	(0532) 351701
Eric Hamilton HFI	Glasgow	(041)946218
Eric Wiley	Castelford	(0977) 553066
Exeter Sony Centre	Exeter	(0392) 79889
Gibbs Electrical	Southampton	(0703) 772475
Goodwins	Wood Green	(081) 8880077
Hamiltons	Southampton	(0703) 228622
Hawksworth & Wheeler	Folkestone	(0303) 255688
Hi-Fi Confidential	London SW1	(071) 2330774
Hi-Fi Surplus	London W1	(071) 9357582
Hi-Fi Confidential	London W1	(071) 5807468
Horsham Sony Centre	Horsham	(0403) 255432
Howes of South Borough	Tunbridge Wells	(0892) 537288
J.G. Windows	Newcastle	(091) 2321356
Johnny Roadhouse	Manchester	(061) 2733069
Kerco Electronics	London W12	(081) 7436698
Kimberleys	Bexley Heath	(081) 3043272
Lisnasure Interiors	Dromore Co. Down	(0762) 551628
Mannerings & Son	South Harrow	(081) 4220070
Marrow Sound	Maidenhead	(0628) 770622
Micro World	London W1	(071) 4361408
Millers Music Centre	Cambridge	(0223) 354452
Mobile Radio	Wellingborough	(0933) 223527
Musical Images	Hounslow	(081) 5695802
Musical Images	Edgware	(081) 9525535
PR Sounds	Trowbridge	(0225) 777799
Pennine TV	Keghley	(0535) 607593
Ownes	Colwyn Bay	(0492) 530015
Peter Ellis Audio	Newark	(0636) 704571
Peter Martin	Congleton	(0260) 273206
Plymouth Audio Visual	Plymouth	(0752) 262976
Practical HiFi	Bolton	(0204) 395789
RK Holman	Wimbourne	(0202) 882785
Radio Lux	Watford	(0923) 228734
Readyvision	Huddersfield	(0484) 532294
Rightway	London W2	(071) 7237995
Roy Townsend	Stafford	(0785) 436669
Roystons	Nuneaton	(0203) 385489
SMC Trading	Shrewsbury	(0743) 232317
Smythe & Bame	Eastbourne	(0323) 729192
Sound Deals	Preston	(0772) 796108
Sounds Incorporated	Ponefract	(0977) 791215
Telefringe	Frome	(0373) 462598
Telescene	Nottingham	(0602) 291665
The Music Station	Inverness	(0463) 225523
The Stereo Shack	Leicester	(0533) 530330
Thilwall & Allan	Basingstoke	(0256) 21228
Todds	Limerick	(061) 417222
TV Centre	Redhill	(0737) 765985
Unique Systems	Ashdon	(061) 3431852
Westgate Audio	Bradford	(0274) 732947
Weybridge Audio	Weybridge	(0932) 851121
Wilkinson HFI	Nelson	(0282) 612901
Zeus Audio	Belfast	(0232) 332522
Pan International Comp	HONG KONG	(852) 8891989
Excel Venture Trad Co.	SINGAPORE	(65) 3832200
Tawan Audio Trad Co.	TAIWAN	(886) 42237609
Scan Audio	AUSTRALIA	(61) 38196352
Jamo HFI USA Inc	USA	(1) 7084984848
Jamo UK Ltd	Daventry	(0327) 301300

Jamo

"The Sound of Excellence"



The way we
go on....
you'd think
we knew
what we're
talking about

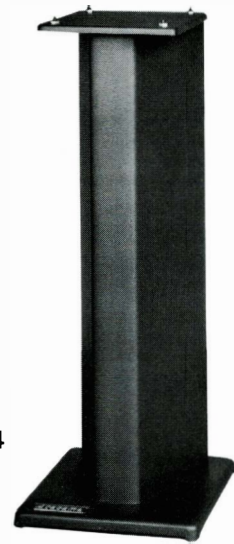
Listen Inn
Hi-Fi Specialists

Linn, Naim, Rega, Epos,
Heybrook, TDL, Arcam,
Mission, Royd, Audiolab,
Creek, Cyrus, Denon,
NAD, Marantz, Kef,
Nakamichi, Dynaudio
(Not all brands stocked
at both branches)

6 Hotel Street, Leicester
0533 623754

32 Gold Street, Northampton
0604 37871

Atacama Audio



Atacama SE24

"Sometimes you've just got to take a stand,
especially when it makes the music sound as good
as Atacamas"

What Hi-Fi Jan 1994

Manufactured by

SAMBELL ENGINEERING LIMITED

Winston Avenue • Croft • Leicester LE9 3GQ

Telephone Sutton Elms 0455 283251 Fax 0455 283908

Infidelity

indecently good hi-fi



Buying hi-fi should be fun, we guarantee to make it so. Listen to a well chosen selection of quality hi-fi equipment in our comfortable and relaxed listening room. Bring along your own records or CDs, we'll provide the coffee, and hear the difference we can make to your enjoyment of music.

NAIM's excellent new CD3 CD Player now on demonstration

ARCAM, EPOS, HEYBROOK, MICROMEGA, NAIM, NAKAMICHI, NEAT, REGA, ROKSAN, ROTEL, ROYD, SHAHINIAN and TEAC

9 High Street, Hampton Wick, Kingston upon Thames, Surrey KT1 4DA
Telephone: 081-943 3530. Open: Tues - Fri 10.30am - 7pm, Saturday 10am - 6pm.

CD transports and DACs



Top digital expert Paul Miller introduces the latest CD transport and DAC combinations culled from a single manufacturer and explains how he tests them.

Over the past few years, our tests have reflected the diversification of modern digital audio, which has branched out from the integrated CD player to encompass separate CD transports, outboard converters (DACs), digital interconnects and (on page 58), the likes of recordable CD, DCC, DAT and MiniDisc.

Nevertheless, when reviewing CD transports and outboard converters, for example, it's always possible to miss a truly

Are two boxes always better than one?

A conventional single-box CD player is, from a digit's point of view, a very noisy place. A place where many separate digital and analogue processes are taking place simultaneously, interfering with one another by cross-coupling through common power supplies, circuit boards and enclosures. This interference can contribute to jitter (a blurring of transitions in the data) which, in turn, only increases the muddying of the music.

A two-box player seeks to lessen any such interference by placing laser assembly, focus, tracking servos and decoder functions in one box, isolated from the oversampling, DAC and analogue filtering circuitry in another. Neat idea. However, before the data is squirreled from CD transport to DAC, it must be altered from the standard language of I²S to S/PDIF (Sony/Philips Digital Interface Format).

Once captured by the DAC, this data is then translated back into I²S, having already recovered both the original data and clock signals. Naturally, a single-box player avoids all this malarkey and thus avoids yet another potential source of jitter or, in the worse case, corrupted data.

Two-box players are no panacea but simply an alternative method of skinning a compact disc.

The cast list

ARCAM DELTA 250/BLACK BOX 50	£750/£450
DPA DIGITAL T1/PDM TWO FIFTY-SIX	£895/£2995
MERIDIAN 500/563	£975/£695
MISSION CYRUS DISCMASTER/DACMASTER	£1900
MONARCHY AUDIO DT-40A/M-33	£1595/£1495
PS AUDIO LAMBDA/ULTRALINK TWO	£2250/£2650
TEAC P-2S/D-2	£3500/£2500
THETA DATA BASIC/COBALT 307	£1997/£699

What the laboratory tests mean

symbiotic relationship — that ideal match between a transport and a DAC. So where better than to continue our search by returning to the genuine two-box CD player, where both transport and DAC hail from the same manufacturer? In theory at least, this represents a digital marriage made in heaven.

In certain cases we've covered one or more of these components previously, in isolation, for example Arcam's *Black Box 50* with its hybrid converter and Sync Lock facility, and the matching *Delta 250* transport. Up to this point, the pair have never met on the reviewing field.

Provided each transport and DAC conforms to IEC958 (a standard for digital inputs and outputs), no single transport/DAC combination should be any more 'compatible' than another. In practice, though, it's not uncommon for manufacturers to engineer a quirk or two, loading the dice in favour of their own separates. Features and facilities, however, remain quite unaffected. As a result there's no reason why a two-box CD player shouldn't offer the same options as a conventional integrated CD player.

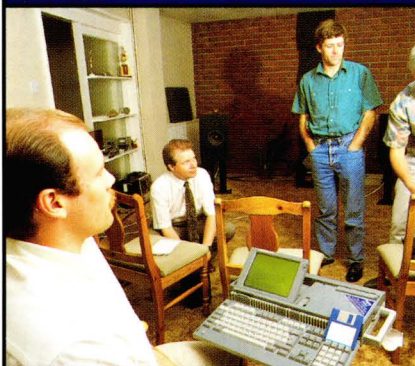
In practice, the exotic combinations on test rarely match the feature-count of a well-specified mid-price Japanese CD player, but they do offer one special widget that's rarely encountered on the single-boxers: the phase-invert switch.

Phase inversion is accomplished by changing each digital one for a digital zero (and vice-versa) within the DAC. It has the same effect as swapping over black and red loudspeaker leads, reversing the motion of the speaker cone note by note. Depending on your choice of speakers, the absolute phase of your amplifier and the relative phase of different instruments within a multi-miked recording, you'll find some CD tracks sound better 'phase-positive', and others 'phase-inverted'.

We've assembled eight of the latest two-box players from what is both a restricted and eclectic field. After all, many more manufacturers churn-out D/A converters for the upgrade market than produce fully-fledged transport/DAC duos for the well-heeled enthusiast.

This is because Philips' Red Book licensing agreement only covers the CD mechanism, not how the digital data is manipulated once it's been recovered.

Furthermore, all facets of basic CD technology are represented in equal measure, including examples of Far Eastern three-beam and European single-beam laser transports. We've various bitstream, 18-bit, 20-bit and hybrid DAC technologies on offer too, together with a full gallery of different electrical and optical digital interconnections. A digital panorama that brings our coverage of the CD market bang up to date.



In accordance with our usual procedure for CD players, each of these transport/DAC combinations was warmed up for a minimum of 72 hours before being auditioned under strict, blind conditions. Each one was evaluated using a broad repertoire of classical, jazz, folk and pop vocal music, with each and every track adjusted to a predetermined listening level.

Where one was supplied, we used the preferred digital interconnect of each manufacturer or distributor; otherwise we reverted to both Goldmund *Lineal* and Audioquest *Video Z* interconnects (established favourites from our cables supplements, issues 108 and 131) or, where appropriate,

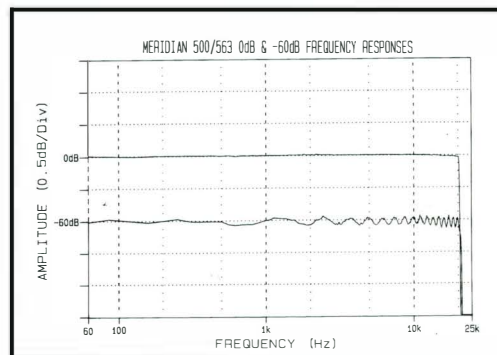
Toslink optical links from Furukawa and Monster.

The remainder of the system comprised updated versions of the DPA *100S* pre/power combination, Audio Note *AN-E/B* and REL *Stentor* (subwoofer) loudspeakers. Remember, *Hi-Fi Choice* remains the only magazine which regularly employs an impartial panel who audition equipment unaware of its origins. As a result, we are able to judge sound quality without preconceptions. Thanks are due to Neil Burt (Rogers), Guy Sargeant (Audio Innovations) and Alan Sircom (*Hi-Fi Choice*) for their participation in this month's test.

Understanding the frequency response plot

This graph demonstrates the response of the player at both peak level (0dB, upper trace) and at a low level (-60dB, lower trace). Ideally, the upper and lower responses should match one another, but in this case changes in linearity and noise are revealed by a change in the smoothness and extension of the lower, -60dB trace. Our example plot (from the Meridian 500/563) demonstrates an obvious change between high and low-level responses.

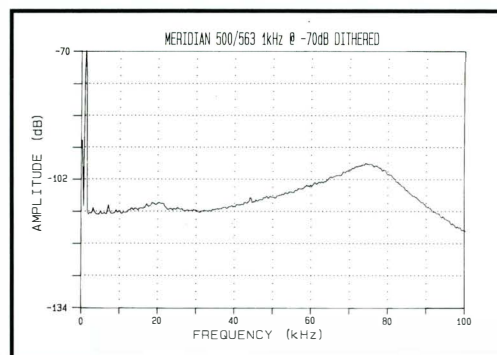
Ripples in either response are often due to the oversampling filter, though bolder ripples on the low-level trace may be indicative of undesirable cross-coupling within the player.



Understanding the dithered -70dB/1kHz plot

Dither is used to swop predictable harmonic distortions for a slight increase in noise through the audio band (0-20kHz). Look out for a hump of ultrasonic noise beyond 20kHz on this plot (taken from the review of Meridian's *500/563*). This is a feature of many bitstream DACs whose noise-shapers are used to re-distribute huge levels of re-quantisation noise.

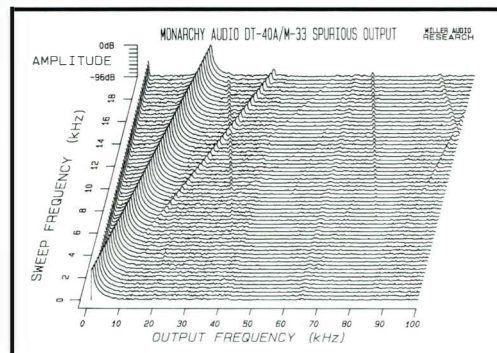
Traditional multi-bit DACs are often 'cleaner' above 20kHz and, as a result, often perform far more consistently when partnered with different amplifiers.



Understanding the 3D spurious output plot

Distortion and sampling images are most graphically illustrated on the 3D plots. Here an audio frequency sweep (20Hz-20kHz) reveals continuous changes in performance rather than at one frequency. Our example plot (from the Monarchy *DT40a/DIP M33*) shows 2nd and 3rd harmonic distortions radiating out to the right of the main sweep.

In addition, sampling or stopband images are represented as whole or partial V-shaped patterns, centred on multiples of the 44.1kHz sample rate. These digital distortions are indirectly audible, through there are other types of distortion that may, or may not, be audible through the amplifier used to partner the CD player itself in the context of a system.



ARCAM DELTA 250/BLACK BOX 50



Slowly but surely, each successive generation of Arcam's CD transport and *Black Box* converter has witnessed some modest improvement. But five generations later those incremental upgrades have culminated in something very significant indeed; the *Delta 250* transport and *Black Box 50* converter.

Naturally, we've already covered both products in isolation where they achieved a Recommendation and Best Buy en route (issues 130 and 127). Nevertheless, it's only when put together that Arcam's proprietary Sync Lock facility comes into full effect, tying the flow of data within the *D250* to a single master clock situated in Arcam's *BB50*.

This clock feed takes the form of a 2.8224MHz signal, squirted between the *BB50* and *D250* via an optical fibre, synchronising the 'timing' of data as it travels from transport to DAC. Digital jitter and analogue distortion are both reduced as a result. Sadly, Arcam's Sync facility is not compatible with other like-minded links from DPA, Linn, Mission or Audio Synthesis.

None of this influences the standard track access, program, repeat and search facilities offered by the *D250*, nor the phase-invert widget provided on the *BB50*. Flexibility without complexity — that's the key to this sober-looking partnership from Arcam.

Sound quality

Building upon its performance in issue 127, where it was described as inviting but measured



Expressive and sophisticated: the *Delta 250/Black Box 50* is a great combination.

and sure-footed, the *BB50* was likened to a bigger but more refined version of Mission's *Disc/Dacmaster*. Now its neutral and even-handed balance revealed the earthy bass line of Mary-Chapin Carpenter's *Never Had It So Good* as effectively as it did the delicate, fluttering percussion that accompanies Lyle Lovett through

another favourite track, *Good Intentions*.

Whatever the style, its music always comes across with a great sense of relaxed clarity, providing a real insight into the colour and conviction of different instruments without appearing heavy-handed. It's a good example of a player that sounds smooth and sophisticated but manages to avoid sounding sugar-coated.

So the backing piano from Lyle Lovett's CD jumped out with great confidence just as the close harmonies were nimbly separated — two feats of resolution achieved with forcefulness. My only criticisms are of a hint of edginess with powerful strings and vocals but, according to the panel, it is a very minor quibble.

Conclusion

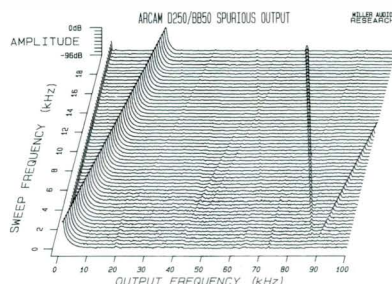
In issue 127, we suggested that Arcam's *Black Box 50* provides a bedrock to sow upgrades above and beyond the capacity of budget CD players and CD transports. The partnership with Arcam's own *Delta 250* proves this was no idle speculation but simply a foretaste of the capabilities of a truly sympathetic pairing.

Clearly, in tandem with the *Delta 250*, the expressiveness of the *BB50* is brought to the fore while the restraining influence of the Sync Lock prevents its enthusiasm from raging unchecked. It's a fabulous combination and fully deserving of its Best Buy accolade.

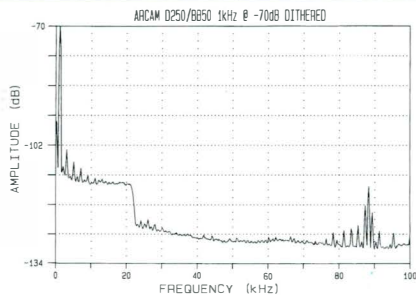
LAB REPORT

Comparisons with the *BB50* from issue 127 prove interesting. In this case, the measurements were repeated with Arcam's Sync Lock facility engaged. This causes a slight increase in ultrasonic noise which masks the digital IM patterns otherwise visible on the 3D plot. It also bumps-up the perceived peak-level distortion at 20kHz from 0.006 to 0.022 per cent.

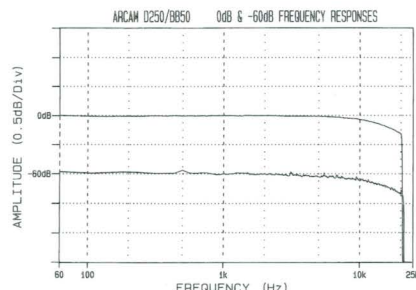
Moreover, though there's no appreciable change in either its 103dB signal-to-noise ratio or +4dB noise modulation, improvements are witnessed in both low-level distortion, linearity and random (noise-like) jitter. Aside from these low-level variations, the *BB50* remains a typical example of Burr-Brown's PCM69 in action.



Clock interference patterns seen in issue 127 are reduced with Arcam's Sync Lock, fully effective in the *D250/BB50* combo.



Odd harmonics are generated by errors in the multi-bit section of the hybrid DAC, as can be seen in the dithered plot above.



The Arcam *BB50* uses the same eight times filter and analogue stage as the *BB5* and has same response curve as well.

VERDICT

- ▲ Poised, detailed and weighty sound; affordable.
- ▼ Lacks smoothness; treble has a rather dull balance and bass is a little detached.

SOUND ★★★★★

VALUE ★★★★★

PRICE £750/450

✉ Arcam, Pembroke Avenue, Denny Industrial Centre, Waterbeach, Cambridge CB5 9PB.
☎ (0223) 440964

DPA DIGITAL T1/PDM TWO FIFTY-SIX

No strangers to digital innovation, DPA has recently upped the stakes with two new digital-to-analogue converters. Both feature a discrete switched-capacitor network known as the DX64 processor together with an adjustable dither facility.

The least expensive of the two, though far from affordable, is the *PDM Two Fifty-Six (256)*, a novel converter whose analogue and digital circuits are powered-up via two external supplies. Combined with DPA's *T1* transport (issue 120), this amounts to a four-box CD player!

The transport is based around a shielded version of the Marantz *CD42* with a revised and re-clocked digital output and optional Deltran facility. For details of Deltran, see also Arcam's Sync Lock feature.

The *PDM256*, however, is a tour-de-force of advanced engineering. Here, digital data is passed, in differential form, to four separate YSF210 eight times oversampling filters which each receive a dither signal from four FPGAs (Field-Programmable Gate Array).

You can add dither to the 15th, 14th, 13th or 12th bit of audio data according to taste, trading distortion (caused by fixed digital errors) for a proportional increase in noise (caused by random digital errors). This, plus its discrete Bit Stream DAC, ensure DPA's latest generation is utterly unique.

Sound quality

In practice, this DPA quartet offered us a



Sophisticated DPA package did not win over the *Choice* listening panel.

fascinating yet perplexing balance of properties. It encourages a very full sound bustling with plenty of entertaining detail, yet the manner in which this detail is portrayed varies with the dither modes on offer.

Without dither, the bass sounds full and heavy but less well defined while the treble

adopts a hard and spitty coloration that plays havoc with vocal sibilance. With increasing additions of dither, the level of background noise increases, and quite markedly so at settings three and four. Our panel, oblivious to my adjustments, immediately identified what they described as 'background grunge' permeating the opening strings of Handel's *Concerto No.1*.

The bass is leaner but tighter under these circumstances, the classical harpsichord lacking the full resonance of its soundbox just as some male vocals lost their characteristic colour. Mary Chapin Carpenter, meanwhile, sounded lively, articulate and less sibilant but her performance was now accompanied by a haze of noise caused by the dither.

Conclusion

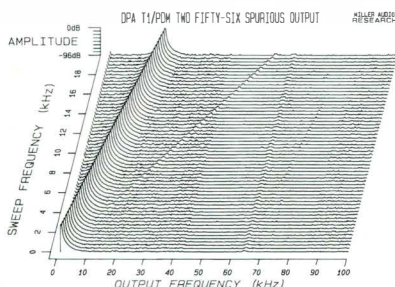
Dither is already implemented in a variety of chips used in modern CD players, but never has such a powerful tool been provided for your personal modification of sound quality. In this application, dither tames the lively but rather bright and sibilant treble of the *PDM256* but encourages a leaner and dirtier balance by way of recompense.

It is perplexing that DPA's years of research have led to such a disappointing conclusion. On the basis of these samples, I have to side with our panel and am forced to give the *T1/PDM256* a rather reluctant thumbs down.

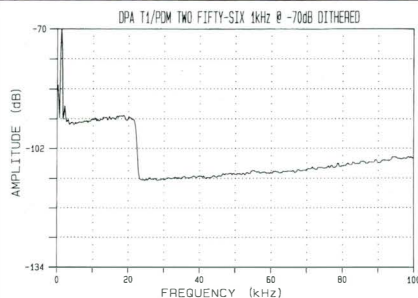
LAB REPORT

In stark contrast with previous DPA converters, including the *PDM2* (issues 101 and 120), the *PDM256* has not been designed with technical specmanship in mind. Hence the modest 0.002-0.012 per cent THD at peak-level that increases to a fairly poor 0.007-0.07 per cent at -30dB and finally bottoms-out at a ghastly five per cent at -60dB. At this level, a THD of 0.1-0.3 per cent would be rather more appropriate.

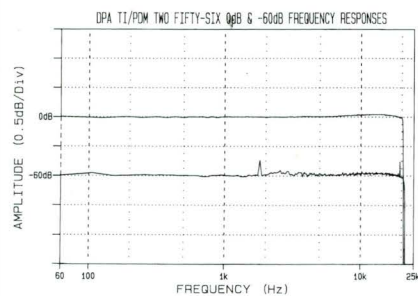
Moreover, at dither levels 1-4, the THD spectrum becomes unstable between -20dB and -80dB, producing unusual high-order harmonics that 'pulse' through the background noise. The best-case 98.5dB signal-to-noise ratio also collapses to 84.5dB at dither level 4, though its noise mod remains a fabulously low +0.1dB.



Simple 3rd harmonic, typical of Philips' SAA7350 noise-shapers that are used by DPA to produce bitstream.



At dither level 4 (the maximum setting) distortion is not eliminated and dynamic range falls to 14 or 15-bits.



Increase in noise caused by adding dither is obvious on the low-level frequency response, and audible to our panel.

VERDICT

- ▲ **A very novel dither facility; exciting, dynamic and informative.**
- ▼ **Great idea that, unfortunately and irritatingly, seems flawed in practice.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £895/2,995

✉ **DPA Digital Ltd, Willow Brook, Technical Units, Crickhowell Rd, St Mellons, Cardiff CF3 0EI.**

☎ (0222) 795621

MERIDIAN 500/563

A salutary tale this, that serves to demonstrate how even past masters of the digital art can miss a flawed canvas from time to time. Superficially, there's nothing amiss with this 500-series combination, a matching and elegant pair that combines the distinctive ergonomics of its forebears with a new and somewhat softer outline.

The combination of an alloy chassis, moulded plastic fascia, black textured-enamel and glass top-plate also confers a deal of added stability to the 500 transport. Its innards have evolved from the 602 (issue 96) but benefit from a new and lightweight carbon-fibre disc-clamping mechanism, separate keypad and servo microprocessors (each programmed by Meridian), plus an improved dot-matrix display.

Once again, Meridian has retained the Philips older swing-arm CDM4 mechanism and SAA7310 decoder — a combination that still provides unparalleled tracking of discs that aren't top quality or in the best condition. Then there's the digital output itself, still fired-up by Philips' PCF2705 ADOC, but now re-clocked and reinforced by a separate line-driver amplifier.

Its partner, the 563, hasn't changed from issue 127 but remains the only outboard converter equipped with a differential pair of Crystal's popular CS4328 Bit Stream DACs. Notable features on the 563 include a phase-invert option and balanced AES/EBU digital input. It's a pity the 500 doesn't feature an AES/EBU output to match.



A disappointing result from a promising coupling.

Sound quality

Glancing back at my notes from issue 127, I discovered that the listening panel had in that test gently chastised the 563 converter for sounding very slightly forward and also a little anxious with busier passages of music. Nevertheless, these trivial foibles were readily tempered by the

sophistication of a superior transport.

But now, some six months and 500 units on, this 500/563 combination was described in deprecating terms by our panel as lacking in real substance. Certainly it seemed rather forward and brash, lacking bass weight and momentum. Our jazz selection sounded harder and brighter than usual, as if the saxophonist had fitted a harder grade of reed.

Mary-Chapin Carpenter sounded particularly busy and vigorous with plenty of low-level detail brought to the fore (note the compressive linearity trend in the test figures on page 54). But sadly, there's little gradation or dynamic expression. It's a loud and tiring performance rather than one that reflects the true contrasts of the music.

Conclusion

Despite achieving a Recommendation in issue 127, this particular 563 converter, in tandem with Meridian's own 500 transport, marked a significant downturn in performance.

Interestingly, many of the minor indiscretions noted in issue 127 were cited at the forefront of its

problems here, despite our use of various digital cables, including both Audioquest Video Z and Goldmund Lineal.

STOP PRESS:

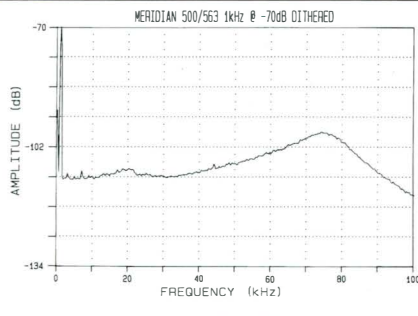
At the eleventh hour, Meridian confirmed this sample was faulty. We will report on a kosher machine as soon as possible.

LAB REPORT

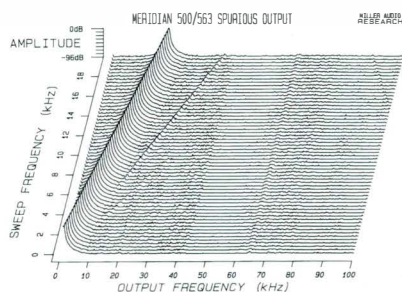
Subject to a fresh overhaul in the lab, this 500/563 combination failed to maintain the performance of the 563 tested in issue 127. Sure, there's a reduction in peak-level THD to 0.0007 per cent midband but a massive increase in THD at -30dB from 0.002-0.008 per cent to 0.02-0.025 per cent.

Its low-level linearity is also slightly wayward with errors of just -0.45dB (issue 127) increasing to +2.40dB in this instance. This, plus the rippling of its low-level frequency response, suggests a possible problem at the LSB of one DAC.

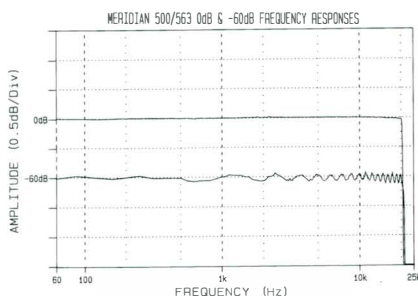
Otherwise, the suppression of stopband noise and wide 103dB signal-to-noise ratio remain equally impressive for this unique 'double-Crystal' implementation.



Typical pattern of ultrasonic noise emerging from Crystal Bit Stream converter as used in the Meridian DAC.



The innocuous 2nd harmonic visible on the 3D plot should have been removed by Meridian's differential DAC.



Obvious ripple in low-level response was absent in 563 converter which was tested in Hi-Fi Choice issue 127.

VERDICT

- ▲ Plenty of get-up-and-go; will liven-up even the dullest and dustiest of hi-fi systems.
- ▼ Too insistent, urgent and fatiguing; light and bright; insufficient weight and gravity.

SOUND ★★★★★

VALUE ★★★★★

PRICE £975/695

✉ Meridian Audio Ltd, St Peter's Road, Huntingdon, Cambs.
☎ (0480) 434334

MISSION CYRUS DISC/DACMASTER



First seen at the 1993 Chicago CES, it's taken nearly a year for Mission's two-box Cyrus CD player to settle into production and finally trickle out for review. It's also the first two-box combination to be designed in-house, though Mission has retained a tie with Philips by employing its advanced CDM9-Pro mechanism and SAA7310 decoder.

The fact that this transport has been converted into a top-loader by ferreting it away under a tinted perspex lid has no bearing on either its tracking or flexibility. It'll still play both three and five-inch discs, for example. Just remember to replace the magnetic disc clamp every time you swap a CD.

The matching *Dacmaster* converter is also built into a familiar Cyrus case and is upgradeable using a PSX-R power supply. More importantly, it mirrors the *Discmaster's* choice of digital outputs, including Mission's version of the balanced AES/EBU output called 'PRO'.

A six-pin DIN COMMS link is also provided, permitting remote selection and track-by-track programming of phase via the *Discmaster*. This link also feeds a sample-rate signal back to the *Discmaster*, synchronising the flow of digital data between the two components (see Arcam and DPA reviews).

Sound quality

Auditioned in Mission's PRO mode and employing its own digital interconnects, this stylish combination delivered a very powerful



Powerful performance is bound to impress.

and authoritative sound with very natural, unforced vocals and airy, spacious treble. Likened by our blind listening panel to 'a good Beaujolais Nouveau', they concluded that this combination seems to possess 'a youthful and fruity balance, if one that lacks the ultimate sophistication of other players'.

It certainly moved through Handel's *Concerto No.1* like a warm chainsaw through butter, delivering its music in a slightly teutonic or mathematical fashion. To our ears, this two-box player carved through our classical selection a little too quickly, its enthusiasm for the performance almost leading to it running away with itself.

The *Discmaster/Dacmaster* combination might appear very slightly crude or heavy-handed but it could never be described as feverish or aggressive. Far from it. In practice, it sounds very clean, confident, persuasively defined and not unlike the *Cyrus 3* we reviewed in issue 130.

Conclusion

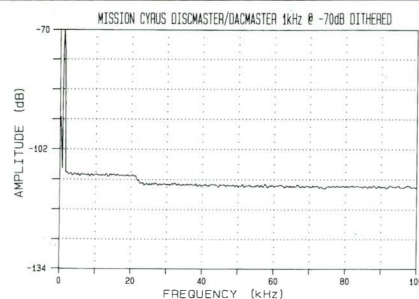
Mission is evidently aiming to achieve a family sound, the robust, 'shoot first' policy of the *Discmaster/Dacmaster* combination sharing many of the sonic hallmarks of the *Cyrus 3* amplifier. Incidentally, it's vital to keep the COMMS link connected between this two-box package for, without it, the sound becomes lighter, brighter more forward and lacking in its customary impact.

Its sure-footed and powerful performance will undoubtedly prove very attractive, whether it's as part of a fully-fledged Mission system or as the source component in a more eclectic hi-fi set-up.

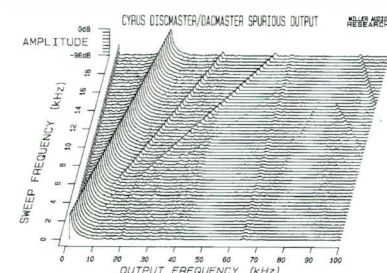
LAB REPORT

Rather than be dominated by its NPC SM5813 oversampling filter or 20-bit DACs, the technical performance is sculptured by Mission's choice of analogue components. This 5th-order passive filter is probably responsible for the increase in HF distortion (0.0007 to 0.02 per cent) and the relatively poor 96-97dB signal-to-noise ratio. Other converters using the AD1862 DACs achieve a signal-to-noise in excess of 110dB (issue 120).

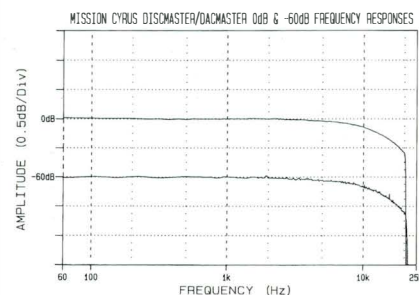
Nevertheless, both low-level linearity and low-level distortion remain the preserve of its digital electronics and here Mission has achieved specs which at least match, and in some cases exceed, its technological rivals. Otherwise, there are no glaring or potentially troublesome bugs to reveal.



Very uniform output of ultrasonic noise but note the 3-4dB reduction in expected dynamic range of the Mission combination.



There are few stopband images to be seen but distortion tends to increase markedly at anything above a few kHz.



The passive analogue filter in the Mission Cyrus *Discmaster/Dacmaster* is engineered to provide a gentle treble roll-off.

VERDICT

- ▲ **Powerful performance; large and beefy without sounding fierce or aggressive.**
- ▼ **Lacks sophistication; can sound a bit too light and bright without the COMMS link.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £1,900

✉ Mission Electronics,
Stonehill, Huntingdon,
Cambs PE18 6ED.
☎ (0480) 451777

MONARCHY AUDIO DT-40A/M-33



Having retreated from a brief foray into the computer market, Monarchy has returned to its roots and launched a new and highly distinctive series of digital components. This includes a massive CD transport, the £1,595 *DT-40A*, based on a Philips' *CDV400* Laserdisc player, stripped of paraphernalia and secured within a reinforced steel-and-alloy case.

Incidentally, this is very similar to the transport used by Theta and EAD for their high-end CD transports. The assumption behind this theory being that a mechanism designed to spin heavy 12inch Laserdiscs should handle 5inch CDs with ease.

In this case, Monarchy has retained Philips' comprehensive remote control but abandoned the old digital output chip (a Philips SAA7220) in favour of a Crystal CS8425 ADOC, Motorola line driver and triple-shielded output transformer.

The *DT-40A* is equipped to punch its way into any outboard DAC, including, of course, the partnering £1,495 *M-33* with its new Yamaha AD1C, a pair of top-grade 20-bit converters and optional class A line preamplifier. A large rotary volume control presides over the DAC's output and caters for two additional line inputs, enabling the *M-33* to be connected directly to a power amplifier.

Sound quality

Buoyant, lively and betraying a real enthusiasm for the music at hand, Monarchy's combination



A bulky combination but one which offers some unique system building options.

proved a great hit with our blind listening panel. This pair retains a very cohesive and well-integrated sound bringing a natural weight, snap and authority to both percussion and rhythm lines.

Its bass is particularly powerful and well-defined, grumbling along without muddying

subtler details. The drum, piano and electric guitar from Lyle Lovett's CD were especially well resolved, allowing us to hear each performer without pulling the music apart in a cold or dispassionate fashion.

Similarly, this excellent sense of focus and integration was immediately appreciated with Handel's *Concerto No.1*, the flow and momentum of the opening violins being maintained as the remainder of the orchestra joined in.

Here at least, the tangible weight of the harpsichord successfully merged with the double bass and violas rather than appearing as a disembodied instrument. A busy and intriguing pair, by all accounts.

Conclusion

To some ears the Monarchy combination may sound as if it's taking liberties with the gentlest of musical styles. To others, it will successfully combine the sophisticated performance of an expensive CD player with a certain necessary roughness.

Nor will the sheer bulk of the *DT-40A* endear it to fussy audiophiles. But how many outboard

DACs interface directly with a power amp, and how many CD transports can send, near broadcast quality pictures to your TV set?

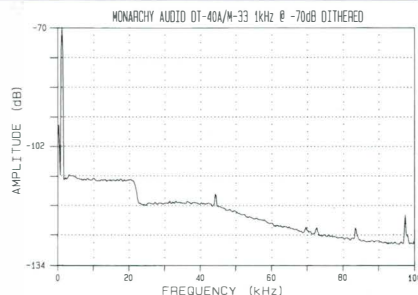
One final carrot; if you buy the pair, Wollaton Audio will throw-in a £175 XLO Reference digital cable gratis.

LAB REPORT

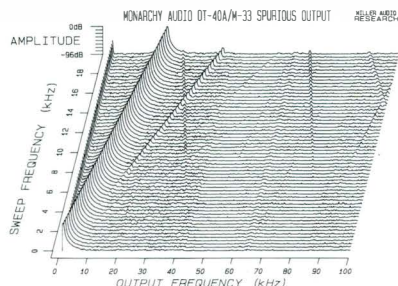
This combination provides a good but not state-of-the-art example of what can be achieved with Burr-Brown's *DF1700/PCM63P* eight times oversampling/20-bit DAC chipset.

A mild 2nd-harmonic pushes its peak-level distortion from 0.002 to 0.03 per cent via both line (3.5V) and AD847-based preamp (7.5V) outputs. Unfortunately, this distortion increases to 0.4 per cent with pre-emphasised CDs.

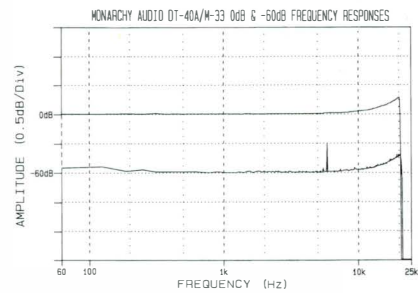
Meanwhile, the stopband suppression should really exceed 105dB just as the 101dB signal-to-noise ratio is closer to 110-114dB in competing PCM63P-based DACs (see PS Audio and Linn, issue 120). These diversions are not significant but do add a certain character to the performance of the Monarchy combination.



Gentle 3rd-order filter effectively removes what little ultrasonic noise remains at low signal levels.



Innocuous 2nd-order total harmonic distortion yet stopband noise is poorer than expected for *DF1700* digital filter.



The +0.3dB boost at 20kHz is maintained through both line and preamp (+6.7dB) outputs on the Monarchy pair.

VERDICT

- ▲ Fine musical communication skills and a rich, warm and friendly sound.
- ▼ Lacks smoothness; treble has a rather dull balance and bass is a little detached.

SOUND ★★★★★

VALUE ★★★★★

PRICE £1,595/1,495

✉ Wollaton Audio, 134 Parkside, Wollaton, Nottingham NG8 2NP.
☎ (0602) 284147

PS AUDIO LAMBDA/ULTRALINK TWO



PS Audio is justifiably proud of its new £2,500 *Ultralink Two* DAC. Despite its dour appearance, it's home to some of the most advanced (and costly!) digital technology available. In many respects, it represents an enhanced but simplified form of the *PS Reference Link Processor* (issue 132).

Behind the black alloy fascia and green indicator LEDs, for its coax, AT&T, Toslink and AES/EBU inputs, lie the same NPC eight times oversampling filter and latest A-grade version of UltraAnalog's 20-bit DAC.

By avoiding the digital volume control, which modified the DAC's reference voltage, and retaining the PMI OP275-based analogue stage, PS Audio has traded complexity for elegance. Furthermore, all data entering the *Ultralink* is now captured by a superior UltraAnalog AES21 ADIC — yet another significant advance on the *Reference Link*.

So what of the £2,250 *Lambda* transport? Funnily enough, this uses the same building-blocks as the *Theta Data Basic*. Hence the common display, features and the same CDM9-Pro mechanism, complete with ASM collimator, which does nothing to enhance its tracking. Similarly, even the PSU, decoder and digital output boards are sourced from those friendly people at Philips.

Sound quality

This pleasantly smooth, open and spacious sounding combination was likened by our blind



A technical tour de force, and it sounds good too.

listening panel to the *Theta/Cobalt* system — a gratifying correlation bearing in mind the *Lambda* and *Data Basic* transports are broadly one and the same thing. Yet the flashes of brilliance missed so sorely with the *Theta/Cobalt* were heard in abundance with the costly PS Audio duet.

Returning to Handel's *Concerto No.1*, our

panel relished the freshness and freedom of the opening violins, but the appearance of double bass marked a mild ponderousness on the part of the PS Audio combination. Mary-Chapin Carpenter sounded similarly fresh, clear and enthusiastic yet the accompanying bass guitar lacked this same measure of speed and lucidity.

Fortunately, and despite losing its grip of deepest bass, the *Lambda/Ultralink Two* combination remains quite unfazed, offering a very positive and well-projected sound that's busy with rock-solid images.

Indeed, both the jazz piano from Marty Paich's CD and the resonant harpsichord from Handel's *Concerto No.1* now sounded beautifully open, robust and colourful. Vocals sounded equally smooth, free of grittiness and sibilance, yet possessing life and vitality that held us enthralled.

Conclusion

From whatever angle you care to listen to the *Lambda/Ultralink Two*, the quality and impact of its performance is difficult to ignore. Sure, it has slightly wayward bass but the refined and fluid quality of its mid and treble ensures its music

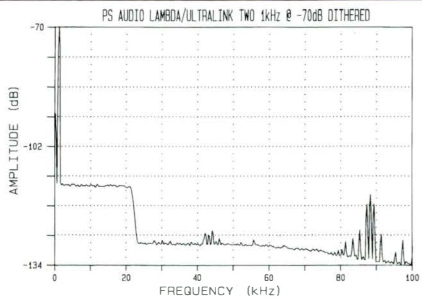
always sparkles with rich and colourful detail.

So, for the price of a single *Reference Link* processor (issue 132), this *Lambda/Ultralink* combination not only exceeds its spec but also earns itself a Recommendation en route.

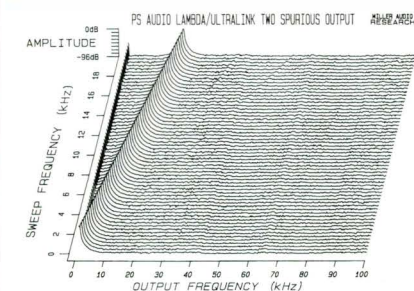
LAB REPORT

Comparisons with PS Audio's esoteric *Reference Link Processor* (issue 132) show that this *Lambda/Ultralink* combination offers a lower peak-level distortion of 0.0007-0.0025 per cent, equally wide dynamic range (see -70dB plot) but far wider 114dB signal-to-noise ratio. Ranged against this is its massive +12dB noise modulation, an inevitable side-effect of traditional multi-bit technology.

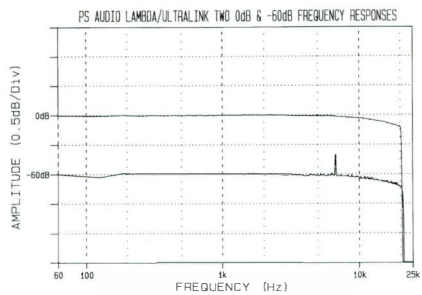
Otherwise, its linearity holds to within -0.65dB across the entire audio band and over a full 100dB dynamic range. More important is the fact that distortion remains low where all the musical action takes place: just 0.005-0.008 per cent at -30dB and 0.08-0.18 per cent at -60dB. This is a state-of-the-art performance, make no mistake.



Very wide dynamic range and low distortion is maintained even at low signal levels by the PS Audio combination.



The PS Audio pairing showed excellent rejection of stopband images with minimal distortion at high levels.



Gently tailored treble response has no undue influence on sound quality which remained refined and fluid.

VERDICT

- ▲ Extremely satisfying performance; glorious midband — refined and fluid; very detailed.
- ▼ This combo is marred only by a bass that would be slightly diffuse in a full-range system.

SOUND ★★★★★

VALUE ★★★★★

PRICE £2,250/2,250

✉ Absolute Sounds, 58 Durham Road, London SW20 0DE.
☎ 081-947 5047

TEAC P-2S/D-2

Instantly recognisable by its compact profile, champagne-gold facia and slender orange display, the *P-2s/D-2* combination is Teac's two-box digital statement. This transport and DAC team cost a cool £4,300 and £2,500 respectively. For your money, the *P-2s* transport features a diecast version of its acclaimed VRDS mechanism which clamps the CD to a brass and aluminium platter that's poised overhead.

It's a novel idea and beautifully executed. However, its tracking of imperfect discs still falls behind the Philips-based transports from Arcam, Meridian, Mission and DPA.

The *D-2* DAC pre-dates the *P-2s* but it is equally lavish in its engineering, offering four inputs (though unfortunately not AES/EBU or AT&T) as well as a 90-step digital volume control that's operable from both the facia and the matching remote handset. Incidentally, the latter offers every conceivable widget including direct index and track selection, program, single and repeat play plus time search, phase and muting facilities.

Inside the *D-2*, however, things are not looking so fresh. Teac is still using Sony's old CXD1076 ADIC to capture incoming data, for example. Meanwhile, the choice of a CXD1244 eight times oversampling filter (as used by Theta) and complementary 18-bit DACs has effectively been superseded by the 20-bit chipset found in its more recent *D-700* converter and *X-1* CD player.



Massively and beautifully engineered; disappointing sound.

Sound quality

This extravagant combination would certainly appeal to Billy Whizz, such is the vigour and pace of its music. Tonally, its balance is lean, distinctly forward and seems easily caught out by fairly busy pieces of music, regardless of the chosen digital input or link.

Further experimentation showed that reversing the polarity of the DAC's mains inlet (a figure of eight Telefunken socket) encourages a smoother and warmer sound that is both less hasty and slightly more appealing. Nevertheless, its dynamic and tonal ranges remain equally restricted.

The alto sax from our jazz selection adopted soprano overtones while the remainder of Marty Paich's Big Band were, it was suggested, 'holed up in a corner of the studio under a fire blanket'. Similarly, what was described as the 'thrash metal' version of Handel's *Concerto No.1* sounded just too harsh and jangly to be convincing.

Further elaboration would be gratuitous — this combination simply failed to impress.

Conclusion

Back in issue 130, we suggested that the true mettle of Teac's *P-2s* transport would, perhaps, only be realised with its natural bedfellow, the *D-2*. Teac also entertained the idea with some confidence but the combination of an over-engineered transport with an equally over-

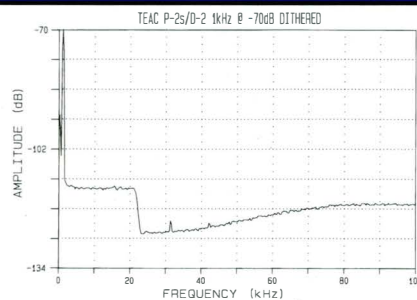
engineered but rather dated DAC has met with a disappointing end.

My advice would be to save yourself £5,300 and opt for Teac's fabulous *P-700/D-700* instead — a £1,500 Best Buy from issue 120 that clearly outclasses its classy stablemate.

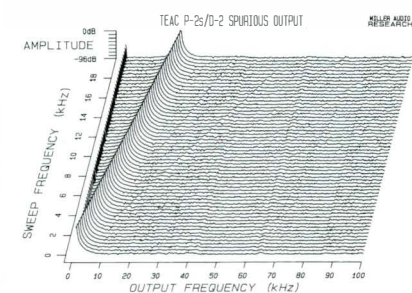
LAB REPORT

From a digital standpoint, both the 750ohm/560mV output of the *P-2s* and true 750ohm input of the *D-2* converter are well-matched. Nevertheless, the technical performance of the *D-2*, with its pairs of complementary 18-bit DACs, lags newer 20-bit Teacs with a reduced 103dB signal-to-ratio and a huge 'multi-bit lurch' in distortion from 0.0009 per cent at 0dB to 0.05 per cent at -30dB.

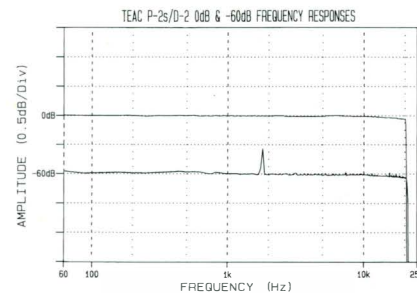
Thereafter, the *P-2s/D-2* behaves itself, with minimal low-level linearity errors of just +0.2dB/-0.35dB over an entire 100dB dynamic range, with a full 105dB rejection of stopband images and a usefully low 16ohm output impedance from its MosFet-based analogue stage.



Wide dynamic range, very low distortion and little or no sampling images.



The merest hint of 2nd, 3rd, 4th and 5th harmonics break clear of an otherwise impeccably clean 3D plot.



Very flat frequency response and excellent low-level linearity from the Teac P-2s/D-2 combination in spite of obvious glitch.

VERDICT

- ▲ An extremely luxurious piece of engineering with no shortage of digital outputs.
- ▼ Thin, gutless and tiring sound; over engineered; not as impressive as its less expensive sibling.

SOUND ★★★★★

VALUE ★★★★★

PRICE £4,300/2,500

✉ Teac UK, 5 Marlin House, The Croxley Centre, Watford, Herts WD1 8YA.
☎ (0923) 819630

THETA DATA BASIC/COBALT 307

Many issues, reviews and tests of new products ago (issue 101), we successfully teamed-up Wadia's costly *WT3200* CD transport with Audio Alchemy's budget *DDE* DAC. The results obtained from this harmonious partnership encouraged us to tempt fate with a similar 'fiscal mis-match', this time from the house of Theta.

Regular readers will already be familiar with the £1,997 *Data Basic* transport from issue 130, a sophisticated Philips-based design combining both a CDM9-Pro mechanism and a new ADOC (Audio Digital Output Circuit). The Philips remote control, however, is a more straightforward affair offering track and index selection plus program and repeat play. Nothing fancy, that's true, but it gets the job done all the same.

The diminutive £699 *Cobalt 307* is a very different story altogether. In this instance, a Crystal ADIC snatches up the incoming data from either of its coaxial or Toslink digital inputs while an eight times oversampling filter from Sony and hybrid DAC from Burr-Brown convert the numbers into music.

It's comforting to know the bulk of your pennies are being well spent on high quality under-the-bonnet engineering, leaving a phase-invert facility by way of a token widget. Such details as the Nichicon Muse capacitors, bulk-foil resistors, a top K-grade DAC and AD841 op-amps (as used by EAD, see issue 120) add up to a small but interesting and potentially super-charged package.



Sound quality

Having auditioned the Theta/*Cobalt* combination not once but on two separate occasions, our listening panel concluded that it was the most relaxed but also the most passive-sounding of our various contenders. Sure enough, its laid-back demeanour and unforced dynamics make

for comfortable long-term listening but it can just as easily sound too inoffensive, dispassionate or even bland.

For example, the delicate smoothness of the Lyle Lovett CD proved highly attractive even if, track by track, it lacked the energy and pizzazz to grip our attention. Similarly, this duet successfully tamed the forthright treble of Mary-Chapin Carpenter's rhythm guitar yet, by the same token, robbed it of boldness, airiness and acoustic space.

Despite this tonal caution, the Thetas still maintain very tightly focused and stable stereo images. So Marty Paich's jazz sax was carved impressively from thin air, despite it lacking that rough and brassy edge necessary to elevate its performance from merely entertaining to genuinely realistic.

Conclusion

Something of a bargain in its home state of California, the *Cobalt 307* still offers good value at its UK price of £700 and represents a worthwhile upgrade for many £200-£300 CD players.

Sadly, in this company, the *Cobalt 307* is

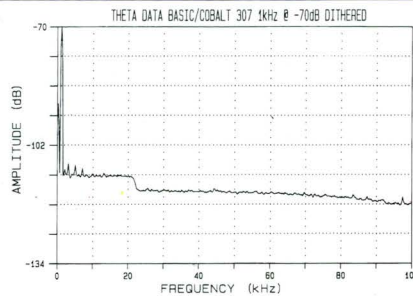
rather overwhelmed by the potential of Theta's *Data Basic* transport. The result is a gentle and pleasant sound, yet by refusing to tackle deep bass or high treble, one that lacks a sense of grandeur, spaciousness and passion.

LAB REPORT

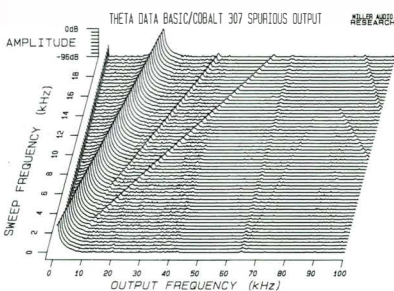
Having already tested a *Cobalt 307* about a year ago, this newer sample, in combination with Theta's *Data Basic*, demonstrated some variation. Its overall signal-to-noise ratio has edged-up to 99dB but still remains some 6-7dB short of what's possible from Burr-Brown's PCM67P DAC.

Moreover, distortion, already about twice as high as expected at -30dB, has further deteriorated from 0.3 to 0.65 per cent at -60dB — witness the odd-harmonics on the 1kHz/-70dB plot.

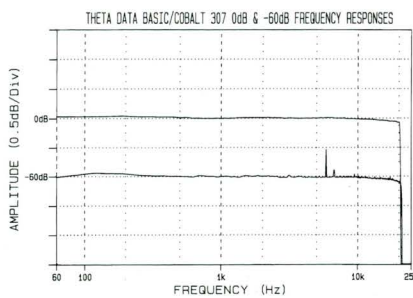
Sadly, the linearity of this *Cobalt 307* is also impaired, with earlier errors of just +0.9dB increasing to +2.7dB at 1kHz. The poor 60dB channel separation at low frequencies is unusual and suggests a degree of unwanted cross-coupling via the PSU.



This particular sample shows higher distortion at low-levels than earlier *Cobalt 307*'s.



Sony's digital filter removes stopband noise, leaving 2nd/3rd harmonics from Theta's *Cobalt 307* DAC.



Flat, ripple-free response but 'spikes' clearly visible to the right of the lower plot are caused by the digital filter.

VERDICT

- ▲ **Unfatiguing and exceedingly refined performance; good value.**
- ▼ **Loss of bass and treble; lack of commitment and emotion can make some tracks sound too polite.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £987

✉ *Absolute Sounds*,
58 Durham Rd,
London SW20 0DE.
☎ 081-947 5047

CD TRANSPORTS AND DACS

Conclusions, best buys and recommendations



Spending a small fortune on a multi-box CD player should guarantee you more than a glimpse of the 'real thing', but sadly, this is not always the case. In reality it's the budget end of the CD market that appears to be converging towards a common and very high standard of sound quality. The more you pay, it seems, the more diverse the flavour becomes.

This is in spite of the fact that there are only a finite number of decoder chips, oversampling filters and digital-to-analogue converters available for the designer to choose from. So anyone who remains hung-up on the archetypal differences between bitstream and multi-bit technology, for example, is clearly missing the point. Players do not succeed or fail by choice of technology alone but rather, how it is implemented.

This is where sound quality can become clouded by the shower of money being thrown at a particular high-end

project. Teac's *P-2s/D-2* combination is a classic example of well-intentioned but disastrous over-engineering. After all, the relative simplicity of Teac's *P-700/D-700* combination never prevented it from earning a Best Buy in *Choice 120*.

Somewhat surprisingly, neither Meridian's *500/563* combination nor the exceedingly hi-tech *T1/PDM Two Fifty Six* from DPA really cut the digital mustard in our blind listening tests. In Meridian's case, the minor distractions noted with its *563* (in issue 127) were now cited as major objections, though our suspicions of a fault in the review sample were confirmed at the last minute. (We will report again as soon as possible when we've heard one that's up to the mark. For DPA, their offering was uncharacteristically compromised.

There was nothing perturbing about the performance of Theta's two-box 'starter-pack', but the *Data Basic* is better suited to a meatier-sounding DAC, while the *Cobalt 307* desires a slightly rough'n'ready transport. Mission's *Discmaster* and *Dacmaster* seem well part-

nered, and earned points for combining a sense of urgency with clear-cut authority and confidence. In this respect there is also a certain empathy between Monarchy's *DT-40A/M-33* and the *Lambda/Ultralink Two* from PS Audio. Both are as invigorating as the Mission, but have a sense of additional poise and sophistication.

The firm definition of the Monarchy outweighs any sense of its music being man-handled, just as the fresh and enthralling midband of the PS more than compensates for any softness in its bass. Even at this exalted price level there's no such thing as perfection!

Arcam's *Delta 250/Black Box 50* is the cheapest of the lot, and the only clear candidate for a Best Buy. Though it lacks the runaway momentum of the Mission and the grandeur of either the Monarchy or the PS Audio, it does make sense of every rhythmic style without imposing artificial civility or undue forcefulness. All in all, it presents a compelling argument for the potential superiority of the two-box CD player.

How the transport and

	Arcam Delta 250/ Black Box 50			DPA Digital T1/PDM Two Fifty-Six			Meridian 500/563		
	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz
CHANNEL BALANCE	0.03dB	0.02dB	0.04dB	0.04dB	0.04dB	0.07dB	0.20dB	0.20dB	0.18dB
CHANNEL SEPARATION	90.7dB	97.3dB	69.3dB	85.4dB	92.7dB	92.1dB	125.8dB	121.6dB	110.5dB
THD VS LEVEL, 0dB	-113.8dB	-91.3dB	-72.8dB	-96.0dB	-93.7dB	-78.4dB	-103.5dB	-103.2dB	-86.8dB
-30dB	-93.6dB	-71.6dB	-69.2dB	-82.2dB	-66.5dB	-62.5dB	-77.5dB	-74.5dB	-67.9dB
-60dB	-43.4dB	-41.9dB	-41.4dB	-40.2dB	-26.2dB	-41.5dB	-45.1dB	-41.5dB	-38.5dB
-80dB	-20.5dB	-21.8dB	-23.5dB	-26.5dB	-24.6dB	-20.4dB	-21.5dB	-20.6dB	-18.7dB
DITHERED, -90dB	-12.5dB	-15.3dB	-16.5dB	-7.80dB	-17.5dB	-12.7dB	-9.50dB	-14.5dB	-10.5dB
DITHERED, -100dB		-14.2dB			-8.50dB			-9.70dB	
DITHERED, -110dB		-2.50dB			-6.50dB			-1.50dB	
RESOLUTION @ -60dB		+0.15dB	+0.15dB		-0.01dB	-0.02dB		+0.03dB	+0.05dB
-80dB		+1.30dB	+1.35dB		+0.03dB	-0.12dB		+0.30dB	+0.37dB
-90dB		+3.10dB	+3.20dB		-0.33dB	-0.65dB		+1.70dB	+1.65dB
-100dB		+3.55dB	+2.85dB		-0.20dB	-0.25dB		+2.40dB	+1.95dB
PEAK OUTPUT LEVEL, L		2.366V			2.027V			2.214V	
R		2.371V			2.015V			2.209V	
RELATIVE OUTPUT LEVEL		+1.5dB			+0.09dB			+0.9dB	
OUTPUT IMPEDANCE		47OHM			<1OHM			46OHM	
1Hz NOISE MODULATION		+4.1dB			+0.10dB			+2.5dB	
CCIR IMD, 0dB		-95.5dB			-76.5dB			-102.5dB	
SUPPRESSION OF STOP-BAND IMD		66.1dB			>105dB			98.0dB	
DE-EMPHASIS ACCURACY, 1kHz		0.00dB			-0.05dB			-0.02dB	
5kHz		+0.01dB			-0.33dB			-0.03dB	
16kHz		-0.07dB			-0.35dB			-0.05dB	
S/N RATIO (A-WTD), w EMP, 0LSB		103.2dB			98.5dB			103.3dB	
w/o EMP, 0LSB		101.8dB			93.9dB			98.7dB	
w/o EMP, 1LSB		101.6dB			90.5dB			99.0dB	
DIGITAL OUTPUTS	COAXIAL, BNC, TosLINK			COAXIAL, TosLINK.			COAXIAL, TosLINK.		
DIGITAL INPUTS	COAXIAL, TosLINK			COAXIAL, TosLINK, AT&T.			COAXIAL, AES/EBU, TosLINK		
MASTER CLOCK ACCURACY	-19.9PPM			+67.0PPM			+26.0PPM		
TRACK ACCESS TIME (99)	3.5SECS			4SECS			4SECS		
SERIAL NUMBER	D25000132/DBB008225						100807/100786		

Best Buys and Recommended models

Best buys

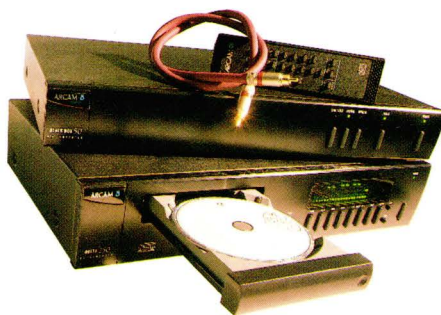
The Arcam *Delta 250/Black Box 50*, at £1,200, is the least expensive combination in the test. A very sophisticated player, it sounds smooth without appearing soft or sugar-coated — a bargain two-box CD player.

Recommended

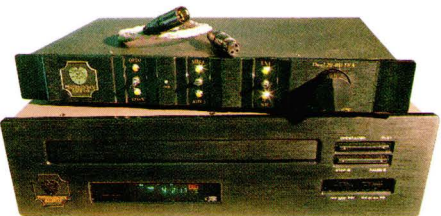
Mission Cyrus's *Discmaster/Dacmaster* (£1,900) is a powerful-sounding and perhaps slightly heavy-handed combination, but it cuts right to the heart of its music.

The Monarchy Audio *DT-40A/M-33* (£3,090) is an intriguing partnership that provides a beefy and enthusiastic performance via its balanced AES/EBU connection.

In direct contrast with its modest appearance, the PS Audio *Lambda/Ultralink Two* (£4,500), is a duet which positively sparkles with colour and resonant detail.



The best of the bunch: Arcam's *Delta 250/BB50*.



Monarchy *DT-40A/M-33*: 'beefy, enthusiastic.'



PS Audio: 'sparkling with colour and detail.'

The best of the rest

If the idea of a one-brand, two-box player appeals, there are a few other worthy candidates to consider. Teac's *P-700/D-700* combination (£1,500), a scaled-down version of the *P-25/D-2* featured here, is the most impressive and least damaging to the bank balance, and offers much more lyrical sound.

Recent modifications to Linn's 20-bit *Karik/Numerik* duet (£2,500) have revealed a quicker, cleaner and more detailed sound lurking beneath; but where a highly charged performance is demanded, there's little to beat EAD's *T-1000/DSP-1000* (£2,200).

Cross-fertilisation across brands continues to unearth some surprising and entertaining combinations. For example, the Meridian *563 DAC* (£695) is especially well suited to Teac's *P-700* transport (£900), just as the Musical Fidelity *Tubalog* (£500) makes an admirable pairing with the standard digital output of £200-£300 players from the stables of both Philips and Marantz.



Mission Cyrus *Discmaster'n' Dacmaster*.

Linn *Karik/Numerik*: also worth hearing.



DAC laboratory results compare

Mission Cyrus Discmaster/Dacmaster			Monarchy Audio DT-40A/M-33			PS Audio Lambda CD Drive/Ultralink 2			Teac P-25/D-2			Theta Data Basic/Cobalt 307		
20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz
0.01dB	0.01dB	0.07dB	0.00dB	0.00dB	0.38dB	0.02dB	0.01dB	0.01dB	0.02dB	0.02dB	0.02dB	0.07dB	0.08dB	0.08dB
126.5dB	113.5dB	93.9dB	133.5dB	115.6dB	92.5dB	131.5dB	124.5dB	114.5dB	148.5dB	135.7dB	115.5dB	59.6dB	90.3dB	99.5dB
-102.6dB	-95.2dB	-73.6dB	-93.5dB	-91.9dB	-70.5dB	-102.9dB	-101.4dB	-91.5dB	-104.1dB	-100.9dB	-88.9dB	-84.2dB	-88.5dB	-83.4dB
-81.5dB	-76.5dB	-68.2dB	-78.5dB	-73.8dB	-79.5dB	-87.1dB	-83.5dB	-81.5dB	-67.6dB	-65.7dB	-64.6dB	-61.7dB	-59.2dB	-63.2dB
-57.2dB	-47.6dB	-36.5dB	-50.2dB	-48.4dB	-56.7dB	-60.4dB	-54.8dB	-61.6dB	-60.0dB	-54.5dB	-53.0dB	-44.7dB	-43.8dB	-38.6dB
-27.7dB	-27.1dB	-15.9dB	-28.4dB	-28.5dB	-34.7dB	-28.5dB	-32.6dB	-40.4dB	-28.3dB	-30.1dB	-32.6dB	-16.5dB	-24.3dB	-20.2dB
-19.5dB	-17.6dB	-9.50dB	-15.5dB	-19.2dB	-26.1dB	-18.2dB	-24.1dB	-29.5dB	-10.5dB	-22.3dB	-22.8dB	-16.3dB	-16.5dB	-11.5dB
	-10.7dB			-10.5dB			-21.5dB			-18.4dB			-12.5dB	
	-2.50dB			-5.60dB			-14.0dB			-10.3dB				
													-5.50dB	
	-0.06dB	-0.07dB		+0.01dB	+0.01dB		0.00dB	-0.01dB		0.00dB	0.00dB		+0.05dB	+0.06dB
	-0.17dB	-0.01dB		-0.22dB	-0.10dB		-0.05dB	-0.06dB		-0.11dB	-0.07dB		+0.85dB	+0.84dB
	-0.70dB	+0.25dB		-0.75dB	-0.60dB		-0.45dB	-0.65dB		-0.25dB	-0.35dB		+2.65dB	+1.75dB
	-0.80dB	+1.20dB		-0.45dB	-1.10dB		-0.30dB	-0.65dB		-0.35dB	+0.20dB		+2.40dB	+0.80dB
	2.048V			3.538V			2.487V			2.513V			2.002V	
	2.046V			3.540V			2.489V			2.506V			2.021V	
	+0.2dB			+5.0dB			+1.9dB			+2.0dB			+0.05dB	
	104OHM			106OHM			40OHM			16OHM			49OHM	
	+2.0dB			+3.5dB			+12.3dB			+4.5dB			+2.8dB	
	-86.7dB			-86.5dB			-99.5dB			-98.4dB			-95.3dB	
	>105dB			84.5dB			>105dB			>105dB			103.5dB	
	0.00dB			0.00dB			-0.01dB			+0.04dB			-0.10dB	
	+0.01dB			+0.14dB			-0.02dB			+0.20dB			-0.10dB	
	-0.02dB			+0.51dB			-0.15dB			+0.20dB			-0.14dB	
	96.5dB			101.1dB			114.2dB			103.0dB			99.2dB	
	96.2dB			101.0dB			114.1dB			102.9dB			99.0dB	
	96.2dB			100.8dB			114.1dB			102.9dB			99.1dB	
COAXIAL, AES/EBU			COAXIAL, AES/EBU			COAXIAL, AES/EBU, AT&T			COAXIAL, AES/EBU, AT&T, TOSLINK			COAXIAL, AT&T		
COAXIAL, AES/EBU, TOSLINK			COAXIAL, AES/EBU, TOSLINK			COAXIAL, AES/EBU, AT&T, TOSLINK			COAXIAL, TOSLINK			COAXIAL, TOSLINK		
+4.2PPM			+7.5PPM			+16.5PPM			+21.2PPM			+9.1PPM		
4SECS			8SECS			3SECS			3SECS			3.5SECS		
HEU00185/HDU00210			NONE/09677			FB0576/BC122			40017/90035			7548/307114983		

The



Club

HOTLINE
081-952 5535

► Membership of the **MUSICAL IMAGES CLUB** gives you access to all the leading developments in the world of Hi-Fi and Home Entertainment

First 1000 people to join the Musical Images Club after 1/5/94 will get

Vouchers worth
£100 FREE

Usable against **BEST BUY & AWARD WINNING PRODUCTS**

★ **STOP PRESS** ★ Vouchers can be used with other offers until 30/8/94 and have no equivalent cash value

PERSONAL CALLERS WELCOME AT MUSICAL IMAGES BRANCHES

MAIL ORDER WORLDWIDE
(081) 952 5535

- Exclusive invitations to special manufacturers' demonstration evenings – your opportunity to sample the very latest products

45 HIGH STREET,
HOUNSLOW,
MIDDLESEX
TW3 1RH
☎ (081) 569 5802

DEMO ROOMS - HOME CINEMA SPECIALIST

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

173 STATION RD,
EDGWARE,
MIDDLESEX
HA8 7JX
☎ (081) 952 5535

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

CLUB SPECIAL - SPEND

OR

£100	▶	CLAIM	▶	£15	▶	FREE
£300	▶	GOODS	▶	£50	▶	
£500	▶	WORTH	▶	£85	▶	
£1000	▶		▶	£200	▶	

NOT WITH ANY OTHER OFFER AND UNTIL 15/8/94

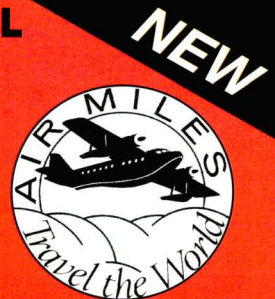
E & O.E.

BUY AUDIO VISUAL EQUIPMENT

AND COLLECT

AIR MILES VOUCHERS

For every £1 SPENT GET ▶ 1 AIR MILE AWARD



NOT WITH ANY OTHER OFFER AND UNTIL 15/8/94

MAIN AUTHORISED DEALERS FOR OVER 100 MANUFACTURERS

Join Today – only 1000 free voucher packs available

- Yes, please commence my subscription to the MUSICAL IMAGES CLUB for £10
- I enclose a cheque for £10 payable to MUSICAL IMAGES
- Please charge my credit card VISA/ACCESS

Name: _____

Address: _____

Postcode: _____

Exp: _____ / _____

Signed: _____

If you do not wish to receive promotional literature from other selected companies please tick

As a Club Member tick one box only: I will take Free Goods I will collect Free Air Miles

Please send completed coupon for: MUSICAL IMAGES, 173, Station Road, Edgware, Middx HA8 7JX.



bit by bit

Does your recorder hiss you off?

Fed up with old fashioned

compact cassettes?

Then why not go digital,

as Richard Black and

Paul Miller

measure up four of

the latest

hi-tech recorders.

In the last couple of years, two entirely new audio recording formats have appeared: Philips' Digital Compact Cassette (DCC) and MiniDisc (MD) from Sony. Both use digital data compression to get a reasonable playing time on a realistically-sized carrier, with what is claimed to be 'near-CD quality'. At the other extreme, Pioneer has introduced a digital audiotape (DAT) recorder which samples music at 96kHz instead of the usual 44.1kHz or 48kHz. This adds a whole extra octave to the response and a whole new dimension to digital audio.

We tested these three technologies alongside recordable compact disc (CD-R), a largely pro-audio system which yields discs that can be played in a normal CD player.

To test these formats under demanding but fair conditions, we set up a recording session, featuring Geraldine Denny (clarinet), Rebecca Lodge (soprano), Clare Parkholm (cello) and myself (Richard) on piano, to get a wide range of instrumental sounds and characteristics. The recording was made in a London church with quiet surroundings, good acoustics and a decent resident piano. The microphones used were based on Calrec capsules, with my own design of electronics to give a line-

level output to drive a tape recorder directly. A conventional (48kHz) DAT recorder was used as a reference.

Subsequent listening was performed on two systems; a painstakingly tweaked and aligned EAR/Quad electrostatic-based system belonging to Jan Lewinski (who assisted in the recording), then my own ATC SCM20 and customised amplifier system. All recorders were auditioned principally as analogue in/analogue out machines.

BUILD QUALITY	
MARANTZ CD-R610	★★★★★
PHILIPS DCC600	★★★★★
PIONEER D-07	★★★★★
SONY MDS-501	★★★★★

As befits its £3,800 price-tag, the Marantz CD-R610 easily leads the field here. It's built on a very substantial cast chassis, stuffed full of high quality circuit boards. Most of these boards are densely populated with surface mount components. As the fussy audiophile would point out, neither its extensive use of 5532 opamps nor its wiring loom are ideal for sound quality, although both are absolutely representative of about 99 per cent of pro-audio design practice.

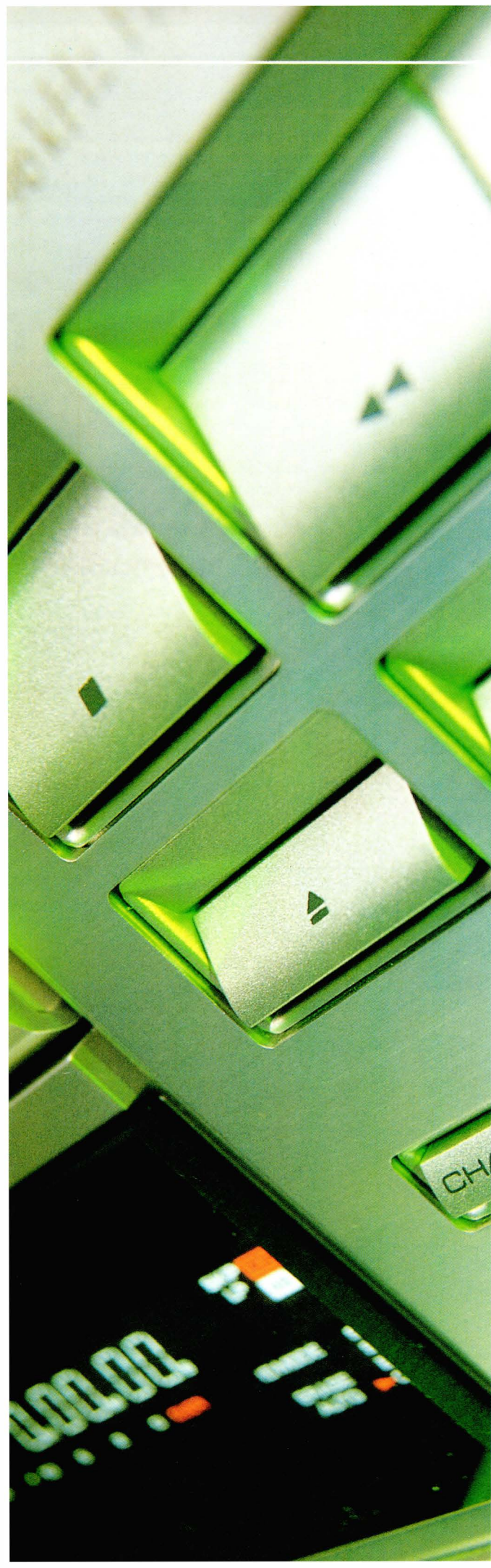
Pioneer's £1,195 D-07 is also well

made, although with obvious signs of its domestic hi-fi origins in areas like circuit board materials and components. On the other hand, it also has a few audiophile tweaks, with copper foil-wrapped capacitors and copper sheet stuck on critical integrated circuits. There is actually surprisingly little inside the case, given that 96kHz sampling DAT (Super DAT) is a new technology. This is no doubt due to Pioneer's use of their own integrated circuit design facility to combine as many functions as possible on a few small chips.

The £799 Sony MDS-501 looks very smart from the outside and is generally well put together, but close inspection shows up a few 'tweaks', evidently in order to fix problems found after the circuit boards were in production. The MiniDisc mechanism is compact and appears to be a fully productionised unit, although this machine is Sony's first non-portable MD recorder.

Even taking its low price into account, the £299 Philips DCC600 seems rather plasticky. Still, it is well put together internally, with similar build and component quality to the MDS-501. The transport is a rather complicated affair of plastic mouldings and gears, but plastic mechanisms like this are

Comparison Table				
	MARANTZ CD-R610	PHILIPS DCC600	PIONEER D-07	SONY MDS-501
SYSTEM	WRITE-ONCE DISC	REWRITEABLE TAPE	REWRITEABLE TAPE	REWRITEABLE DISC
DIGITAL INPUTS	TOSLINK, COAXIAL, BALANCED	COAXIAL	TOSLINK, COAXIAL	2 TOSLINK
DIGITAL OUTPUTS	AS ABOVE	COAXIAL	TOSLINK, COAXIAL	TOSLINK
MAX. CONTINUOUS RECORD TIME	74MINS	53MINS	60MINS (96kHz) TO 240MINS (32kHz)	74MINS
SAMPLING RATE (ANALOGUE IN)	44.1kHz	44.1kHz	32/48/96kHz	44.1kHz
SAMPLING RATE (DIGITAL IN)	44.1kHz	44.1kHz	32/44.1/48kHz	32/44.1/48kHz
PRICE	£3800	£299	£1195	£799
BLANK MEDIA PRICE (APPROX. FOR 1 HOUR)	£18	£6	£8	£7



generally very reliable unless mistreated. Since it uses motorised tray loading, opportunities for maltreatment are vastly reduced compared with normal cassette decks.

FACILITIES AND ERGONOMICS

MARANTZ CD-R610	★★★★★
PHILIPS DCC600	★★★★★
PIONEER D-07	★★★★★
SONY MDS-501	★★★★★

The CD-R610 has the most complex front and rear panels of the four machines, but the smallest number of features. Basically, you can record and you can play back. It is also possible to do basic editing, by marking tracks or portions of tracks for skipping. Recordable CDs can only be recorded once, which places a great constraint

Format wars

Why the upsurge of new formats? The big electronics giants say that people have had a taste of digital audio and want a digital replacement for cassette, for home and mobile use. DAT is a professional and semi-pro format that never took off for home use because the mechanism is too complex to make cheaply and tapes can't be mass-duplicated. A lack of pre-recorded software and early industry concerns about pirates making perfect copies helped speed DAT's demise as a domestic format, despite the efforts of labels like Factory and Chandos.

CD-R also raises the issue of piracy, which is a large part of the reason why you won't see cheap CD-R machines (anyway, a blank CD-R currently costs nearly £20) until the piracy issue is resolved. Hence Philips' DCC and Sony's MD, both touted as 'The Future'. Both formats use data compression, not only for practical reasons but to reduce the threat of 'perfect' pirates, thus making them acceptable to the record companies, without whose support any new software format is sunk from the start.

But which format should one buy? If you want to record live from decent microphones, then buy DAT, Super DAT, CD-R or even open reel analogue, as your budget allows. But if, like most people, you want to make tapes for the car, for a friend or for a portable, or record the odd radio programme, DCC and MD are very close on sound but differ radically in use. MD is dearer at the moment and DCC is slightly more familiar, but even so it's hardly selling in phone numbers. If we wait and see, both formats may fizzle out anyway. Come back cassette, all is forgiven?

on flexibility. Once a CD has been recorded, it can only be played back on a CD-R machine until it gains a Table of Contents (TOC), after which time it can be played on any CD player, but can no longer be recorded on at all. Even after the addition of a TOC, any sections marked for skipping will only be skipped on a CD-R machine.

Where the CD-R610 really scores is on interconnection flexibility. It has analogue inputs and outputs (balanced only) alongside 75ohm unbalanced, Toslink and 110ohm balanced digital inputs, allowing it to accept any professional or domestic digital audio format. It can be daisy-chained with other recorders, and remotely controlled by infra-red or wired remote, or an external event controller.

The Pioneer D-07 has the unique feature of its 'wide', double sampling (96kHz) mode, but it also handles normal (48kHz) and long play (32kHz) recording and replay, plus 44.1kHz recording via digital inputs (coaxial and Toslink). It writes and reads the normal DAT start and skip IDs, which allow for very basic editing. It allows the user to enter track titles which scroll across the display, but the procedure for doing this is so tiresome that I can't imagine anyone bothering frequently.

The Philips DCC600 essentially offers no more features than analogue cassette, except for the ability to display pre-recorded track titles on certain recordings. It can divide recordings into tracks and search for them by number, and will play analogue cassettes. Forthcoming machines should address the issue of slow winding and track searching and will allow the entry of track names.

The DCC600 has a number of irritating features, from the way it defaults to the digital input every time it is switched on, to the slow and clunky response of the mechanism. It also automatically writes track start markers after every four second pause, which can be infuriating. Because the tape plays both ways, the maximum continuous recording time is only 53 minutes, but it is possible to write markers which either reverse direction on the spot, or wind to the end and then reverse.

MiniDisc only lacks the ability to go rapidly to a given spot within a track (also missing from most CD players). Apart from that, track access is as fast as CD and of course one can program the playing order. Even better, tracks can very easily be divided, moved, combined and deleted after recording to cut out awkward pauses and give the desired running order. This means that the discs can be re-used almost indefi-



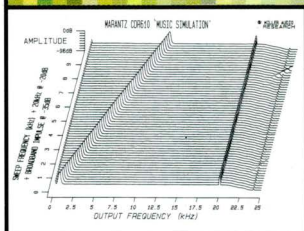
Marantz' CD-R610 looks cool and kicks digital recording ass if you can afford the hard and software.

ambient information and a marginally purer clarinet tone. Having worked extensively with Geraldine, I am familiar with her sound and this tone seemed more accurate. However, CD-R seemed more precise in its image placement and more detailed in its presentation of information.

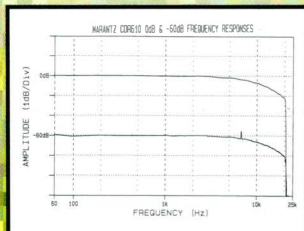
This may seem like a paradox, one recorder seeming to have more information yet less precision than the other, but this finding was repeated on every track. It can only sensibly be explained by the Super DAT's extra octave of response being compromised by the inability of the converters and filters used to produce exactly the same standard of detail.

Both DCC and MD lost some ambience and rendered the attack of piano notes less clearly defined. DCC seemed very slightly more natural, but the difference was small and, as with many such digital signal processing artefacts, varied from minute to minute. The benchmark — normal DAT — was resolutely in the middle, between Super DAT and CD-R on the one hand, and DCC and MD on the other, a position it maintained throughout.

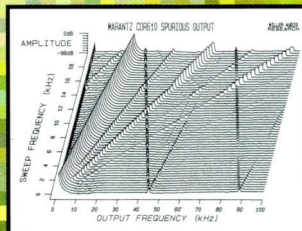
In the impassioned climax of the *Embroidery Aria* from Britten's *Peter Grimes*, the CD-R was unequalled in capturing the tonal strength in Rebecca's voice. Super DAT came close to the CD-R recording, leaving DCC and MD bringing up the rear with a rather sani-



No loss in the audio band. Everything is filtered above 20kHz, in accord with CD standard.



Mild 1dB drop in treble should have little or no subjective consequence.



In-band sampling images and massive increase in distortion only occurs near peak output.

nity. Tracks can be titled, and all recordings are automatically marked with date and time of recording. After cassette, MD's random-access disc recording is a joy. For example, pop a half-filled disc in the player and within four seconds you have a display telling you how much time remains to be filled. Press record and start and you are at once creating a new, appropriately-numbered track right after the last one.

Both the DCC600 and the MDS-501 will record from a digital input: the DCC600 has coaxial input and output sockets only, while the MDS-501 has Toslink only (two inputs, one output). Both record at 44.1kHz sampling rate, but while the DCC600 only accepts 44.1kHz data, the MDS-501 can convert from 48kHz digitally. Given that a stand-alone rate converter costs over £600, it's not a bad feature to have.

The first track recorded, and therefore the first listened to, was Saint-Saëns' *Sonata for Clarinet and Piano*. Of particular interest here was the comparison between CD-R and Super DAT, the latter portaying slightly more

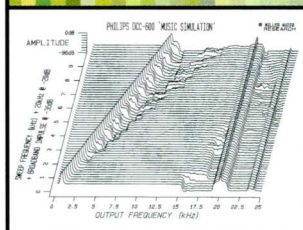


Philips DCC600: the least expensive route to digital recording in the home.

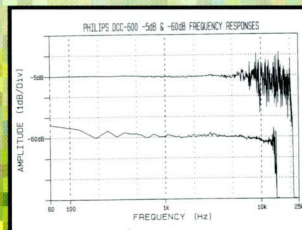
SOUND QUALITY

MARANTZ CD-R610	★★★★★
PHILIPS DCC600	★★★★★
PIONEER D-07	★★★★★
SONY MDS-501	★★★★★

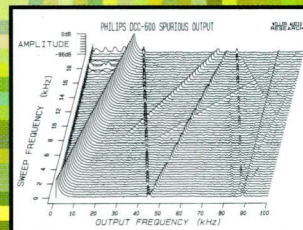
First, the good news; if you've been fearing the worst from DCC and MD, you'll be pleased to hear that they are really not at all bad. Although at no point during auditioning was anyone in danger of preferring either one to CD-R, taken in isolation both could have been mistaken for the average commercial CD.



Huge gullies of information are deemed inaudible by PASC and are removed before recording.

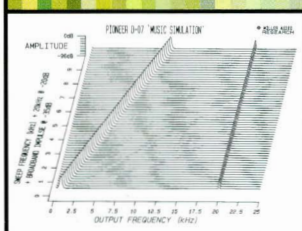


The PASC Bit-pool quickly evaporates, creating uncertainty in its treble response at high levels.

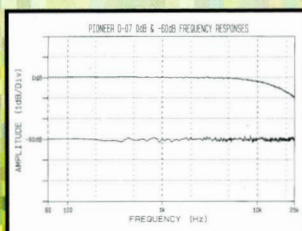


This plot could have come from any SAA7321-based CD player, except for tell-tale noise (top left).

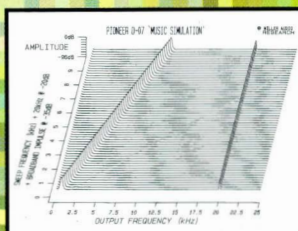
Super DAT deck the D-07 samples at twice the normal rate for an extra octave of bandwidth.



Double sample rate also pushes the first stop-band image (V-pattern) to 96kHz.



Errors in ADC and DAC linearity mean Pioneer's response is flatter at lower signal levels!



The perfect plot — no distortion or loss of information up to and beyond 25kHz.

replaying both through a high quality external DAC, proved conclusively that neither DCC nor MD has the world's best converters. Surprisingly, via the external DAC, the sound could easily be confused with the uncompressed original, in casual listening at least. Only some lessening of attack and reduction of absolute scale gave the game away. They sounded more similar than ever in this mode.

VERDICT	
MARANTZ CD-R610	★★★★★
PHILIPS DCC600	★★★★★
PIONEER D-07	★★★★★
SONY MDS-501	★★★★★

The Marantz CD-R610 is obviously a serious, high-grade, professional recorder, but its price and the format's limitations make CD-R effectively a non-starter for home use (well, what would you use it for?). However, for professional or well-heeled amateur recording use, recordable CD has much to recommend it.

Pioneer's D-07 Super DAT gives a hint of what can be achieved when the technology becomes more mature (an equivalent double-sampled CD could really be interesting). Even as it stands, it is an attractive proposition if you want to make high-quality recordings for domestic and semi-pro use, and its cost, compared to the CD-R610, makes the D-07 reasonably priced. Not to mention the

tised and less involving sound. By contrast, the gentler *Not While I'm Around* from Sondheim's *Sweeney Todd* was best served by the Super DAT, which clearly showed the advantage of its extra octave of treble by reproducing consonants (especially sibilants) much more cleanly than the other recorders.

Solo cello in a couple of Bach cello suite movements was relatively flattered by all the recorders. Again, the CD-R was the most precise, but the only area in which DCC and MD fell down was impact. They both sounded a little polite and 'hi-fi' compared with the more raw and immediate CD-R and Super DAT.

Ronald Stevenson's *Prelude and Fugue* on Busoni's *Doktor Faust* is the sort of piano piece that stretches recording gear to the limit, rapidly covering the entire frequency and dynamic range of the piano with frequent and sudden contrasts. CD-R reproduced the whole effect with great panache, giving a solid image and plausible acoustic. Once again, the Super DAT hinted at greater detail on leading edges and high treble notes but sounded just a tiny bit strangled.

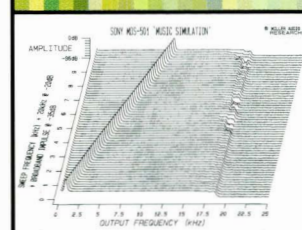
MD seemed happier than DCC on very loud passages but a little less clear and defined at moderate levels, while DCC, although seeming to run out of energy on sudden loud notes, made slightly more sense of the complicated ending of the fugue. Both became a lit-

tle fatiguing during the course of this (nine minute) track; though, frankly, to a lesser degree than some low-budget CD players.

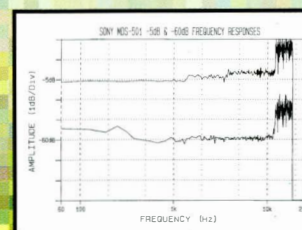
Subsequently copying this track digitally from CD-R to DCC and MD, and



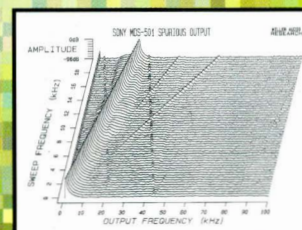
Sony's MDS-501: instant track access, easy peasy recording and appealing little diskettes.



All musical information, regardless of content, is stripped away above 18kHz by ATRAC.



ATRAC provides a spurious +1.5dB treble boost before dropping sharply above 18kHz.



Quiet detail is masked by a shoulder of noise surrounding dominant treble signal.

ROMULUS

BY C.R. Developments Ltd.



C.R. Developments Ltd.
 8 Craftsman Square Temple Farm Industrial Estate, Sutton Road, Southend on Sea, Essex SS2 5RH
 Tel 0702 469055, Fax 0702 601883 (Demonstrations by appointment.) Phone for your nearest dealer.



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'll 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.

35 years combined experience.

Two Fully equipped listening rooms.

Home installation service.

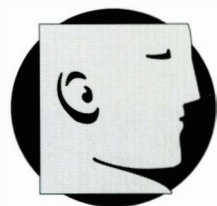
Multi-room design and installation.

2 years Parts and Labour guarantee.

Home cinema surround-sound.

Export and Credit facilities.

- LINN • QUAD • MERIDIAN • NAKAMICHI • ARCAM • AUDIOLAB • ACOUSTIC ENERGY • SME • AUDIO RESEARCH •
- KRELL • CLASSE AUDIO • WAIDA • THETA • APOGEE • MARTIN LOGAN • SONUS FABER • MUSICAL FIDELITY •
- REL • ROGERS • PIONEER • TANNOY • STAX • AURA • LEXICON • SYSTEMDEK • PINK TRIANGLE • MICHELL •
- MONITOR AUDIO • YAMAHA • MARANTZ • KEF • BOSE • CELESTION • EPOS • MISSION • DENON • NEAT PETITE • CYRUS •



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.

Data compression – what is it?

Basically, data compression (as incorporated in Philips' PASC and Sony's ATRAC) is a trick for recording only the essentials of a music track, to reduce the amount of data that must be put on a disc or tape. The success in defining the 'essentials' as we hear them determines the audible success or failure of data compressed formats.

major difference in software prices.

Both DCC and MD seem to fulfil their promise of an enhanced replacement for cassette where sound is concerned, both being entirely acceptable as a home recording format. They are still being developed, but at the moment the contest between them is not on sound but on features and ergonomics.

Unless the issue of compatibility is your main concern, Sony's MDS-501 offers everything while Philips' DCC600 has a way to go. However, it must be remembered that the Philips DCC is an older and cheaper model, although even with Philips' promised enhancements, it will never match a disc format for ease of use. It will be interesting to see how the market develops, assuming the price of MD comes down soon. But for myself, I want Sony MiniDisc recorder and I want one now.



Unfortunately not for this world, CD-R is priced to remain the exclusive domain of pro-audio.

Comparison Table

Viewed together, the graphs that accompany our four digital recorders vividly demonstrate the fundamental differences between all four formats. Crucially, the bandwidth of the CD-R and DAT recorders is limited solely by their respective sample rates. By contrast, both the bandwidth and content of recordings made on DCC and MiniDisc players are determined by their PASC and ATRAC data reduction programs.

This is revealed in the response plots of the *CDR-610* which, in accordance with its 44.1kHz sample rate, rolls-off sharply above 20kHz. However, the *D-07*, with its elevated 96kHz sample rate, extends way beyond 25kHz at the edge of the graph. The flat -60dB trace is caused by the compressive linearity trend of its ADC and DAC (see table) which provides a complementary treble boost.

Broadly speaking, the response of Sony's ATRAC remains unaffected by level but Philips' PASC progressively ditches high treble detail as the signal level is reduced. The erratic nature of the responses is caused by the uncertainty of both ATRAC and PASC at high frequencies, their respective 'bit-pools' (number of bits available for coding) being monopolised by bass and midrange sounds.

The *CDR-610*'s 3D Spurious Output plot shows an unusually high amount of distortion (max 1.6 per cent) which is joined by sampling images (-67dB) within the audioband. This is a specific problem and is restricted to the last 0-3dB of the recorder's dynamic range. Only the *MDS-510* betrays evidence of digital jiggery-pokery, seen as noise masking signals either side of the main sweep at 8-20kHz.

Instead it's the 'Music Simulation' plots that expose the true nature of each beast. Take the Pioneer *D-07* as a notional reference, its -60dB floor representing broadband low-level musical detail that stretches from 0-25kHz. The *CDR-610* simply demonstrates the limits of the CD sample rate while Sony's ATRAC data reduction casually abandons any information beyond 18kHz.

Despite the limited 4:1 data reduction rate of Philips' PASC (Sony's ATRAC reduces from 5:1, chopping incoming data to 20 per cent of its original size), it has the most dramatic effect on recorded signals. Although the 20kHz tone is retained, large areas of information — deemed inaudible in the presence of bolder signals — are sacrificed. Evidently, though PASC data reduction appears more violent than Sony's ATRAC, by following a more complex set of 'rules' it is also more adaptable. Whether these rules are entirely realistic, however, is another matter.

Evidently, though PASC data reduction appears more violent than Sony's ATRAC, by following a more complex set of 'rules' it is also more adaptable. Whether these rules are entirely realistic, however, is another matter.

Paul Miller

Comparison Table

	MARANTZ CDR610			PHILIPS DCC-600			PIONEER D-07			SONY MDS-501			
	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	20Hz	1kHz	20kHz	
CHANNEL BALANCE	0.06dB	0.06dB	0.15dB	0.07dB	0.08dB	0.08dB	0.03dB	0.03dB	0.13dB	0.00dB	0.02dB	0.04dB	
CHANNEL SEPARATION	98.9dB	108.5dB	104.6dB	100.1dB	110.4dB	81.5dB	118.1dB	98.5dB	64.3dB	114.5dB	109.2dB	84.6dB	
THD VS LEVEL	0dB	-102.8dB	-77.6dB	-35.9dB	-90.5dB	-90.0dB	-69.3dB	-95.1dB	-92.2dB	-81.0dB	-94.2dB	-93.7dB	-81.9dB
	-30dB	-85.9dB	-77.3dB	-51.5dB	-77.1dB	-71.0dB	-66.9dB	-79.4dB	-61.8dB	-67.5dB	-81.5dB	-74.5dB	-59.1dB
	-60dB	-49.2dB	-45.8dB	-20.5dB	-43.2dB	-47.9dB	-35.3dB	-43.6dB	-37.6dB	-35.2dB	-44.5dB	-45.0dB	-30.7dB
	-80dB	-23.7dB	-28.1dB	+0.50dB	-17.1dB	-25.0dB	-13.5dB	-42.5dB	-24.3dB	-21.7dB	-25.5dB	-25.8dB	-9.50dB
DITHERED, 90dB		-11.3dB	-18.5dB	+7.50dB	-10.3dB	-13.5dB	-3.50dB	-30.4dB	-15.5dB	-13.0dB	-17.4dB	-17.5dB	-2.50dB
DITHERED, -100dB			-11.7dB			-9.75dB			-7.20dB			-8.4dB	
DITHERED, -110dB			-4.50dB			-2.50dB			-			-	
ADC/DAC RESOLUTION @	-60dB	-0.04dB	+0.60dB		+0.05dB	-0.20dB		-0.20dB	+0.20dB		0.00dB	-	
	-80dB	-0.06dB	+0.75dB		+0.05dB	-1.20dB		+0.40dB	+0.35dB		+0.10dB	-	
	-90dB	+0.25dB	+0.90dB		-0.40dB	**		+0.75dB	+0.90dB		+0.55dB	**	
	-100dB	+1.05dB	+1.40dB		+1.05dB	**		+1.10dB	+1.35dB		+0.75dB	-	
ANALOGUE INPUT SENSITIVITY FOR	0dB	627mV/3.597V			144.0mV			292mV			596.0mV		
0dB OUTPUT LEVEL,	L	6.299V			2.030V			2.337V			2.058V		
	R	6.346V			2.050V			2.330V			2.056V		
RELATIVE OUTPUT LEVEL		+10.0dB			+0.2dB			+1.3dB			+0.24dB		
OUTPUT IMPEDANCE		104OHM (BALANCED)			315OHM			970OHM			923OHM		
1Hz NOISE MODULATION		+2.4dB			+3.9dB			-			+9.1dB		
CCIR IMD, 0dB		-62.1dB			-95.3dB			-90.5dB			-98.5dB		
SUPPRESSION OF STOP-BAND IMD		63.1dB			54.3dB			70.3dB			73.6dB		
DE-EMPHASIS ACCURACY, 1kHz		0.00dB			-0.38dB			NO DE-EMP			-0.09dB		
	5kHz	-0.10dB			-1.23dB			NO DE-EMP			-0.06dB		
	16kHz	-0.86dB			-1.20dB			NO DE-EMP			0.00dB		
S/N RATIO (A-WTD), W EMP,	0LSB	97.4dB			99.6dB			108.5dB			93.8dB		
	w/o EMP, 0LSB	97.5dB			97.0dB			108.5dB			102.5dB		
	w/o EMP, 1LSB	97.3dB			96.9dB			108.4dB*			98.3dB		
CRYSTAL CLOCK ACCURACY		-40.4PPM			-16.3PPM			0.00PPM/0.00PPM			-70.7PPM		
SERIAL NUMBER		AH01-9407-530001			AH01-9316-204082			NJ8400286			35944		
TYPICAL PRICE		£3,800			£500			£1,149.95			£799		

SL SonicLink

20 Derwent Business Centre,
Clarke Street, Derby DE1 2BU
Telephone: 0332 674929
Fax: 0332 298836
Send A4 SAE for nearest dealers

Read below the verdict from a recent interconnects supertest in What HiFi? Then visit your local Sonic Link dealer.

Sonic Link Violet £80 **Verdict** ★★★★★

Violet cable works well in high quality system where information retrieval is a priority. Despite having warmer, fatter bass than Pink or Red, it remains exceptionally clear and detailed, especially in the mid-range and treble. Music's upper registers are very delicately portrayed but instruments nonetheless have a reassuringly solid feel. Not suitable for ragged-sounding systems.

Sonic Link Pink £25 **Verdict** ★★★★★

This ultra-slim cable looks unconventional and home-brewed, but it does offer a respectably detailed and cogent sound. Pink's tonal balance is rather light, due to its lean, dry bass, but it doesn't sound too forward in a well balanced system thanks to very refined treble and good overall clarity. In fact this cable's fast, rhythmically urgent sound is very appealing.

Sonic Link Red £45 **Verdict** ★★★★★

Just like Pink, Red is also skinny, but packs loads of musical information into its slim and modest diameter, recommended as a CD to preamp link, red is vividly detailed with a vibrant and lively tonal balance, which is aided and abetted by good dynamic contrast and slick timing. Provides bass with far more substance and weight than the less pricier Pink leads.

Sonic Link Blue £120 **Verdict** ★★★★★

Blue uses Sonic Link's rhodium plateplugs, which are claimed and certainly seem able to out perform the more common gold plated variety. Blue has a very clean and spacious sound that captures low level detail very well. Like the Violet cables though, it can be too revealing for a system.

Sonic Link Black £150 **Verdict** ★★★

A heavyweight, even by Sonic Link standards, this cable uses silver-plated cable and rhodium plugs. Its sound is too weighty too, but bass sounds over-bloated, slowing lively music right down. We still prefer the cheaper Blue cable, which gives bass lines more intonation and flow, resulting in the music seeming faster and better articulated overall.

SPALDINGS

The South East's Leading Hi-Fi Specialists

352-354 Lower Addiscombe Road Croydon Surrey CR0 7AF

081 654 1231/2040

Announcing . . . the
ELEKTRA Integrated &
EOS Power Amplifiers



Arión
ACOUSTICS

MAKE THE LEAP
FROM AUDIO TO . . . REALITY

ELEKTRA INTEGRATED £999
EOS POWER £899
TOTAN MAINS FILTER £125
SILVER INTERCONNECT AND
DIGITAL CABLES FROM £75
SILVER SPEAKER CABLES
FROM £25 per m

Worldwide sales agents
KRONOS DISTRIBUTION
35 Farlough Rd. • Newmills
Dungannon • N. Ireland
Tel 0868 748632
Fax 0868 748281

ON TEST

Headphones



Will Alvin Gold find comfort in a pair of £20-£50 headphones, or will the latest technology get the better of them?

We are living through a period of turmoil and revolution. New technologies proliferate: black vinyl records have been usurped by compact discs, while a battle for supremacy rages between DCC, MD, DAT – all right, not DAT – and who knows what else lies just around the corner.

A seemingly endless variety of variations on the CD theme are vying for your allegiance and your money, with digital radio and digital speakers around the corner. Even familiar and comforting con-

cepts like two speaker stereo are up for examination. And headphones, what part do they play in these unsettling but exciting times? How has their technology advanced to meet the new challenges?

The answer is that with a few honourable exceptions, standards have either remained stable, or they have even regressed. While everything has changed around them, headphone designers seem to have been, to coin a phrase, out to lunch.

Let's backtrack for a moment. Tested here are 10 headphones in what might be described as the entry level band for serious designs, centred on £30 to £40. The last full test in *Choice* appeared around a year ago, but I have been running similar tests for much longer than this, and it is this perspective that underpins the critical tone of the comments expressed

The cast list

AKG K70	£39.95
AUDIO TECHNICA ATH-M2A	£27.95
BEYER-DYNAMIC DT 311	£49.95
KOSS TD/60	£29.99
MAXELL HP-3000	£29.99
PIONEER SE-400D	£36.95
ROSS RCH-300CD	£19.99
SENNHEISER HD320	£39.95
SONY MDR-CD450	£44.99
VIVANCO SR606	£39.99

above.

True, there are one or two models in this test that show real advances, either in technology or in the understanding they show of the problems inherent in music reproduction through headphones. The rest, however, do not. Looking at the group as a whole, there are perceptible signs of backsliding in at least one important area.

For the last couple of decades, the standard has been set by so-called open back or vented headphones, whose simplicity, and intrinsically open and uncoloured sound, turned a generation on to headphones-based music. Now there are signs of a retreat towards an older and more problematic technology, namely the sealed or closed back headphone.

This change is highly significant. Sealed headphones are what the phrase suggests: headphones which form an acoustic seal around the ears, and behind the drive unit, to prevent the listener being disturbed by the sounds of the outside world, or polluting that same outside world with whatever you're listening to.

These are laudable enough aims, though it should not be forgotten that music played at normal levels through headphones will drown out much of the environmental static without the need to erect additional barriers.

But this is beside the point, which is that designing sealed headphones, and compact sealed headphones in particular, is more exacting than designing open back models. The evidence of this test, in fact, is that it is all but impossible to design decent sealed headphones at the prices we're looking at here. However, as ever there is just one exception to prove that the idea isn't an entirely lost cause.

Personal hi-fi or accessories for a personal?

It is tempting to use high quality, high fidelity headphones to upgrade the performance of a personal stereo, and on the whole this makes sound musical sense. However, there are one or two points to watch. Most of the headphones tested are far from discreet, though there are important differences, with the largest, the Sony MDR-CD450, being several times as bulky as the Audio-Technica ATH-M2a, which could just pass as an overgrown miniature.

There is another purely technical factor. Not all headphones are electrically suitable for use with personal stereo players, which may not have enough power in hand to drive them to sensible volume levels. There are no rules about this since the sonic character of a headphone can make one model sound

louder than another of similar sensitivity, and the power output figures specified on personal stereos are not to be trusted.

I tried each of the test models with an Aiwa cassette personal, which is broadly representative of the genre. Three models, those from Beyerdynamic, Koss and AKG, were judged too insensitive for use in this way. The Pioneer, Sony and Ross models were better, and are capable of generating adequate volume levels for all but the most demanding (and foolhardy) users, though perhaps not with every personal stereo.

The Vivanco and Sennheiser offer slightly greater sensitivity still, and the most sensitive, and therefore the preferred choice for the head-banging fraternity, are the models from Maxell and Audio-Technica.

The comfort factor

A quick trial in your dealer before you buy will tell you little about that other key element of headphone design – long term comfort. Sealed headphones with impermeable ear cushions that sit on the ear rather than around it tend to become uncomfortable very quickly.

In addition, lightweight sealed designs are often microphonic, providing a noisy and coloured environment for the ears which becomes almost subliminally tiring in short order. Open back models generally allow

the ears to 'breathe' much more freely.

In all cases, check that ear cushions are removable for washing (unless they have a wipe clean finish), and that replacements are available. Dual headbands, which consist of an outer sprung band, and an inner flexible band to locate on the head without pressure hot spots, are invariably more comfortable than single headbands, however well padded. Finally, loose fitting phones, such as the Sennheiser HD320 tested can be a liability for the active user.

AKG K70

The £40 K70 from AKG is bottom of the K series which includes the finest non-electrostatic headphone I have encountered, namely the K400. The K70 obviously benefits from some of the development work that made the senior model so special.

Physical design points include the use of a self-adjusting twin headband in which the inner, pliable band locates around the head, adjusting itself against the spring pressure provided by what amount to elastic bands at each end. As usual with twin headbands, the outer part is a spring hoop which determines the inwards pressure on the ear. The design would be near perfect if AKG had adopted a more flexible inner band.

The K70 is an open back design, weighing 120gm, with a 100 ohm impedance which should make it a better match than many to the relatively high impedance headphone feeds on some less competently designed amplifiers, CD players and cassette decks. The lead, which is attached to both capsules, is 1.8 metres long, and fitted with the standard arrangement of a 3.5mm plug and a 6.3mm slipover adapter.

The K70 feels tight and snug (inwards pressure on the ears, which is non-adjustable, is moderate) but the ear cushions have a soft, cossetting feel. Their open construction also helps to ventilate the ears and keep them reasonably cool. This kind of material, however, is not the most hygienic on earth, and will need to be removed for washing, which is something that doesn't concern its wipe-clean counterparts.

With the experience of the K400 fresh in mind — I used them as a reference point for this test — I was extremely disappointed by these headphones. Comfortable they may be, and the bass seems warm and full, but output doesn't extend very deep into the true bass, and the



Will the AKG K70 live up to the quality of the reference K400 headphones?

midband lacks in colour and variety. The sound as a whole has no drive or dynamics. Everything appears to be happening on the same plane, and there is little sense that the music is changing in volume level as the K400 clearly reveals it should.

The real problem, however, is the shut-in, thin and reedy treble which speaks of serious high frequency break-up modes in the drive unit diaphragm. Tonal balances are dull; a clapping audience sounded like dried peas rattling in a small cardboard box.

There were also some interesting inconsistencies brought about by the contradiction between a close, in-head presentation of bass sounds and a wispy, distant midband and treble which made it very difficult to get inside the music — something that I feel is vitally important in any audio system, regardless of cost.

VERDICT

- ▲ Strong on comfort; sumptuous ear cushions; self-adjusting inner headband.
- ▼ The drive unit lacks the quality to match the plus points already outlined.

SOUND ★★★★★

VALUE ★★★★★

PRICE £39.95

✉ Harman Audio UK Ltd, Unit 2, B'wood Ind Park, Rowley Lane, Borehamwood, Herts WD6 5PZ.
☎ 081-207 5050

AUDIO-TECHNICA ATH-M2A

One of the most striking features of the last few years of headphone design, (discussed more fully in the introduction), has been the surge of interest in compact, sealed headphones. This is something that the Audio-Technica ATH-M2a exploits.

It's an extremely compact model, with tiny annular ear cushions that sit on the ear, and a single covered but unpadded headband hoop which exerts only the smallest amount of pressure on the ears. The unusually long 3.5 metre lead splits to both ear pieces, and is equipped with a standard dual plug.

Impedance is 22 ohms, which may react poorly with less adequately designed headphone drive circuits, possibly resulting in the loss of extreme treble.

As far as music goes, the ATH-M2a is not so much bad as simply inadequate. There's no bass to speak of, and little that justifies being called upper treble. On the other hand, there is plenty of midband from the drive units whose output appears to be on a smooth but steady decline above 1-2kHz.

The music sequences used for this test were uniformly deathly boring to listen to, with acres of undifferentiated sound barely changing in texture or colour from one piece to the next.

It was the almost complete absence of bass that led to the almost complete lack of colour. The less severe lack of real treble meant that subtle matters of inflection and instrumental timbre were subsumed in what was left — namely that rather pushy sounding midband. There were also some microphony problems, associated with the plastic mouldings that envelop the capsules.

I have heard more bass from some true miniature in-ear models, a paradox that arises from the way they interact with the design of the ear canal itself. With some headphones, the lack of low



Cheaper than many, but still the Audio-Technica ATH-M2a sounds too compromised.

frequency grunt can be attributed to poor sealing around the ears.

But although the design of the seals does indeed appear to be deficient, holding the capsules firmly against the ears failed to produce the expected benefits in the deeper regions, indicating that the bass loss is inherent to the generating system — the drive unit and perhaps the bass loading applied by the outer shell that covers the capsule. In fact, treble definition picked up significantly when the capsules were pressed inwards.

About the best excuses the ATH-M2a has to offer is that its cheap, comfortable and well built. It is also true that the ATH-M2a lacks some of the overt colorations inherent in a large number of the competition. But the limitations are simply too severe to avoid censure, even at so low a price.

VERDICT

- ▲ Cheap; extremely comfortable; good build quality and adequate (if over exposed) midband.
- ▼ Threadbare audio performance at both ends of spectrum.

SOUND ★★★★★

VALUE ★★★★★

PRICE £27.95

✉ Audio-Technica, Technica House, Unit 2, Royal London Trading Estate, Old Lane, Beeson, Leeds LS18AG.
☎ (0532) 774441

BEYER DT 311

Beyer is one of the big three — the triumvirate of top European microphone manufacturers with headphone making arms. The others are Sennheiser and AKG who, along with Sony of Japan, have come to dominate the quality middle price headphone market.

The *DT 311* is an entirely characteristic Beyer. It has an open back design, is light in weight (124gm) and it has a modestly high impedance (40 ohms) which will match well with the headphone drive circuit on virtually any amplifier.

At the same time, the Beyer is one of the least sensitive models I have

encountered, and certainly the least sensitive in this test. Most battery driven equipment, and even the odd cassette deck or CD player fitted with a fixed output level headphone socket, may find that this model gives volume levels which are too low to be viable.

Dressed in a fetching modern black and red colour scheme, the *DT 311* has a single hoop headband, strategically padded, which is claimed to be unbreakable, and which exerts somewhat higher inwards pressure on the ears than usual. The capsules are foam-lined, and covered in a cloth that feels cool on the ears. The lead is 1.8 metres in length, and terminated by a 'Y' attachment at one end, and a 6.3/3.5mm dual plug at the other.

Overall, this is a likeable headphone, though it's not a particularly accurate or analytical one. It has a slightly tubby bass and forward midband. It worked quite well with most of the rock music extracts used for this test, but it made something of a meal of the classical pieces. This was thanks to a rather thick and inappropriate rollicking midband which underplayed the elegance and beauty of Mozartian strings (to give a representative example).

The real Achilles' heel of the *DT 311*, however, is the treble, which lacks the openness, clarity and



Beyer Dynamic's *DT 311*; good on rock, but too thick-sounding for classical music.

sheer class of something like the Sennheiser *HD430*. The problem was obvious even with speech, which failed to articulate sibilants. 'S' sounds reproduced as 'sch' and a rather heavy-handed variant at that, not the lighter and more feline 'sch... you know who' species.

Stereo soundstaging also suffered, as it does when different parts of the audio frequency band are not treated in a mutually consistent way, the net effect being rather close, even in the head.

Despite these shortcomings, the Beyer is bold and colourful, with strong midrange dynamics. It also sustains protracted use rather better than many, despite the rather high inwards pressure on the ears. This is perhaps because of the combination of open back construction and the artful design of the ear cushions. Not an instant hit, but definitely worth a listen.

VERDICT

▲ **Firm, but comfortable; positive, engaging sound.**

▼ **Lacks refinement in the treble, and control in the bass; stereo imagery lacks spaciousness and consistency.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £49.95

✉ *Beyer Dynamic (GB) Ltd, Unit 14, Cliffe Industrial Estate, Lewes, West Sussex BN8 6JL.*

☎ (0273) 479411.

Koss TD/60

What can I tell you about these

phones? The packaging gives very little away, but that is what I was referred to when I asked the Koss distributor for information. About all I can say is that the *TD/60*'s impedance is 27 ohms and weight is 7.3oz (that's about 204 gm in real money).

While a sheet of comprehensive instructions are not a prerequisite for a pair of headphones, the level of information on the packaging is rather poor. One interesting snippet I did glean from the packing, however, is that this latest testament to US high

technology is made in South Korea.

The *TD/60* is a very simple headphone. It's a sealed design with non-permeable covered foam ear cushions that sit on the ears, a simple padded steel hoop headband and a two metre lead with a 'Y' piece at one end to connect to both capsules, and a 90 degree 3.5/6.3mm plug at the other. The *TD/60* neither looks nor feels like a quality item, but it's a competent one, and it fits the head like a glove (er, like a glove fits a hand, that is).

Within the rather limited brief that seems to have been set here, the *TD/60* is a success. But there is one sour note; the ear cushions are fixed in place with glue. They can be wiped clean, but cannot be easily replaced if they are damaged, which from their uninspiring construction looks all too probable.

The Koss is closest in overall performance to the Ross and Maxell models described later in this test. All three have the same bandwidth problem for example. The bass is lacking to the extent that changing to a more capable design (such as the Sennheiser *HD320* — see page 69) reveals the presence of previously unsuspected instruments — or, in the case of orchestral recordings, whole orchestral sections, such as the cellos and basses.



A perfect fit for the Gold head, but does the Koss *TD/60* have a sound to match.

These instruments aren't merely well hidden through the Koss, they're not there at all. The Koss draws a veil over everything that happens below, say, 150Hz.

Treble quality, by contrast, is reasonable. It is possible to follow fine detail, though instrumental colours tend to be on the squeaky side of neutral. The Koss has a pervading quacky, almost plasticky midband coloration, and a ringing quality that is excited by certain sounds, but not by others.

Treble quality of the Koss still transcends most of the other sealed headphones in this group (though the Sony *CD450* is an honourable exception here).

The Koss is also a great deal more open and spacious sounding than its most direct competition. But this in itself is not enough, and even at £30, the Koss *TD/60* does not look cheap.

VERDICT

▲ **The Koss is on the whole better behaved than most of the direct (non open-back) competition.**

▼ **Like listening to AM radio; colorations in the midband and higher frequencies.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £30.00

✉ *HW International, 167-171 Willoughby Lane, Brantwood Industrial Area, London N17 0SB.*

☎ 081-808 2222.

MAXELL HP-3000

My first impressions of these £30 compact sealed headphones was favourable. The *HP-3000* make a colourful display in their packaging, which showcases the gold-plated 3.5mm captive plug and 6.3mm plug on adapter. The good impression is sustained out of the packaging, thanks to the contemporary rounded appearance and sumptuous padding around the headband. The whole effect is pleasing, but is badly let down when they are used for the first time in anger.



Maxell's *HP-3000* looks attractive but is not comfortable to wear and sounds congested.

Sad to relate, the Maxell are not comfortable headphones. I felt claustrophobic wearing them. The bearing surfaces were poorly shaped and knobby, and the 'dual axis' freedom of movement promised on the back of the pack was insufficient to allow the phones to sit flat on my ears in the lateral plane. They exerted considerable pressure too, though this would probably not have attracted adverse comment had other comfort related aspects been more favourable.

Maxell gives little away about the technology on offer beneath the sheets, as it were. Beyond the anodyne suggestion that the *HP-3000* are 'digital' stereo headphones, there is little to say. Impedance is given as 32 ohms, and the headphone is wired with 120 inches of thin cable to a standard dual plug. The lead is wired to the left hand earpiece only, and a volume control and mono/stereo switch are fitted to a small in-line remote control.

Musically, the *HP-3000* is uninspiring, though by the standards that prevail in these price latitudes, it is not offensive. The mid and treble are smoother and less overtly coloured than some, but tonally the balance is extremely dull, with little fine detail on offer.

As usual with budget sealed designs, it is the sound of the capsule housing that predominates,

and while there is no sharp high-Q resonance to draw the ear, the overall effect is boxy and slurred. Notes tend to run together in a blur, and subtle ambient effects are swamped by the general low frequency noise generated by the capsule housings when energised by the music.

There is little energy at either frequency extreme, the bass being particularly lightweight, though there is plenty of upper bass which might be mistaken for real bass.

One other property, noted repeatedly, was the close, in-head presentation. The sound is very tight and congested, with absolutely no sense of air and space, and it was this, as much as the physical discomfort of the ear cushions, that set the tone for what followed. In short, this model has little to do with high fidelity or entertainment.

VERDICT

- ▲ In-lead volume and stereo/mono controls; build quality is okay; smooth, basic sound.
- ▼ Congested; dull; lacks dynamics and resolving power; poor comfort levels.

SOUND ★★★★★

VALUE ★★★★★

PRICE £29.99

✉ Maxell UK Ltd, 3a High Street, Rickmansworth, Hertfordshire WD3 1HR.
☎ (0923) 777171.

PIONEER SE-400D



Pioneer's contribution to this test is one of the new breed of compact, semi-sealed designs. The £37 *SE-400D* has the added spice of two small horn shaped vents behind the cone in an attempt to wring extra bass from the relatively compact design. The cable is three meters long and of oxygen-free Litz construction. It's connected to both earpieces through a 'Y'-section, and terminated in a 3.5mm plug, with a push-on 6.3mm stereo jack adapter.

The Pioneer's physical design draws a lot from the Maxell and the Ross models also covered in this

test, and it is not the most comfortable headphone in the group. Straight from the box, it clamps the head rather hard, and I was only able to slacken the headband a little by repeatedly bending it back.

The ear cushion consists of an impermeable oval synthetic cloth over a foam base. It is quite well shaped, and sits on, rather than around, the ears. It felt okay but warmed up quickly. The other negative is the headband, a simply covered circular single hoop.

Finally, the Pioneer is microphonic. Talking with the phones in place was like listening through a stethoscope, and though this might not matter in secluded listening, the same quality shaped all sounds from the headphones.

The Pioneer's saving grace is a decently engineered pair of transducers. Although performance overall is barely enough to qualify as high fidelity (leaving aside what the term means), even this modest level of achievement places the Pioneer light years ahead of more than a few of the rest.

The basic requirements for decent headphone performance are met. The Pioneer is smooth and neutral. The treble offers a fair degree of clarity and presence, with little of the sharpness or obvious resonance problems endemic at this



Solid, comfortable design from Pioneer in the shape of the compact, semi-sealed *SE-400D*.

end of the price tree. This generally respectable showing is matched by a bass quality which is open a good half octave more than other ostensibly similar headphones in this test. Maybe those odd looking horn mouldings do work after all.

There are cabinet induced colorations which, in common with other models sharing the same general construction, means some rather heavy midband colorations and overhang. This gives the Pioneer *SE-400D* a rather lumpy, undifferentiated quality, — notwithstanding the behaviour of the treble in isolation — the only caveats being that that these things are not enough to totally swamp the positive features.

This is an enjoyable headphone to use. At the end of a couple of hours solid use, I wasn't itching to pull them off, at least as long as the volume hadn't been set too high.

VERDICT

- ▲ Adequate comfort levels are offset by a staid but presentable, even likeable, sound quality.
- ▼ The usual culprits, including some obvious (though not ruinous) midband colorations.

SOUND ★★★★★

VALUE ★★★★★

PRICE £36.95

✉ Pioneer Hi-Fidelity (GB) Ltd, Pioneer House, Holybush Hill, Stoke Poges, Slough SL2 4PQ.
☎ (0753) 789500

ROSS RCH-300CD

My first impressions of these £20 compact, sealed headphones was favourable. They make a colourful display in their packaging, which showcases the gold-plated 3.5mm captive plug and 6.3mm plug on adapter... Hang on, haven't we been here before?

The answer is yes, with the Maxell HP-3000. The Ross and Maxell have almost the same physical design. They seem to come from the same Chinese supplier, with some mild customisation of (probably) off the shelf components.

Read all about it under Maxell HP-

3000. Just because the structure is largely identical, however, there is no reason to assume that the capsules themselves are the same. They don't sound the same (though there are some similarities), and they are not acoustically loaded in the same way. The Ross uses a semi-sealed loading design, with a single vent in the outer covers that surround the capsules.

The drive unit is also promising. Ross specifies samarium cobalt magnets and Mylar diaphragms, though the 'high velocity' drive units should not be confused with so-called velocity drive, which relies on full open back working.

The Ross is fitted with impermeable on-ear oval cushions. Impedance is low, and weight is a very moderate 155gm, which is actually too low for effective sound isolation. A fair amount of solidity and damping is needed for effective sound insulation, and both properties demand a certain amount of weight. The three metre cable is attached to one capsule only, which is an advantage. An in-lead control is fitted for volume and mono/stereo switching.

As it happens, the external similarity with the Maxell is not matched by the listening results. On the one hand, the Ross has a cleaner, clearer and more detailed sound than the Maxell; on the



Ross RCH-300CD bears a striking similarity to the Maxell HP-3000 also in this test.

other, there is a sharpness and strain in the higher frequencies that suggests a sharp treble resonance or break-up mode, which make these headphones extremely tiring to listen to. Speech is reproduced with an aggressive, pushy quality that quickly had me reaching for the volume control.

Music, though easier to follow, was similarly sharp and graceless in character, and the ability to extract detail from the music was much too low to act as any kind of compensation.

And so the story continues. The bass is shallow, but with the same upper bass prominence identified with the Maxell; this part of the audio spectrum is dominated by the structure of the capsule.

My abiding impression however, was one of relief — when the time came to move on to the next model in the test.

VERDICT

- ▲ In-line volume control and stereo/mono switch.
- ▼ I found these headphones a trial; they are uncomfortable, aggressive and shallow in expression and tonal colour.

SOUND ★★★★★

VALUE ★★★★★

PRICE £19.99

✉ Ross Consumer Products Ltd,
Emlyn Street, Farnworth, Bolton,
Lancs BL4 7EB.
☎ (0204) 862026.

SENNHEISER HD320

The HD320 is a junior member of Sennheiser's new Expression Line. The style is highly distinctive, and several novel and clever features have been introduced, the most important of which is a dual headband design (see AKG) with a novel locking head size adjustment. This is both comfortable and unlikely to lose its adjustment — a common failing with dual headband headphones.

Another important feature is a new oxygen-free copper (OFC) lead which interweaves the conductor with Kevlar to increase strength. Previous generations

used a plug on the end of the cable 'Y' lead to mate with matching sockets in each capsule housing.

With the Expression Line range, this feature has been dropped in favour of a single connecting point on one earpiece only, in response (says Sennheiser) to consumer demand. This change coincides with a change to a permanently soldered lead, just like all other brands. Sennheiser probably reasoned that a single plug and socket would be far too vulnerable to everyday accidents, such as treading on the lead when walking about.

Other elements in the HD320 include Sennheiser's most famous feature: the 'unbreakable' headband which can be contorted to some unlikely shapes without risk of fracture or distortion. The lead is three metres long, and is equipped with the usual twin plug.

The ear cushions are covered in a soft, permeable cloth which is always cool and comfortable, and inwards pressure on the ears is low, which makes them exceptionally easy to wear, especially in extended use. Only rapid side to side head movement can dislodge them. The ear cushions are fully replaceable. Indeed, Sennheiser is the only maker of the 10 to explicitly recommend regular replacement, citing reasons of hygiene.

Sound quality is exceptional,



The Sennheiser HD320 is as expressive as the Expression Line name suggests.

easily the best of the group. Veering on the side of euphony rather than analytical clarity, the HD320 sounds full and warm, but with less coloration than any model in the group. Compared to any of the other nine models, the level of detail reproduced from all sources is nothing less than prodigious.

Switching from any of the other models to the Sennheiser was to change a flat, dimensionless radio play into a living, breathing space. It added depth as well as width, in which the actors interacted in a believable way, the acoustic of the space around them being properly defined. With music too, similar qualities were apparent.

Instruments were more clearly and distinctively formed, and the Sennheiser HD320 was the only model tested capable of doing justice to the expressiveness and dynamics of fine playing.

VERDICT

- ▲ The best of the group; clear, concise, overhang-free sound.
- ▼ A drier balance might have been preferable; not suitable for the highly mobile.

SOUND ★★★★★

VALUE ★★★★★

PRICE £39.95

✉ Sennheiser UK Ltd, 12 Davies Way, Knaves Beech Business Centre, Loudwater, High Wycombe, Bucks HP10 9QY.
☎ (0628) 850811.

SONY MDR-CD450

Yet another sealed headphone, the *CD450* is a more serious looking design than most. The capsules are large in size, with an 'ear conscious' inclined oval ear cushion that sits around, rather than on, the ears for good acoustic sealing. Weight is higher than the group average at 250gm, but clever detail design, and the wide 'footprint' of the ear cushions, makes this a comfortable headphone, even in protracted use.

The drive unit is built around high energy neodymium rare earth magnets, and appears to be quite high-tech in design, though

Sony's descriptive matter is notably short on specifics, contenting itself with such observations as 'allows expression of a delicate and beautiful sound.' Well, that's okay then. The OFC cable is three meters long, with a 'Y' connection to both capsules, and a dual plug at the far end. For once, the 6.3mm adapter screws onto the 3.5mm plug soldered to the lead, which should make a more reliable long-term connection, though I'm not sure that it is 'resistant to a secular change' as Sony claims.

In stark contrast to most of the other sealed headphones in our group, the *CD450* actually offers some useful attenuation of sound from the outside world. Its large size, and the circumaural earpads, clearly stand it in good stead here. Even so, the reduction in sound from the outside world is only a matter of a few decibels — easily noticeable, but far from dramatic.

I liked the sound of this model, which displayed an airy quality, a scale and spaciousness quite out of the ordinary for the group as a whole, or for a sealed headphone in particular. Like any good headphone, the Sony has a reasonably even spread of abilities. Tonally, the *CD450* is close to neutral, though there was some masking of very high frequencies which reduced vocal clarity to a



If you need to be isolated, it may be worth shelling out for Sony's conch-like *CD450*.

certain extent. The midband was clean, open and colourful, and the bass was fairly well extended, tuneful and, well, just plain competently executed.

The only problem identified on test was a degree of low level coloration associated with the ceramic composite housings. This coloration is related to the microphonic construction of the conch-like housing — listen to the handling noise when you run a finger across the capsule casing while they're on your head. This problem is far from uncommon with sealed phones, but at least it doesn't overwhelm the sound, as it often does elsewhere.

Taking everything together, this is a strong performer, which will be of particular interest to those who need a degree of isolation from outside sources of interference at a reasonable price.

VERDICT

- ▲ **Solid, neutral sound quality; fair isolation from the outside world.**
- ▼ **Loss of treble clarity, which affects music and speech subtleties; low-level structure-related colorations.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £44.99

✉ Sony Consumer Products Ltd, Sony House, South Street, Staines, Middx, TW184PF.
☎ (0784) 467000.

VIVANCO SR606

Here is an exception to the current trends at this price level. The £40 *SR606* is an unfashionably generous semi-open back design, with wide diameter ear cushions which fit comfortably around the ears. This is a factor which improves long-term comfort immeasurably, even though the various bits of padding are harder than I would have preferred.

Notwithstanding the open-back design, the substantial build and large physical appearance has the unexpected side effect of ensuring that the ability to block sounds from the outside world is

comparable to most of the sealed models in this test. This is as much an indictment of the unsatisfactory isolation afforded by some of the latter as it is a positive statement about the Vivanco. These comments do not include the Sony, which, in this respect at least, is made from sterner stuff.

The cable is rather thick and inflexible, though it is more or less non-microphonic. A short 'Y' section couples it to both earpieces, and at the other end is a standard dual plug arrangement.

Although the Vivanco *SR606* is not the crispest or the most detailed sounding headphone in existence, the model is a genuinely civilised design. It sounds open and clean, with a warmth and graciousness denied most of its competitors. On the showing of this test at any rate, it's also bolder and more colourful than most.

It is instructive to compare this model to the only one in this test capable of playing in the same ballpark — the Sennheiser *HD320*. The Vivanco is the stronger meat. It has a richer, more varied sense of tonal colour and a fuller bass, in some way like a pair of *HD320* played through an amplifier whose loudness control has been turned on. Where the Vivanco loses out is in the general area of refinement. The *SR606* is just perceptibly thicker



The big, bold semi-open Vivanco *SR606* is costly, but it lives up to its price-tag.

in texture and less subtle.

The Vivanco is also a tad boxy, and there is a certain loss of separation, and of the independence of related but separate sounds. Orchestral strings for example have a homogenised, rather samey quality. But this model remains a fine all-rounder. Its easy, outgoing and undemanding sound quality makes the *SR606* easy to listen to, if not through.

This model remains one of the good guys, a model that will suit a wide variety of users. Its positive, outgoing character makes it easy on the ear, and a more attractive initial proposition than some technically more neutral designs. The physical design makes it possible to listen for long periods without too much danger of listening fatigue. And if the Vivanco *SR606* isn't quite the most refined headphone in its class, it isn't too far short.

VERDICT

- ▲ **Unusually comfortable; bold, colourful and dynamic music; articulate speech.**
- ▼ **Lacks a little refinement and spaciousness by the best standards.**

SOUND ★★★★★

VALUE ★★★★★

PRICE £39.99

✉ Vivanco UK Ltd, Unit C, Boundary Way, Hemel Hempstead, Herts HP2 7SS.
☎ (0442) 231616.

HEADPHONES

Conclusions, best buys and recommendations

Before looking at the individual models, I have a couple of more general observations to get off my chest. The first is that there is a greater variation in the performance of these headphones than in any other group of hi-fi products I can name, even products as notoriously variable as loudspeakers.

The second concerns the sheer incompetence of a large proportion of the group. The most charitable explanation is that not all the designers involved used the same design goalposts. Several of the models tested were so bad that it seems scarcely credible that they were ever properly auditioned by informed, musical ears. The fact that exceptions exist, however, demonstrates that something approaching true excellence is possible for less than £50.

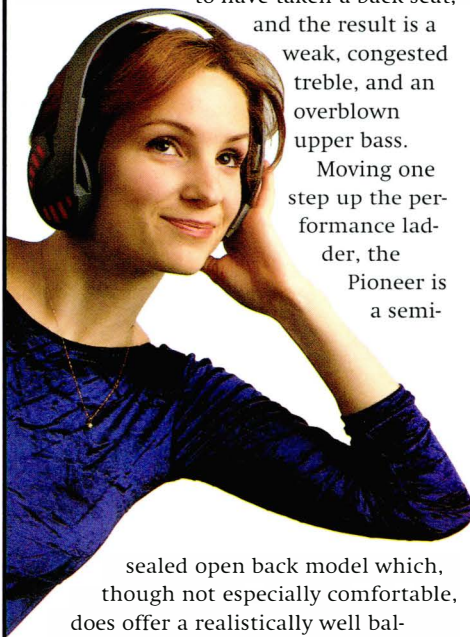
Least satisfactory of all those tested were the Ross *RCH-300CD* and the Maxell *HP-3000*, both of which can best be described as crude and A-musical. The Maxell has the edge, but at two-thirds the price, the Ross offers better value for money. The Koss *TD/60* was somewhat better, though again very limited in its capabilities, especially towards the frequency extremes. The Audio Technica *ATH-M2a* is thin and utterly devoid of bass, though it is comfortable and it does have an acceptable midband. The AKG *K70*, the first of the open back models, is well built, but the performance of the drive unit appears

to have taken a back seat, and the result is a weak, congested treble, and an overblown upper bass.

Moving one step up the performance ladder, the

Pioneer is a semi-

sealed open back model which, though not especially comfortable, does offer a realistically well balanced performance, along with a num-



Best Buy and Recommended models



Another classic from Sennheiser, the *HD440II* is an alternative design to try in this price range.

miniature that will set you back just £20, which places it in direct competition with the Ross *RCH-300CD*. As an alternative, Aiwa produces a model called the *HP-X30* which costs a little more, £26, and which does a broadly similar job, albeit with a rather heavier, bassier balance.

Best Buy

The £39.95 Sennheiser *HD320* stood out as the best of the group. Extremely expressive and clear headphones — but don't dance around too much as they may fall off.

Best of the Rest

The £20-£50 price band is home to a variety of similar models under different product names. As there is relatively little continuity from all but the largest handful of suppliers, it is hard to be definitive about which models to include in a shortlist. A few names do spring to mind, however, along with a couple which cost just over £50 which should be considered by anyone interested in spending towards the top of the band. One example of the latter is the Vivanco *SR808 Classic*, which is an excellent open back model that costs £55. Another is the Beyer *DT411*, which at £59 is generally more successful than the *DT311* covered in this test.

Within the price band tested, the obvious stand out model is another Sennheiser, the £35 *HD440 II*, a classic model which has been and updated is light open and airy, if slightly 'cold' tonally. There is also an excellent closed back model called the *MDR-CD350* from Sony, a snip at £30, and almost certainly the cheapest satisfactory sealed headphone you can buy. At the bargain basement end of the price band, look out for the Kenwood *KH-1000*, a kind of outsize

ber of, mainly low-level, colorations — Recommended.

On to the Sony and own up time. This is the second time I have crossed the *MDR-CD450*'s path, and although the basic observations (its lack of clarity, and the colorations attributable to the microphonic capsule construction) were confirmed, I find myself better disposed towards it this time. The reason of course is the general standard (or lack of standards) of the group as a whole, especially the sealed models. If you really want a sealed headphone, then at least as far as this test group is concerned, the Sony is still the best, and arguably the only game in town. A cautious Recommendation is in order.



The outstanding Sennheiser *HD320* on the left and the very appealing Vivanco *SR606*, right.

Recommended

Pioneer's £36.95 *SE-400D* is part of the current trend for compact, semi-sealed models. Sounds great and is comfortable to wear.

The reasonably priced *MDR-CD450*, at £44.99, is a sealed design from Sony that ensures a fair degree of isolation together with a solid neutral sound.

Vivanco's *SR606*, £39.99, should prove to be a popular buy. It's attractive, comfortable and very easy on the ears.

The open Beyer *DT311* offers a slightly shambolic set of virtues and vices. It is well built and mainly comfortable, if a bit firm, but the bass is boomy, and the treble lacks vitality and resolution, which is slightly disappointing given the track record of this usually excellent source. In many ways, the Vivanco offers comparable qualities to the Beyer but without the shortcomings, and this model therefore gains a Recommendation. There is no doubt about the winner though. The Sennheiser *HD320* is so far ahead of the field as to leave its Best Buy status beyond question. The only real problem is that it is a rather loose fit, and users who move around while listening may notice a tendency for them to slip off the head.

Dealer Guide

AVON

V' AUDIO 36 Druid Hill
Stoke Bishop
Bristol BS9 1EJ
Tel: 0272 686005

ATC, AVI, Acoustic Energy, Alon, Audio Innovations, Audiomeca, Audio Technica, AMC, Analogue Electronics, Cadence Valve, Chord AMPS, Electronic Companiet, Exposure, Goldring, Harmon Kardon, Heybrook, Jamo, LFD, Lyra, Ortofon, Perception, Pink Triangle, Ruark, Michell, REL, Sansui, SME (inc. 20A), Sonic Link, Stax, Sugden, Sumiko, Townsend, Triangle, Wadia.

Demos by appointment only. Home trial facilities.
Free installations. Servicing facilities.
We are not a shop.

BIRMINGHAM

Norman H. Field Hi-Fi

Consultants for Home High Fidelity

- B & W
- Denon
- Castle
- Dual
- Mordaunt-Short
- Technics
- Thorens
- Tannoy
- Yamaha
- Kenwood

NAD

Two-year guarantee
Private Listening Rooms

HURST STREET
BIRMINGHAM B5 4BJ
Telephone: 021-622 2323

BIRMINGHAM

ELECTRO CENTRE

244 SOHO ROAD, HANDSWORTH, BIRMINGHAM
TEL 021 554 1878 & 523 2426

FULL RANGE OF HI-FI

PIONEER, TECHNICS, AKAI,
KENWOOD, JVC, SONY, AIWA,
Guaranteed the lowest price in the UK.
24 Hour Mail Order Facility Available

To find out how you can reach
100,000 discernable hifi buyers

ring Jennifer Phillips
(071) 917 7643

BERKSHIRE

B&B Hi-Fi
Berkshire's Leading Specialist

Aiwa, Akai, Alphason, Aura, Bang & Olufsen, Beyer, Bose, B+W, Canon, Castle, Celestion, Denon, Dual, Dynaudio, Heco, Heybrook, Infidelity, Jamo, JPW, JVC, Kef, Kenwood, Marantz, Mission, Mitsubishi, Monitor Audio, Mordaunt/Short, NAD, Nakamichi, Panasonic, Path, Philips, Pioneer, Project, QED, Quad, Rogers, Rotel, Sennheiser, Sony, Tannoy, Target, Technics, TDK, Thorens, Wessex, Wharfedale, Yamaha.

Ask about FREE delivery & FREE installation

11-12 Market Place, Reading* Tel: 0734 583730
18 King Street, Maidenhead* Tel: 0628 73420
Princess Square, Bracknell* Tel: 0344 424556
4 Priory Road, High Wycombe Tel: 0494 535910
62 North Brook Street, Newbury Tel: 0635 32474
12a Park Square, Luton* Tel: 0582 459915

*DEMONSTRATION ROOMS

MUSIC MATTERS THE AUDIO SPECIALISTS

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

Aiwa, Alphason, Apollo, Arcam, Audiolab, Audioquest, Audio-Technica, B&W, Bever, Canon, Celestion, Chord, Cyrus, Deltac, Denon, Dual, Epos, Exposure, Harman Kardon, Heybrook, Infinity, KEF, Luxman, Marantz, Meridian, Michaelson Audio, Michell, Micromega, Mission, Monitor Audio, Monster, Mordaunt Short, Musical Fidelity, Nakamichi, Panasonic, Pink Triangle, Pro-Ac, Revolver, Revox, Rogers, Roksan, Rotel, Royd, Ruark, Sansui, Sennheiser, Shure, SME, Stitwire, Wide range of classical CDs in stock Systemdek, Target, Technics, Thorens, Wharfedale, Yamaha, etc. Full servicing facilities available

INTEREST FREE
(for Limited Period) APR 0%. Written details
on request. Licensed Credit Broker.
VISA • ACCESS • SWITCH

351 HAGLEY ROAD, EDGBASTON, BIRMINGHAM B17 8DL
TEL: 021-429 2811 FAX: 021-434 3298
156-157 LOWER HIGH STREET, STOURBRIDGE, WEST MIDLANDS TEL: 0384 444184
93-95 HOBS MOAT ROAD, SOLIHULL, WEST MIDLANDS B92 9JL TEL: 021-7420254

OPENING TIMES
Tues-Thurs 10.30-6.00
Friday 10.30-8.00 Saturday 10.30-5.00
Demonstrations by Appointment

CAMBRIDGESHIRE

University Audio

MAIN AGENTS FOR:

LINN • ATC • MERIDIAN • QUAD
• ROTEL • DENON • B&O • etc

3 DEMO ROOMS

TELEPHONE: 0223 354237
FACSIMILE: 0223 322079



ESSEX



Akai • Alphason • Arcam* • B&W • Bang & Olufsen • Bose • Celestion • Dual • Harman Kardon • Kenwood • Quad* • Marantz • Mordaunt-Short • NAD • Nakamichi* • Pioneer • Ruark • Sony • Wharfedale • Yamaha • *Epping and Saffron Walden only

148 HIGH STREET • EPPING • TEL: (0992) 574242
26 KING STREET • SAFFRON WALDEN • ESSEX • TEL: (0799) 523728
70 SOUTH STREET BISHOP'S STORTFORD • HERTS • TEL: (0279) 656401

HAMPSHIRE

MARTIN LOGAN • ALCHEMIST • AUDIO RESEARCH • AUDIO INNOVATIONS

AUDIO GALLERY

NR PETERSFIELD HAMPSHIRE

MISSION, MUSICAL FIDELITY, KLIPSCH, DECAPO, ARGIS SPEAKERS, LYRA CARTRIDGES, DPA2005 HEYBROOK

HOME DEM AUDIO SYNTHESIS ACUSTIC ENERGY WADIA 6, MICROMEGA STAGE, DAC-IN-A-BOX, TDL, SME, TEAC, VRDS 10, AUDIONOTE + AV

0730 - 895194

VALVE SPECIALISTS ON A SUPERIOR LEVEL

AUDIO ALCHEMY • TEAC • NAD • TRIPOD • ALPHASON • PIONEER • DENON

RESTEK • PROAC • JPW • MOTH • PINK TRIANGLE

WADIA DPA • THE TECHNOLOGY

CHESHIRE

ASTON AUDIO HI-FI SPECIALISTS

ARCAM • MERIDIAN • MISSION • CYRUS • AUDIOCAB • B & W • NAKAMICHI • AURA • DENON • QUAD • YAMAHA • KEF • MARANTZ • ROKSAN • NAD • MF • AIWA • DUAL • CELESTION • ROGERS • AUDIOQUEST • TECHNICS

WEST STREET • ALDERLEY EDGE • PLUS HOME CINEMA • CHESHIRE • TEL 0625 582704 • INTEREST FREE CREDIT • DISCOUNT CD & TAPE • BADA

EDINBURGH

RUSS ANDREWS HI-FI

34 Northumberland Street, Edinburgh.
Telephone: 031 557 1672

Linn, Naim, Rega, Arcam, Rotel, Marantz, Nakamichi, Quad, Creek, Yamaha.

Demonstrations.

Open 10.5.30. Mon-Fri, 10.5pm Sat.



BUCKINGHAMSHIRE

SOUND GALLERY

BUCKINGHAMSHIRE'S PREMIER HI-FI DEALER

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

65 Castle Street, High Wycombe, Buckinghamshire.

Open Monday - Saturday
0494 531682 / 464670

HEREFORDSHIRE

ENGLISH audio

CYRUS CENTRE

PINK TRIANGLE • AUDION • SYSTEMDEK • HEYBROOK MICH • KEF • REFERENCE • MICROMEGA • NAKAMICHI CHORD • ARCAM • MUSICAL FIDELITY • ROGERS • NAD • ROTEL • DENON • TANNY • MARANTZ • EXPOSURE • MISSION • STAX • DUAL • TDL • ALBARRY • JPW • CELESTION • IXOS • SME • RUARK • MOTH • AUDIO TECHNICA • AND OTHERS

MONDAY - SATURDAY 10-6
95 WHITECROSS ROAD, HEREFORD,
HR4 0DG. TELEPHONE 0432 355081



Classified

Dealer Guide

HEREFORDSHIRE

Hi-Fi City

Aiwa, Arcam, Aura, Bose, B&W, Canon, Cerwin Vega, Denon, Jamo, JPW, Kenwood, Marantz, Mission, NAD, Philips, Pioneer, Rogers, Rotel, Sennheiser, Tannoy, Target, Technics, Thorens, Wharfedale.

0% CREDIT AVAILABLE • FREE LOCAL DELIVERY
12 YEARS SOUND ADVICE LASERDISC

FRIENDLY PROFESSIONAL ADVICE
WATFORD (0923) 226 169
15 CHARTER PLACE, HIGH STREET, WATFORD

HIGHLANDS

THE Music Station

• MISSION • DENON • ROTEL • PIONEER • SONY • KEF • TEAC •
• WHARFEDALE • CELESTION • JAMO • MUSICAL FIDELITY • MARANTZ •

LISTENING FACILITIES AVAILABLE

FOR ALL THE BEST IN HI-FI
Contact:
THE MUSIC STATION
49 Church Street, Inverness. Tel: (0463) 225523

HUMBERSIDE

Lend us your ears and we'll blow your mind . . .

Audio Innovations, B & W, Celestion, Cyrus, Denon, Kenwood, Kef, Marantz, Michell, Mission, Meridian, Mordaunt-Short, NAD, Nakamichi, Philips, Pioneer, Panasonic, Quad, Rotel, Sony, Tannoy, Technics, Wadia and more.

Audition the very best at South Humberside's premier Hi-Fi dealer . . .

MANDERS HI-FI LTD.
AUDIO • TV • VIDEO & SATELLITE SALES

2-4 EDWARD STREET (Off Pasture St.)
GRIMSBY. TEL: (0472) 351391

IRELAND

We Never Compromise On Quality

CLONEY
Meridian Arcam Classe Philips Rogers Epos B&W Naim Audio

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

KENT

ELECTRICAL DISCOUNT CENTRE

SALES & SERVICE

BRANCHES AT

The Broadway, Bexleyheath, Kent. Tel: (081) 298 7880. Fax: (0474) 535 937

jamo PIONEER marantz Technics JVC AKAI plus many more . . .

138 Pelham Rd, Gravesend, Kent Tel: (0474) 326600 (0474) 569601

KENT

KIMBERLEY HI FI
A Sound Investment

SEPERATE DEMONSTRATION ROOM
BRANDS STOCKED: DENON TECHNICS KENWOOD AIWA NAD DUAL WHARFEDALE MISSION MARANTZ SPKS TANNOY CASTLE MONITOR AUDIO HECO JAMO CERWIN VEGA CELESTION ROTEL

SOUTH LONDON'S AND NORTH KENT ONLY

LARGE RANGE OF ICE INC PIONEER, PANASONIC & JVC, KENWOOD, ETC
193 BROADWAY, BEXLEYHEATH, KENT
Telephone: 081 304 3272

LINCOLNSHIRE

Cottage Audio 17 BRIDGE STREET, SAXILBY, NR LINCOLN LN1 2PZ
TEL: (0522) 702834

AGENTS FOR: ATC, AVI, CHORD AMPS, HARBETH, KINSHAW, LFD, MICHELL, ORIGIN LIVE, ORTOFON, PROJECT, QED, ROYD, SANSUI, SEQUENCE, SONICLINK, THORENS, ETC

DEMONSTRATIONS BY APPOINTMENT
HOME TRIALS FACILITIES • INTEREST FREE CREDIT

LANCASHIRE

MS MONITOR SOUND HI-FI SPECIALIST

■ TECHNICS ■ SONY ■ PIONEER
■ PANASONIC ■ KENWOOD ■ DUAL

■ AIWA ■ CASTLE ■ QUAD ■ B&W ■ MARANTZ
■ SPENDOR ■ THORENS ■ ARCAM ■ ROTEL
■ WHARFEDALE ■ DENON ■ YAMAHA ■ TANNOY
■ PHILIPS CD ■ CELESTION ■ ROGERS
■ MORDAUNT SHORT ■ MONITOR AUDIO ■ JPW
■ TDL ■ AND MANY MORE

• BIG DISCOUNT • TWO YEAR GUARANTEE ON HI-FI •
• FREE HOME INSTALLATION • EXCELLENT COMPARATOR DEMONSTRATIONS • PRIVATE LISTENING ROOM •

CHORLEY (0257) 271935
54 CHAPEL STREET, CHORLEY

LONDON

AUDIO CONCEPT

27 BOND STREET, EALING W5 ☎ 081 567 8703

ACOUSTIC ENERGY, AMC, AUDIO INNOVATIONS, AUDIOLAB, AURA, B&O, B&W, CANON, CASTLE, DENON, DUAL, EVOLUTION, JPW, KEF, MARANTZ, MICROMEGA, MISSION, MONITOR AUDIO, MUSICAL FIDELITY, NAD, NAKAMICHI, ONIX, QUAD, REL, ROGERS, ROTEL, SYSTEMDEK, TARGET, TEAC, THORENS, VAN DEN HUL

Two demonstration rooms. Free local delivery & installation.
Repairs & Service. Closed Wednesday

WELCOME TO LONDON'S MOST EXCITING SPECIALIST HI-FI STORE

5000' of basement showrooms with 8 Listening Rooms

Open until 7pm every weekday

A BADA Bonded Store

Worldwide Personal Exports
Audiophile Recommended Dealer

227 TOTTENHAM COURT RD., LONDON W1P 0HX
Tel. Help Line 071 580 3535 - 24 Hour Fax 071 436 4733

LEICESTERSHIRE

SOUND ADVICE

THE MIDLANDS LEADING BRITISH EQUIPMENT SPECIALISTS, FOR OVER A DECADE

NAIM • LINN • MICROMEGA • MISSION
CYRUS • ROYD AUDIO • REVOX
• SENNHEISER • ROTEL • YAMAHA
• NAKAMICHI • EPOS • CREEK • REGA • JPW
• ARCAM • MERIDION • MORDAUNT-SHORT

EXCLUSIVE REGA AGENT:
LEICESTERSHIRE & NOTTINGHAMSHIRE
TEL LOUGHBOROUGH : 0509 218254

MANCHESTER

HI-FI YOU CAN'T AFFORD
not to listen to

EQUIPMENT BY ABSOLUTE SOUNDS, AUDIO INNOVATIONS, SUGDEN, IMPULSE MICHEL, ROKSAN, PINK TRIANGLE, ACCUPHASE, THIEL, COUNTERPOINT, SONIC FRONTIERS, TRICHORD RESEARCH ETC.
By appointment only

SERIOUS KIT
061-707 4823

Central Radio
MANCHESTER LTD. Est. 1946

30-32 SHUDEHILL MANCHESTER
M41EZ OPEN 9.00-5.30 MON-SAT

STOCKISTS OF: AIWA, BEYER, BOSE, B&W, CERWIN-VEGA!, CANON, J.B.L., KENWOOD, MARANTZ, MISSION, PANASONIC, PIONEER, SENNHEISER, SONY, TECHNICS, THORENS, WHARFEDALE, ETC. Call us if it's not listed above.

EASY PARKING CALL FOR DIRECTIONS
CALL US NOW WE'LL BE PLEASED TO HELP

061 834 6700

NORFOLK

The Old School School Road Bracon Ash Norfolk
Tel: (0508) 570829

Basically Sound of Norfolk
STOCKISTS OF LEADING HI-FI

Acoustic Energy, Arcam, Audiolab, Creek, Denon, Epos, Heybrook, Rotel, Naim, Nakamichi, TDL, and others.

NORTH

THE AUDIO SHOP
HI FI SPECIALISTS

Appointed stockists of:-
Ariston, Creek, Denon, Dual, Goodmans, JPW, Mordaunt-Short, Rotel, Royd, Tannoy.

Six Hill Street Raunds, Northamptonshire
Tel: 0933 622325

Classified

Dealer Guide

WEST MIDLANDS

AUDIO EQUIPMENT FROM LEADING AND SPECIALIST BRANDS ON TWO FLOORS FOR YOU TO LISTEN AND CHOOSE FROM

- 3 Demonstration Rooms
- Home Trials
- Home Cinema – Instore Demonstration Theatre
- Audio Visual Equipment
- Evening Demonstrations by appointment
- Inhouse Service Department
- Mail Order Available
- **Interest Free Credit** on Selected Items (Apr. 0% – Written details on request)

Hi-Fi for the Beginner, the Enthusiast and the Audiophile Telephone (0922) 493499/473499

ACUSTIC ENERGY • ARCAM • ALEMA • AUDIO LAB • APOLLO • A.T. • AUDIO ALCHEMY • AUDIO QUEST • B&W • BOSE • BEYER • CABLE TALK • CHORD COMPANY • CHORD • CYRUS • CELESTION • DPA • EPOS • EXPOSURE • INFINITY • JPW • KEF REFERENCE • KENWOOD • MARANTZ • MICHELL • MONITOR AUDIO • MONSTER • MORDAUNT SHORT • MERIDIAN • MICROMEGA • MISSION • MOTH • MUSICAL FIDELITY • NAKAMICHI • ORTOFON • PROJECT • QUAD • ROKSAN • ROGERS • ROTEL • SENNHEISER • SONY • SPENDOR • SUMIKO • SYSTEMDEK • TARGET • TDL • THORENS • TRIANGLE • TUBE TECHNOLOGY • VAN DEN HUL • VANDERSTEEN • YAMAHA • YBA

OXFORD

o v e s t u r e

arcam meridian
bose mission
denon naim audio
epos nakamichi
heybrook quad
linn products yamaha

3 Church Lane, Banbury (0295) 272158

SURREY

Grandix Sound & Vision
71 HIGH STREET, NEW MALDEN, SURREY
TELEPHONE: (081) 336 0012

AVI, ATC, Audio Innovations, Tube Technology, Exposure, Micromega, Ruark, Rogers, REL, McIntosh, Harman, Marantz, Project, TDL, Nakamichi, Kenwood, Aiwa, JBL, Cabletalk, Wharfedale, Sansui, and many more

TWO DEMO ROOMS, FREE PARKING, HOME DEMOS

WEST SUSSEX

PHASE 3 HI-FI
THE SOUTH'S LEADING HI-FI SPECIALISTS
Listening Rooms • Dedicated 'Home Cinema' Demonstration Room

ADCOM • ARCAM • B&W • CASTLE • CELESTION • DENON • HEYBROOK • KEF • REFERENCE • KENWOOD • LEXICON • MARANTZ • MERIDIAN • MONITOR AUDIO • NAD • SHEARNE • SPENDOR • TANNOY • THORENS • YAMAHA • including all 'Home Cinema' products

215 TARRING ROAD, WORTHING, WEST SUSSEX BN11 4HW
TELEPHONE: (0903) 245577

STRATFORD

STRATFORD HI-FI

You can come and visit us at:
25 HENLEY STREET,
STRATFORD CV37 6QW
Contact Dirk or Jamie on:
Tel/Fax No. (0789) 414533

We are stockists of the leading HiFi brands including:

ARCAM, SONY, PANASONIC, NAKAMICHI, B&W, PIONEER, TECHNICS, DENON, NAD, MARANTZ, ROTEL, MUSICAL FIDELITY, MONITOR AUDIO, MISSION, TANNOY, ONKYO, KEF, QUAD, TDL & SENNHEISER, YAMAHA, CELESTION, ACOUSTIC RESEARCH, AUDIOQUEST, MONSTER, TARGET, BEYER, SYSTEMDEK

0% Finance is available on selected products and all major credit cards accepted.

We also have a Demonstration Room and Service Facilities.
Monday to Saturday 9.30 - 5.30.
Late night Wednesday
"Where friendly service stills counts!"

SUFFOLK

signals hifi for grown-ups
martlesham heath ipswich (0473) 622866

SCOTLAND

RIVERSIDE AUDIO

ART AUDIO, CONCORDANT • VALVE AMPLIFICATION
ATACAMA AUDIO SUPPORTS • J.P.W. SPEAKERS SYSTEMS

THE MYSTIC OF VALVE AMPLIFICATION DEMONSTRATED IN THE COMFORT OF YOUR OWN HOME

SOUTH-WEST SCOTLAND TEL: 0475 631066
ARGYLL AND BUTE TEL: 0700 504845

YORKSHIRE

LINN NAIM REGA ARCAM QUAD DENON YAMAHA
AUDIOLAB CASTLE HEYBROOK NAKAMICHI
MARANTZ KEF TARGET ACOUSTIC ENERGY

SURREY

Front End Problems?
contact:
The Cartridge Man

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 & Nottingham Analogue – plus cartridge re-tipping service

(081) 688 6565

SUSSEX

WORTHING AUDIO

20 Teville Gate, W. Sussex. BN11 1UA Tel: (0903) 212133

The friendly shop with the best sound systems in the South.
Friendly advice • 3 yr guarantees • easy parking
Open Mon-Sat 10am-6pm Late night Wed 7:30pm

Agencies include: Arcam, Exposure, JPW, Naim Audio, Marantz, Orelle, Origin Live, Ruark, Audio Technica, Target, TDL, Tripod, Kinshaw Electronics and many more.

SOUND STYLE THE HI-FI EXPERTS
284 Glossop Road Sheffield S10 2HS
tel 0742 737893
81 Nether Hall Road Doncaster DN11 2QA
tel 0302 321421

send for our newsletter & privilege club details

SURREY HI-FI
SPECIALIST HI-FI OUTLET
DEMONSTRATION ROOM - PARKING

MUSICAL FIDELITY • QUAD • AUDIOLAB • REL • TUBE TECHNOLOGY
TDL • TANNOY • KEF • DENON • NAKAMICHI • THORENS • TARGET
MARANTZ • MICHELL • SENNHEISER • BEYER HEADPHONES
JPW • SOUND ORGANISATION • SOUNDSTYLE TRIPODS
VAN DEN HUL CABLES • BOSE

HOME CINEMA NOW ON DEMONSTRATION

Just 2 minutes off Junct. 6 M25 (A25)
GODSTONE (0883) 744755
45 HIGH STREET, GODSTONE, SURREY RH9 8LS

HI-FI CHOICE
The World's
No.1
Buying Guide

Moorgate Acoustics Hi-Fi

Frustrated and confused?
Call in and get some help and advice from a company that cares enough about its customers to put them first.
184 Fitzwilliam St., Sheffield. Tel: (0742) 756048
8 Westgate Chambers, Rotherham. Tel: (0709) 370666

Classified

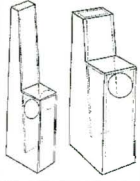
Dealer Guide

TRADE SALES & SERVICES

KIT LOUDSPEAKERS

BANDOR LOUDSPEAKER

Have you heard the REVOLUTIONARY fast & detailed Aluminium Anodised drivers by Bandor?



Transmission Line Kits exploits the unique performances of BANDOR 150mm (8") & 50mm (2") drivers. Brochures available

11 PENFOLD COTTAGE, PENFOLD LANE, HOLMER GREEN, BUCKS HP15 6XR. TEL: (0494) 714 058

HI-FI STYLIST

DAN DULEY

Top quality amplifiers & loudspeakers customer styled to fit in with your decor and furnishings.

Give your ears a treat - without compromising your aesthetics.

(081) 470 9795

TECHNICAL SERVICES

CLOCK THIS

CD Transport/player clocking to ultimate performance. This is a modification to the digital processing circuitry with unbelievable results. External DAC's can still be used to advantage, resulting in further enhancement. Probably the best CD upgrade you will ever make. Technically proficient engineers will also handle all your high end repair, servicing or modification requirements. Please call us on (0209) 612260 for further details.

RJF AUDIO VISUAL 84 Pendarves Street, Tuckingmill, Camborne, Cornwall TR14 8NJ
• Also High End Retail •

HIFI ACCESSORIES

KLIPSCH

Horn loudspeakers - a legend in sound for over 50 years, KLIPSCH hi-efficiency speakers are used in many studios, top hi-fi and stage systems.

FOR DETAILS CALL

(021) 430 7817

MULTIROOM INSTALLER

Gospel Music Audio

The Service Consultancy Design and Professional Installation of Multiroom Audio Visual Systems, Satellite, Home Cinema Surround, Pro-Logic and THX.

Call Doug or Jean

(0544) 230254

32A HIGH STREET, KINGTON, HEREFORDSHIRE

Wilmslow Audio

Drive units and Kit loudspeakers ATC, Celestion, Coles, Dynaudio, KEF, Motorola, Morel, RCL, Peerlefs, Scanspeak, Seas, Volt. Over 30 kits. 4 demonstration rooms.

Send for catalogue: £2.00. Major Credit Cards accepted

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

CARTRIDGES & HEADPHONES

Cartridges and Headphones; £25-£1000.

Ortofon, Audio Technica, Denon, Goldring, Shure, Arcam, Sennheiser, Beyer, Koss plus others. Trade in your old moving coil - substantial discounts!

IAN HARRISON HI-FI

(Mail Order only)

7 Mill Hill, Repton, Derby, DE65 6GQ Telephone: (0283) 702875

CARTRIDGES

HEATHERDALE AUDIO LTD

TEL: (0903) 872288 FAX: (0903) 872234
202 Findon Road, Worthing, W. Sussex BN14 0CJ

To experience the ultimate in record reproduction, come and listen to a CLEARAUDIO cartridge. Hand crafted in West Germany, these fabulous cartridges will retrieve more information and MUSIC from your valuable record collection than you thought possible.

DEALER ENQUIRIES WELCOME

SPARES

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 Specialists

MAJOR CREDIT CARDS WELCOME

IMPERIAL STUDIOS

MAXWELL ROAD, BOREHAMWOOD, HERTS WD6 1WE

AUDIO CABLES

Custom Made STUDIO QUALITY CABLES

DIRECT FROM THE MANUFACTURER AT TRADE PRICES

Handmade & Highly Recommended Available only by Mail Order

7 day money back guarantee. For details contact:

CONNECTIONS 49 BISHOPS ROAD
TEL/FAX 0733 897379 PETERBOROUGH PE1 5AP

VALVES

VALVES MADE IN WEST EUROPE OR RUSSIA

We have one million valves, CRTs, Sockets and Tubes in stocks by brands such as Brimar, GE USA, GEC UK, Mullard, Sovtek/Russia, Testa, Thermionic, Tungstam, etc.

Types include: 6L6GC, 12AT7, 12AU7, 12AX7, DG732, ECC81, ECC82, ECC83, EL34, EL84, KT66, KT88.

SEND FOR OUR 40 PAGE VALVE CATALOGUE!

Billington Export Ltd

1E Gilmans Industrial Estate, Billingshurst, Sussex RH14 9EZ, UK.

CALLERS STRICTLY BY APPOINTMENT ONLY

FAX: (0403) 783519. TEL: (0403) 784961

Minimum order: UK £50.00 plus VAT Export £100.00

REVOX SERVICING

REVOX SERVICE

A77, B77, PR99

For fully guaranteed professional service and repairs, call RamTek.

Tel: (081) 207 6159. Fax: (081) 953 1118
Suite 33, Kinetic Centre, Theobald Street, Borehamwood, Herts WD6 4SE

FAST • CHEAP RATES • EXCELLENT SERVICE

THE REVOX MOBILE SERVICE

ALL MODELS

call us: UK (0850) 167955

24 HRS INCLUDING WEEKENDS

ENQUIRIES WELCOME FROM OVERSEAS

WHY CONTINUE TO ACCEPT OTHER INFERIOR SERVICE?

THERE IS ONLY ONE LIKE US

FREE TECHNICAL ADVICE FREE ESTIMATES

Classified

Choosing a good hi-fi dealer is the most vital step in acquiring the system that is right for you. This unique directory gives full information on dealers able to help in your area.

DEALER Directory

Members of the British Audio Dealers Association are able to offer:



- Two year guarantee, transferable to another BADA dealer should the purchaser move more than 30 miles from his/her original address
- low cost five year guarantee option
- proper demonstration facilities
- seven day exchange or refund scheme if the dealer's advice is taken on product selection
- fully guaranteed service work
- customer complaints procedure in the event of problems

For more information, contact BADA on ☎ (071) 226 4044

AVON

AUDIO EXCELLENCE, 65 Park Street, Bristol. (0272) 264975. Great hi-fi carefully selected and demonstrated by friendly enthusiastic staff. Closed Mon. **BADA**
PAUL GREEN HI-FI LTD., C/O Harper Furnishings, Kensington Showrooms, London Road, Bath BA1 6AD. (0225) 316197. Technics, Denon, Sony, Rotel, AVI, Quad, Rogers, Mission, Tannoy, Aura and many many more. 2 demo rooms, home demos, appointments required, service dept, free install, home trial. Access, Visa, Int free credit, instant credit. Tue-Fri 9-5.30, Sat 9-5, closed Monday
V' AUDIO, 36 Druid Hill, Stoke Bishop, Bristol B59 1EJ. (0272) 686005. ATC, AVI, Acoustic Energy, Audio Innovations, AMC, Analogue Electronics, Cadence Valve, Chord Amps, Exposure, Jamo, LFD, Pink Triangle, Ruark, Michell, REL, Sansui, SME (inc 20A), Sonic Link, Stax, Townshend, Wadia. Demos by appt only, home trial facilities, free installation, service facilities.

BERKSHIRE

ARC AUDIO, 9 Dukes Ride, Crowthorne, Berks, RG116L2. (0344) 762201. Denon, Harman Kardon, JWP, Marantz, Monitor Audio, Onix, Rogers, Ruark, Tannoy, Thorens, Yamaha. Demo facilities, no appt necessary, home trial facilities, free install. Access, Visa, Diners. Open Mon-Sat 9-6pm (closed Wed at 1pm)
B&B HI-FI, 11-12 Market Place, Reading, Berkshire, RG1 2EG. (0734) 583730. Aiwa, Denon, Kenwood, Mission, NAD, Panasonic, Pioneer, Rotel, Sony, Technics. Free installation, Service dept. Access, Visa, Credit Facilities including interest free credit subject to status. 9.30-5.30, Sat 9-5.30. Also at: Bracknell, Maidenhead, High Wycombe, Newbury.
READING HI-FI CENTRE, 4 Queen's Walk, Broad Street Mall, Reading RG1 7QF. (0734) 585463. Your first choice for real hi-fi and home cinema sound. Arcam, Audiolab, B&W, Celestion, Micromega, Meridian, Quad, Rega, Rotel, Yamaha etc. Demonstration facilities (including home cinema). Free local installation. Bada guarantee. Open Tues-Sat 10am-6pm **BADA**

BIRMINGHAM

SOUND ACADEMY 152a High Street, Bloxwich, Nr Walsall W. Midlands, (0922) 493499/473499. Audio equipment from leading and specialist brands on two floors, with 3 demo floors, home trials, home cinema with instore demo theatre, evening demo's by appointment. In house service dept. Mail order avail. Int free credit subject to status. Open 6 days 9am - 6pm. Late night Friday. Expert advice, cable dressing and free installation is what makes Sound Academy the Midlands most exclusive Hi-Fi studio. FOR FULL PRODUCT LISTING SEE ADVERT IN THE DEALER GUIDE **BADA**

BUCKINGHAMSHIRE

AUDIO INSIGHT LTD, 53 Wolverton Rd, Stony Stratford, Milton Keynes, Bucks MK11 1ED. (0908) 561551. AlchemistProducts, AVI, Arcam, Audiolab, Aura, Heybrook, Meridian, Moth, Rotel, Royd, Ruark, TDL, UKD and more. Records and CDs, record cleaning service. SGL speaker demo room. Access, Visa and Finance.
D.L. CHITTENDEN LIMITED, 59-61 The Broadway, Chesham, Bucks, HP5 1BX. (Opposite Boots). (0494) 784441 Philips, Mordaunt-Short, Denon, Kenwood, Canon Audio, Koss, Wharfedale. Nicam TV & Video, Surround Sound, AV Systems. Showroom Demonstrations from expert and friendly staff. No appts nec. Service Department. Credit facilities available. Open 8.30 to 17.30 Mon-Sat.
FACTORS SOUND AND VISION, 16 Hill Avenue, Amersham, Buckinghamshire HP6 5BW. (0494) 432944. Sony, Panasonic, Kenwood, Technics, JVC, Denon, JWP, KEF, Tannoy, Bose, Aiwa, Grundig. In shop and in home facilities. No appts required, service dept, free install, home trial. Access, visa, int free credit. Open Mon-Sat 9.30-5.30, closed Thur.

CAMBRIDGESHIRE

AUDIO FILE, 2 Foundry Walk, Market Hill, St. Ives, Cambridgeshire. (0480) 66123. Naim, Rega, Quad, Yamaha, Mission, Arcam, Denon, Audio Lab, Meredion, JWP. Musical Fidelity. 9.30am-6pm 6 days. 0% Credit. **BADA**
STEVE BOXSHALL AUDIO, 41 Victoria Rd, Cambridge CB4 3BW. (0223) 68305. 10-6 - 6 days. 3 dem rooms, home trial, appts. preferred. Free installation and service dept. Access, Visa & credit. **BADA**
UNIVERSITY AUDIO, 1-2 Peas Hill, Cambridge. (0223) 354237. Mission-Cyrus, Arcam, Rotel, Denon, Meridian, Ruark, ATC, AVI, Quad, Linn. 3 dems, 1 single speaker. Home trial, free install, Service Department Visa, Access, Amex, Credit. Open 9-5.30. **BADA**

CHESHIRE

ASTON AUDIO, 4 West St, Alderley Edge. (0625) 582704. For the very best in hi-fi separates and home cinema. Wide range of specialist audio, interest free credit. Visa, Access. Home trial. **BADA**
DOUG BRADY HI-FI, Kingsway Studios, Kingsway North, Warrington. Padgate (0925) 828009. For the very best in hi-fi separates and home cinema. All credit cards. 3 Dem rooms. Open 6 days. **BADA**
CHRIS BROOKS HI-FI, 29 Gaskell St, Stockton Heath, Warrington. (0925) 261212. Tues-Sat 10-6. 2 dem rooms. Credit facilities. All credit cards. Total absence of bull****. **BADA**
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, Yamaha, etc. Superbly appointed single speaker demo facilities. 3 listening rooms with one dedicated to home cinema. No appts nec, home trial facilities, free installation. 2 year guarantee on all equipment. Access, Visa. Credit facilities available on request. Open Mon-SAT, closed Weds. **BADA**

NORMAN AUDIO, 106 Victoria Str, Crewe. (0270) 211091 Fx (0270) 211795. For full details see our Lancashire entry. **BADA**

PETERS HI-FI, 4 St Michaels Sq, Grosvenor Precinct, Chester., (0244) 322063/319392. Arcam, Technics, Sony, Marantz, Dual, Denon, Tannoy, Wharfedale, Quad. 2 Single speaker Dem rooms, no appts nec, free installation service dept. Access, Visa, Amex. Peters credit chargecard. Mon-Sat 9-5.30.

THE HI-FI SHOWROOMS, 12A West Str, Congleton, Cheshire (0260) 280017. Celestion, Creek, Exposure, Musical Fidelity, Naim, Pink Triangle, Project, Rotel, Ruark, Systemdek, Tannoy, TDL, Technics. 5 Dem Rooms. No appts necc, Home trial, Free install. Service dept. Access, Visa, Lombard Tricity. Open 9-5.30, Closed Wed.

SWIFT HI-FI, St Annes Parade, Wilmslow. (0625) 526213. Aura, B&W, Denon, Kenwood, Marantz, NAD, Pioneer, Rotel, Systemdek, Tannoy, Revolver, JWP. Open 9:30am-6:00pm dem room. No pressure! **BADA**

CLEVELAND

ACTION ACOUSTICS, 155-157 High Street, Redcar, Cleveland TS10 3AN. 0642 480723. Audio Innovations, Denon, Harman-Kardon, JBL, Michell, Musical Fidelity, Pink Triangle, Revox, Rogers, Thorens, etc. Dem Room. Appts nec. Home trial facilities, free installation, service dept. Access, Visa & H.P. Open 9.15-5.30.

GILSON AUDIO LTD, 172 Borough Road, Middlesbrough. (0642) 248793. Exposure, Arcam, Mission, Cyrus, Denon, Marantz, NAD, Rotel, Pioneer, Audiolab, Tannoy, Teac, Yamaha. Demonstration facilities in main shop and 2 dem. rooms, 1 AV room, appt nec, home trial facilities, free install, on request, service department. Access, Visa, HP. 10-5 - 6 days. **BADA**

CORNWALL

DEFINITIVE AUDIO, Cornwall, Near St Austell, PL26 6R7. (0726) 844039. For audio components/systems which actually work! Impulse, Micromega, OVA, Audio Innovations, Audio Note, Voyd, Systemdek, JWP, Silver Custom Design, DNM. Demonstration by appointment only. Demonstrations throughout Cornwall, Free Installation. Service Facilities.

RJF AUDIO VISUAL, 84 Pendarves Str, Tucking Mill, Camborne, Cornwall TR14 8NJ. (0209) 710777/612260. TDL, Michell, Musical Fidelity, NAD, Nakamichi, Bower & Wilkins, SME, Micromega, Pink Triangle, Pro-jekt, Perception, Harman Kardon, Triangle. Integral Demo room/showroom and special home dems. Appts nec, home trial, free install, service dept. All cards, switch and transax. Open Mon-Sat 9.30-5.30.

CUMBRIA

MISONS SOUND & VISION, 11 Warwick Road, Carlisle CA1 1DH. Tel (0228) 22620. Bang & Olufsen, Rotel, Sugden, Harbeth, 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.

PETER TYSON, 6 Abbey St, Carlisle, Cumbria, CA3 8TX. "Cumbria's premiere hi-fi centre". Part exchange welcome. (0228) 46756. Linn, Musical Fidelity, Cyrus, Marantz, Denon, Philips, Nakamichi, Technics, Pioneer, Creek & more. Dem room. Demos without obligation. Home trial, Free install. In-house service dept. Access & Visa. HP 9-5.30pm.

DEVONSHIRE

THE HI-FI ATTIC, 58 New George St, Plymouth, Devon PL1 1RR. (0752) 669511. We stock most leading makes and have an expert enthusiastic staff. Premises include attractive hi-fi and home cinema demonstration rooms. We offer free installation and credit facilities (written details on request) also a fully equipped service department. We can also provide a mail order service for all your LaserDisc requirements. We accept Visa, Access, Amex.

UPTON ELECTRONICS, 31 Torquay Road, Paignton, Devon TQ3 3DT. (0803) 551329. Pioneer, Denon, Sony, Technics, Harman-Kardon, Quad, Tannoy, JWP, Monitor Audio, Audio Innovations etc. Single speaker demonstration. No appts required, service dept, free install, home trial. Access, Amex, Inst credit, Visa. Open Mon-Sat 9-5.30, Wed 9-1pm.

DORSET

DAWSONS, 23 Seamount Road, Westbourne, Bournemouth, Dorset. (0202) 764965. B&O, Castle, Canon, Jamo, JBL, Pioneer, Sony, Target, TDL, Technics. No appts necessary. Free install, Service depart. Various credit facilities available. Open 9-5.30 6 days a week.

MIKE MANNING AUDIO New branch now open at: 128 Pool Road, Westbourne, Bournemouth. (0202) 751522. For details see main entry under Somerset.

SUTTONS HI-FI, 18 Westover Road, Bournemouth. 0202 555512. Linn, Arcam, Mission, Quad, Audiolab, Rotel, Yamaha, Denon, etc, 2 Single Speaker Listening Rooms, Home Demonstrations, Free Installations. Open Mon-Sat 9-5:30. Call for details. **BADA**

DURHAM

HI-FI EXPERIENCE, 17 Coniscliffe Road, Darlington DL3 7EE. Tel Help Line (0325) 481418. Agencies include: Arcam, Audiolab, Bang & Olufsen, Celestion, Cyrus, Denon, Harman, IMF, KEF, Marantz, Mission, Musical Fidelity, Meridian, NAD, Pioneer, Quad, Rotel, Shearne, Tannoy, Yamaha. 3 listening rooms. 3 years guarantee. Free delivery and simple installation North Yorks/South Durham. Home cinema specialist. **BADA**

ESSEX

AUDIO T, Gants Hill, 442-444 Cranbrook Rd, Gants Hill, Ilford, Essex IG2 6LL. Tel: 081 518 0915 Fax 081 554 8463. Arcam, Audiolab, Cyrus, Denon, Kef, Meridian, Rotel, Micromega, Yamaha & many more. Mon-Sat 10-6. 3 yr gntee on Hi-Fi. Free del & instal. 30 day upgrade scheme. Home dems. PX. **BADA**



INDICATES MEMBERSHIP OF THE BRITISH AUDIO DEALERS ASSOCIATION

BRENTWOOD HI-FIDELITY, 2 Ingrave Rd, Brentwood, Essex, CM15 8AT. (0277) 221210. Audio Innovations, Denon, DNM, EAR, Marantz, Micromega, Mission, Pink Triangle, Quad, Tannoy plus many more. Single speaker dem rooms, home trials, evening appts (high end), home installations. Mon-Sat 9.30-5.30. Access. Visa. Service Facilities. Advice second to none. **BADA**
RAYLEIGH HI-FI, 44a High Street, Rayleigh, Essex. (0268) 779762/747571, 216 Moulsham St, On-the-Parkway, Chelmsford. (0245) 265245. 132-134 London Road, Southend-on-Sea. (0702) 435255. A&R, Audiolab, Cyrus, Denon, Epos, Linn, Marantz/Meridian, Mission, Naim, Quad, Rega, Roksan, Royd. 0% finance. Excellent audio visual range, home cinema Dolby Pro-Logic, multi-room specialist. **BADA**

GLOUCESTERSHIRE

AUDIO EXCELLENCE, 58 Bristol Road, Gloucester. (0452) 300046. Great Hi Fi carefully selected and demonstrated by friendly and enthusiastic staff. Closed Mon. **BADA**
HUTCHINSONS, 295-297 High Str, Cheltenham, Glos. GL50 3HL. (0242) 573012. Pioneer reference point, Technics, Dual, NAD, jWharfedale, Celestion, Marantz, Aiwa, Kenwood, Sennheiser. No appts necessary, free install, service dept. Instant credit up to £1000. Open Mon-Sat 9.15-5.30.

HAMPSHIRE

AUDIO SOUTH for further details see the Surrey entry.
FLEET AUDIO, 287 Fleet Road, Fleet, Hants GU13 8RT. (0252) 811088. Micromega, Exposure, Ruark, Royd, Denon, Orelle, Aura, Nakamichi, Rotel, J_PW. "Sound advice for a sound system". Home dem facilities, hours to suit. Appts preferred, service dept, free install within local area. Access, Amex, Visa. Open Tues-Sat 9.30-6pm
HAMPSHIRE AUDIO LTD., 2-12 Hursley Rd, Chandlers Ford, Hants SO53 2FU. (0703) 252827/265232. 3 hi-fi and 2 home cinema/Dolby surround sound demo studios. Thurs late eve, closed Mon (except in Dec). 2-year guarantee, service dept on site, large free car park, junctions 4 (M27/M3), 5(M27), 12(M3), 13(M3) all within 3 miles. Est 1969. **BADA**
JEFFERIES HI-FI, 29 London Road, Portsmouth. PO2 0BH. Tel (0705) 663604. Hi-fi, home cinema and multi-room specialist. Range includes Adcom, Arcam, Celestion, Denon, Dynaudio, KEF, Lexicon, Linn, Meridian, Mitsubishi, Naim, Panasonic, Polk, Quad, Rega, REL, Rotel, Royd, Ruark, Sony. 2 dem rooms. Open Tues-Sat, late night Wed. Free parking, bus route, credit facilities. Winner Sony/Hi-Fi News Best Southern Dealer. **BADA**

HEREFORDSHIRE

ENGLISH AUDIO, 95 Whitecross Road, Hereford HR4 0DG. (0432) 355081. Cyrus Centre, Pink Triangle, Audion, Systemdek, Heybrook, Michi, KEF Reference, Micromega, Nakamichi, Chord, Arcam, Musical Fidelity, Rogers, NAD, Rotel, Denon, Tannoy, Marantz, Mission, Stax, Dual, TDL, Albary, J_PW, Celestion, Ixos, SME, Ruark, Moth, Audio Technica and others. Single Speaker Dem room. Home trial. Free install. Service dept. Access, Visa, Credit arranged. Open Mon-Sat 10am-6pm. **BADA**

HERTFORDSHIRE

ACOUSTIC ARTS LTD., 101 St Albans Rd, Watford, Herts. (0923) 245250. Fax (0923) 230798. Adcom, AMC, Apogee, Audiolab, Audio Research, B&W, Bose, Celestion, Chord, Classe, Denon, KEF, Magneplanar, Marantz, Martin Logan, Michell, Micromega, Orelle, PS Audio, Professional Monitor, Roksan, SME, Sonus Faber, Sonic Link, TDL, Tannoy, Theta, Thorens, Wilson. 4 demonstration rooms. Purpose built AV studio. Credit available, 100 yards from Watford Junction station. Open Tues-Sat 10-6.00. **BADA**

AUDIO FILE, 27 Hockerill St, Bishops Cleeve, Herts CM23 2DW. (0279) 506576. 9.30-5.30 open 6 days. Dealer of the Year 1988/89. Linn, Naim, Quad, Cyrus, Arcam, Roksan, Denon, Epos, Rotel, KEF, ProAc. 0% credit. **BADA**

HALEY AUDIO LTD., 328 Ware Road, Hailey, Hertford SG13 7PG. Tel (0992) 442425, fax (0992) 448387. Enjoy choosing your system in one of our three listening rooms. Relax with coffee or something from the bar. Demonstrations include Lexicon CP3 with THX surround sound with the guaranteed deepest, tightest bass available. Choose your hi-fi (top valves and MOSFETS), LD, CDi etc in a realistic domestic environment. Brands include: REL, AC Magnum, CR Devs, Rotel, Celestion, Micromega, Lumley Reference, Acoustic Energy, Royd, J_PW, Sonic Link, Harmon, etc. We deliver anywhere in the UK for home audition, or mail order. Access, Visa etc.

STUDIO 82, 82 High Street, Harpenden, Herts AL5 2SP. (0582) 764246, Fax (0582) 467022. ATC/AVI, Arcam, Aura, Audiolab, Bang & Olufsen, Denon, Epos, Mission Cyrus, Naim Audio, Nakamichi, Quad, Nad etc. Quiet single speaker dem room. Appts nec. Home trial, free install Service Dept. Visa, Access & finance terms. Open 9-5.30pm (Mon/Sat). Closed Weds. **BADA**

KENT

ASHFORD SOUNDCRAFT HI-FI, 40 High Street, Ashford. Seeking music lovers, male or female any age, to share common interest in, musical Pro-aktiv Hi-Fi Systems, Multi Room or Home Cinema. Attractive unusual equipment in unusual setting, your place or ours, we guarantee lasting pleasure. Open Mon-Sat, Appointment Service or just pop in. Tel: 0233 624441. **BADA**

JOHN MARLEY HI-FI CENTRES, 2 Station Rd, West Canterbury. (0227) 769329. Also at Dover - (0304) 207562. Arcam, Aura, B&W, Heybrook, J_PW, NAD, Pro-Ac, Pioneer, Rotel, Ruark, Tannoy, TDL, Technics. Dem and home trial facilities. Mon-Sat 9-5.30 closed Thurs. Free install. Credit to £1,000. Access, Visa, Credit charge. Service dept.

KIMBERLEY HI-FI, 193 Broadway, Bexleyheath, Kent. (081) 304 3272. Pioneer, Technics, Kenwood, Denon, NAD, Aiwa, Tannoy, Mission, Wharfedale, B&W. Separate dem room, no apt nec. Free installation. Service Dept. Instant credit facilities. 9.30-5.30. No early closing.

V J HI-FI, 29 Guildhall St, Folkestone. (0303) 256860. Mission, Kenwood, Tannoy, Marantz, Sony, Rogers, Denon, Musical Fidelity, Quad, Yamaha. Dem and home trial facilities, free local install. No appts necessary, service dept. Amex, Diners, Visa, Access, Int free credit, instant credit. Mon-Sat 9-6.

V J HI-FI, 119 High Street Margate. (0843) 226977. For full details see our above entry. **BADA**

LANCASHIRE

NORMAN AUDIO, 131 Friargate, Preston, Lancs PR1 2EE. Tel (0772) 253057. Fax (0772) 562731. Marantz, Pioneer, Yamaha, Audiolab, arcam, Mission, Cyrus, B&W, KEF. Send for catalogue. Home cinema demo room. No appointment nec, home trial facilities, free installation. Instant credit subject to status. Open 9.30-5.30, late night Wed till 8pm. **BADA**

NORMAN AUDIO, also at 216 Church Street, Blackpool, Tel (253) 295661, Fax (0253) 295722. **BADA**

LEICESTERSHIRE

LEICESTER HI-FI CO, 6 Silver Walk, St Martins Square, Leicester LE1 5EW. Tel: (0533) 539753. Fax (0533) 626097. Acoustic Energy, Arcam, Marantz, Micromega, Mission/Cyrus, Musical Fidelity, Nakamichi. Exposure, 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. **BADA**

LISTEN INN, 6 Hotel Street, Leicester. (0533) 623754 (Fax) 0533 623758. Linn, Arcam, Royd, Heybrook, Creek, Neat, Mission, Cyrus, Audiolab, Quad, Denon, etc. 2 Dem Rooms. **BADA**

SOUND ADVICE, The Factory, Duke St, Loughborough LE11 1ED. (0509) 218254. Shahinian, Rega, Naim, Linn, Royd, Yamaha, Rotel, Arcam, Nakamichi, J_PW. 3 demonstration areas, no appts necessary, free installation, service department. Lombard credit charge, Access, Visa. Mon-Fri 9.30-6.00. Sat 9.30-5.30.

STEREO SHACK, 1-3 Guildhall Lane, Leicester. Tel 0533 530330. Aiwa, A.R., Denon, Kenwood, Jamo, Mission, NAD, Phillips, Pioneer, Rotel, A/V Speciality. Free Install Open 9.30 - 5.30 6 days. Credit available.

LINCOLNSHIRE

BOSTON HI FI CENTRE, 65a Wide Bargate, John Adams Way, Boston, Lincs PE21 6SG. (0205) 365477. Denon, Quad, Nakamichi, Arcam, Onkyo, Marantz, NAD, Castle, Tannoy, Rogers, etc. Separate demo studio. Home trial. Free installation. Access, Visa. Tues - Sat 9-5 pm.

STAMFORD HI-FI CENTRE, 9 Red Lion Square, Stamford, Lincs PE9 2AJ. (0780) 62128. Pioneer, Technics, Marantz, Cyrus-Mission, Rotel, NAD, Yamaha, Kenwood, Quad, plus all major speaker manufacturers. Expert advice, comparator demonstrations, on two floors, part exchange Hi-Fi purchased for cash. No appointments necessary, home trial facilities, free installation, service department. Mastercard, Visa & credit charge, finance available. Mon-Sat 9-5.30pm, closed Thursdays.

SUPERFI, 271A High Str, Lincoln LN2 1JG. (0522) 520265. See main entry under Nottinghamshire for full details.

LONDON

BILLY VEE SOUND SYSTEMS, 248 Lee High Road, Lewisham, London SE13 5PL. 081-318 5755/081-318 1321. Arcam, Denon, Marantz, Linn, Mission, Cyrus, Naim, Nakamichi, Quad, Rega, etc. 2 domestic style listening lounges. Appts required, service dept, home trial facilities, Int. free credit, instant credit. Access, Visa. Open Mon-Sat 10-6.30, Closed Thurs. **BADA**

CORNFLAKE SHOP, 37 Windmill Street (just off Tottenham Court Road), London W1. Tel 071-631 0472 (all enquiries), Fax 071-436 7165. Open Tues-Sat 10-7pm. Rega, Roksan, Naim, Monitor Audio, Arcam, Nakamichi, ATC, AVI, Rotel, Epos, Meridian and Linn. 3 dem rooms (incl home cinema). Friendly/professional service. Home trial facilities. Appointments preferred, full delivery and repair service, multiroom specialists. Access, Visa and Amex.

GRAHAMS HI-FI, Canonbury Yard, 190a New North Rd, London N1. 071-226 5500. Winner Sony/HFN Greater London Dealer Award 1986/89/90. "One of the 5 best hi-fi shops in the world". Arcam, Linn, Meridian, Naim, Rega, etc. Systems from £500. FREE PARKING, 4 dem rooms, service dept, open Tues-Sat. RING FOR APPOINT. **BADA**

HI-FI & COMPONENTS, 84 Battersea Rise, London, SW11 1EH. Tel: 071 2231 110. Denon, Harman Kardon/Tannoy, Kenwood, Rotel, NAD, Wharfedale, Dual, Shure, Ortofon, Celestion, etc. Appts nec, Service Dept. Access, Visa, Diners, Amex, Open 10-6 Closed Wed.

HI-FI EXPERIENCE, Lion House, 227 Tottenham Court Road, London W1P -HX. Tel Help Line 071-580 3535 24 hour, fax 071-436 4733. Agencies include: Arcam, Audiolab, Bang & Olufsen, Castle, Celestion, Chord, Cyrus, Denon, Heybrook, Harman, IMF, KEF, Marantz, Mission, Musical Fidelity, Meridian, Nakamichi, Nad, Pioneer, Quad, Rotel, Shearman, Tannoy, TDL, Yamaha. 8 listening rooms, 3 years guarantee. Free delivery and simple installation (M25 periphery), home cinema specialist. **BADA**

INFIDELITY, 9 High Str, Hampton Wick, Kingston-upon-Thames. (081) 943 3530. For full details see entry under SURREY.

K. J. WEST ONE, 26 New Cavendish St, London, W1M 7LH. (071) 486 8262/63. Fax (071) 487 3452. Most established brands stocked. Two Hi-

Fi and one Home Cinema dem studios. Appts nec. Home trial. Free installation. Service dept. Major credit cards. Interest free credit usually available - ask for details. Mon-Sat 10-6pm. (Late night Thurs till 7pm)

MUSICAL IMAGES LTD, 173 Station Road, Edgware. 081-952 5535, fax 081-951 5864 & 45 High Street, Hounslow, Middlesex. 081-569 5802, fax 081-569 6353. See under Middlesex for further information. Main authorised dealers for over 100 manufacturers.

SOUND SENSE, 350 Edgware Road, London W2 1DX. (071) 402 2100. Alphason, B&W, Kenwood, Nakamichi, Celestion, Denon, Monitor Audio, Marantz, NVA, Sony ES, Yamaha. Appts preferred. Installations available. Access, Visa, Standard credit facilities. Mon-Sat 9.30-6.30.

STUDIO 99, 79-81 Fairfax Road, Swiss Cottage, London NW6. 071-624 8855, Fax 071-624 5315. Naim, Meridian, Quad, Mission/Cyrus, Rega, KEF, Arcam, Epos, Acoustic Energy, Yamaha, Nakamichi, NAD, Sonus Faber, B&O etc. Single speaker dem room, AV demos. Multiroom. Service dept. Visa/Access credit facilities. 10-7 Mon-Fri, 10-6 Sat. **BADA**

UXBRIDGE AUDIO - CHISWICK, 109 Chiswick High Road, Chiswick, W4 2ED (081) 742 3444. Fax (081) 742 3295. 2 Demo Rooms, Installations, 2 Year Guarantee, 7 day exchange. Major credit cards, Tues - Sat 10 - 6, See Middlesex entry for brands stocked. **BADA**

ZEBRA, 18-24 Brighton Road, South Croydon CR2 6AA. 081 688 2093. Audio lab, Arcam, KEF Reference, Marantz, Mission, Micromega, Pioneer, Rotel, Sony, Tannoy, and large range of AV equipment. S2 Air Conditioned Demo Rooms. In a more casual environment. Service department. The UK's leading home cinema centre. Mon-Sat 9.30-6.00. Access, Visa, Switch & instant credit up to £1000 subject to status.

GREATER MANCHESTER

CENTRAL RADIO, 30-32 Shudehill, Manchester M4 1EY. Tel 061 834 6700. Technics, Kenwood, Pioneer, Aiwa, Marantz, Mission, B&W, Wharfedale, JBL, Thorens, Panasonic, etc. TV video, surround sound, AV systems, service dept, free delivery. Access, Visa, Switch finance. Mon-Sat 9-5.30.

THE AUDIO COUNSEL, 12 Shaw Road, Oldham, Manchester OL1 3LQ. (061) 633 2602. Linn, Yamaha, Rega, Rotel, Arcam, Micromega, EPOS, Creek, Nakamichi, Denon. 2 dem rooms. Free install. Visa, Access, Licenced credit brokers up to £1000 instant credit. 10.00-5.30 Tues, Weds, Sat; 10.00-7 Thurs & Fri. Closed Mon. **BADA**

SWIFT OF WILMSLOW, 4-8 St Annes Parade, Wilmslow. (0625) 526213. Aura, B&W, Denon, Kenwood, Marantz, NAD, Pioneer, Rotel, Tannoy, Revolver, J_PW. Open 9:30am-6:00pm 2 dem rooms. No pressure! **BADA**

MIDDLESEX

HARROW AUDIO, 27 Springfield Rd, Harrow. (081) 863 0938. Mon-Sat 9.30-5.30. A&R, Audiolab, Cyrus, Denon, Epos, Monitor Audio, Musical Fidelity, Nakamichi, Quad, Rotel, Tannoy, Thorens, Yamaha, etc. **BADA**

MUSICAL IMAGES LTD, 45 High Street, Hounslow, Middlesex TW3 1R. (081) 569 5802. FAX (081) 569 6353. & 173 Station Road, Edgware HA8 7JX (081) 952 5535. FAX (081) 951 5864. Authorised dealer for over 100 brands. Interest free credit, anywhere in the UK, subject to status. Demo rooms including big screen TVs. Repairs and service. Open all week including Sundays. Home cinema specialist. Mail order world wide. Part exchange. Musical Images club.

RIVERSIDE HI-FI LTD, 422 Richmond Road, East Twickenham, Middlesex TW1 2EB. Tel. (081) 892 7613. Fax (081) 892 7749. A.R., Arcam, Audio



INDICATES MEMBERSHIP OF
THE BRITISH AUDIO DEALERS
ASSOCIATION

Innovations, Castle, Dual, Denon, KEF, Luxman, Michell, Musical Fidelity, Micromega, Marantz, Nakamichi, Rotel, Spondor, Systemdek, Tannoy, Yamaha. One demo room, in-car demo for car hi-fi systems. Apts not always necessary. Home trial facilities. Free installation, service dept. Lombard Tricity, Access, Visa, Amex, Diners Club. Mon-Sat 9.30-6, Thurs, Fri 9.30-7. **BADA**

MERSEYSIDE

WA. BRADY & SON, 401 Smithdown Rd, Liverpool L15 3JJ. (051) 733 6859. 'Largest choice of specialist Hi-Fi in N.W. £100-£20K'. All credit cards. 3 dem rooms. Closed Monday. **BADA**
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 Nica surround sound dem room. Free delivery, installation (Merseyside) service dept. Mon-Sat 9-5.30 Half day Tues, Access, Visa, Lombard.
PETERS HI-FI 11 Werburgh Sq, Grange Precinct, Birkenhead. 051-647 5626. 9-5.30 closed Thurs. See Cheshire entry for full details.
PETERS HI-FI, 11 St Werburgh Sq, Birkenhead. Also at 8 High Str, Bromborough. 051-334 1874/2825. Open 9-5.30 6 days a week. See Cheshire entry for details.

WEST MIDLANDS

AMADEUS SOUND & VISION, 10 Boldmere Road, Sutton Coldfield, West Midlands. 021-354 2311. Audio Innovations, aura, B&O, B&W, Castle, Marantz, Micromega, Musical Fidelity, Nakamichi, Harman Kardon, QED. Single speaker demo, apts preferred, service available, installations, B&O link install, home trials. Access, Visa, interest free credit available subject to status. 9.30-6pm, 6 days. **BADA**

FRANK HARVEY HI-FI EXCELLENCE, 163 Spon Street, Coventry CU1 3BB. (0203) 525200. Audiolab, Arcam, Bang & Olufson, Mission-Cyrus, Denon, Marantz, Meridian, Nakamichi, NAD, Quad, Rega, Rotel, Yamaha. 3 floors, 3 demonstration rooms, nice staff, nice coffee. Apts nec, service dept, free install, home trial facilities. **BADA**
 All credit facilities available. Mon-Sat 9.30-5.30. Wed til 8pm.

GRIFIN AUDIO LTD, 94 Bristol Street, Birmingham. (021) 692 1359/(021) 622 2230. Arcam, Castle, Denon, Linn, Marantz, Naim, Quad, Shahinians, Rega, Rotel. Open Tues-Sat 10-6. **BADA**

MUSIC MATTERS, 351 Hagley Road, Edgbaston, Birmingham B17 8DL. (021) 429 2811. Rotel, Denon, Lexicon, Tannoy, Ruark, Alchemist, Exposure, Pioneer, Roksan, Nakamichi, Arcam, Audiolab, Musical Fidelity, Mission/Cyrus, Meridian, KEF, Monitor Audio, Pink Triangle. 2 single speaker luxury demo rooms. Apts nec, home trial facilities, free installation, service dept. Access, Visa, instant credit up to £1000, interest free credit available. Tue-Thur 10.30-6, Fri 10.30-8, Sat 10-6. Branches also at: 93-95 Hobs Moat Road, Solihull, W Midlands B92 HJL. 021-742 0254. 156-157 Lower High Str, Stourbridge, W Midlands D18 1TS. (0384) 444184 **BADA**

NORFOLK

AUDIBLE DIFFERENCE, Near Diss, Norfolk. Tel (0379) 740227. Absolute Sounds, Audion, Art Audio, ATC, Audio Innovations, Audio Note, AVI, DPA, EAR, Impulse, LFD, Pink Triangle, Roksan, SME, Tube Technology. Full demonstration facilities including evenings. Apts required, free installation, home trial facilities. Open Mon-Fri 12-9pm, Sat 9-5pm.
AUDIO IMAGES, 7 All Saints Rd, South Lowestoft, Suffolk NR33 0DL. Tel: 0502 582853. For full details see our main entry under Suffolk.

BASICALLY SOUND, The Old School, School Rd, Bracon Ash, Norwich NR14 8HE. (0508) 570829. Arcam, Naim, Denon, Spondor, Audiolab, Sound Organisation, Creek, Epos, Rotel, Heybrook, TDL, Nakamichi, etc. 2 comprehensive dem rooms. Home trial. Free installation. Visa, Access, HP facilities. Tues-Sat 9.30-1, 2-5.30. **BADA**

NORTHAMPTONSHIRE

AUDIO CRAFT 23-25 Derngate, Northampton, NN1 1TY. Tel: 0604 36291. Bang & Olufsen, Kenwood, Technics, Marantz, Celestion, Mordaunt-Short. No apts nec, Free Install, Service Dept. Open Mon-Sat 9-5:30pm
CLASSIC HI-FI + VIDEO, School Lane, Kettering, Northants. (0536) 515766. Heybrook, Rotel, Yamaha, Onix, Onkyo, LSD, Nad, Pioneer, Marantz, Kenwood, Kef, Shearne, Rogers, Metaxas Audio and many more. Home trial, free instal., service dept. Access, Visa, credit facs. 9.30-5.30pm.
LISTEN INN, 32 Gold Street, Northampton. (0604)37871 (Fax) (0604) 601430 . Linn, Naim, Rega, Epos, Royd, Mission, Cyrus, Arcam, Audiolab, Neat, Creek, Quad, Denon etc. 2 Dem Rooms **BADA**

NOTTINGHAMSHIRE

CHANTRY AUDIO, 16-18a Eldon Street, Tuxford, Nr Newark, Notts NG22 0LH. (0777) 870372. Pink Triangle, DPA, Rotel/Michi, Micromega, NVA, Absolute Sounds, Alema, CR Developments, Michell, Lumley, Ruark, SME and much more! 3 dem rooms. Home trial, free installation, service dept. Access, Visa & credit facilities and mail order. Mon-Sat 9:30-6pm Sun by appt.
DEFINITIVE AUDIO, (0602) 813562. For a carefully considered approach to building a true hi-fidelity audio system with components derived from the following manufacturers; Audio Innovations, Snell, Wadia, Micromega, Deltec, Voyd, Systemdek, SME, Revox, Ortofon, Pioneer. Demos by appt. Please phone for further details. Installation free of charge. Mon-Sat 10-7, closed Wed am.
NOTTINGHAM HI-FI CENTRE, 120-122 Alfreton Road, Nottingham. (0602) 786919. Over 25 years experience, superb demo rooms, extensive range, free parking. Mon-Sat 9-5.30. **BADA**
PETER ELLIS AUDIO, 29 Kirkgate Newark, Nottingham, NG24 1AD (0636 704571) Quad, Castle, Arcam, Audio Innovations, JVC, QED, Sugden, Tannoy, TDL, Thorens, Marantz, Denon, Teac. Demo Room, Free Install, Service Department. Home cinema dem room. Home trial facilities. Switch, American Express, Access, Visa, Mon-Sat 9-5:30 Close at 1:00pm on Thursday.

OXFORDSHIRE

ASTLEY AUDIO LTD, 3 Marketplace, Wallingford (0491) 839305. Aura, B&W, JPW, Technics, Panasonic, Pioneer, Kenwood, Marantz, Sony, Yamaha, Denon, Dual, Mission, TDL, Tannoy. Home trial, free installation. Service dept. Access, Visa, Amex, Diners. Instant credit. Tue-Fri 9-5.30, Sat 9-5. Records & CDs stocked.
OUVERTURE HI-FI, 3 Church Lane, Banbury, Oxfordshire OX16 8LR. (0295) 272158. Arcam, Heybrook, Mission, Quad, Denon, Linn Products, Naim Audio, Epos, Meridian, Nakamichi. For sensible unbiased advice, call Oxfordshire's audio experts. Superb demo facilities. No apts nec, service dept, free install, home trial. Access/Visa, instant credit. Mon-Fri 10-6, Sat 9.30-5.30. **BADA**
OXFORD AUDIO CONSULTANTS, Cantay Hse, Park End Street, Oxford OX1 1JE. (0865) 790879 fax (0865) 791665. NAD, Rotel, Musical Fidelity, Pioneer, Marantz, Rogers, TDL, Thorens,

Audio Research, Proceed.2 Demo rooms. Service Dept, Home trial and free installation. Instant credit, Access, Amex, Visa. 10-6 Mon-Sat.

BADA
WESTWOOD AND MASON, 46 George St, Oxford. Tel: (0865) 247783. Aura, Arcam, Denon, Epos, Royd, Marantz, Mission, Monitor Audio, Nakamichi, Naim, Quad, Rotel, Rega, Tannoy, Teac. Open 10-5pm. Dem room. Closed Thur. **BADA**

SHROPSHIRE

AVON HI-FI, 12 Barker Street, Shrewsbury, Shropshire SY1 1JQ. (0743) 355166. NAD, Quad, B&W, Kenwood, Aiwa, Bose, Nakamichi, Onkyo. Dem room. Home trial. Free install. Service dept. Access, Visa. £1000 instant credit. Mon, Tues, Wed, Fri, Sat 9-5.30.
CREATIVE AUDIO, 9 Dogpole, Shrewsbury. (0743) 241924. Arcam, Audiolab, Celestion, Cyrus, Denon, Epos, Kef, Meridian, Mission, Naim, Quad, Rega, Roksan, Rotel, Ruark, Tripod. Dem room. Home trial and free installation. One of the best ranges of quality hi-fi outside London. Credit to £1000. Access, Visa. Tues-Sat 9.30-5.30. Service dept.

SOMERSET

MIKE MANNING AUDIO, 110 Middle Street, Yeovil, Somerset BA20 1NE. (0935) 79361, Fax (0935) 32923, Mobile(0850) 325965. Naim, Roksan, Pink Triangle, A+R (Arcam), ATC, AVI, NAD, Pioneer, Rotel, Denon, etc. Dedicated listening lounge, for relaxed and unpressured demonstrations. Apts not usually nec. but best to phone first. Home trial facilities on request, free installation, service department. Instant credit, Access & Visa, etc.9-5.30 closed Mondays.

STAFFORDSHIRE

GRANGE HI-FI LTD, 153 Branston Rd, Burton-on-Trent, Staffordshire DE14 3DQ. (0283) 33655. Albany, Audio Innovations, Arcam, Castle, Denon, JPW, Marantz, Moth, Pink Triangle, Yamaha, Rogers, Systemdek, SME, Tannoy, TDL, Rotel. Home cinema and hi-fi demo rooms, apts nec on Sat, Free Install. Service dept Access, Visa, interest free credit available, subject to status. 9.00-5.30pm. Closed for lunch 12.00-12.30. **BADA**

SUFFOLK

AUDIBLE DIFFERENCE, Near Diss, Norfolk — see main entry under Norfolk.
AUDIO IMAGES, 7 All Saints Rd, Pakefield, South Lowestoft, Suffolk NR33 6JL. Tel/Fax: 0502 582853. Quad, Triangle, Arcam, Castle, Rotel, Moth, JPW, Finlux, Audio Innovations, plus the amazing Rothwell range. Separate demo room, no apts nec. 10-6.30 Tue-Thur, 7pm Fri, 6pm Sat.
BASICALLY SOUND, The Old School, School Rd, Bracon Ash, Norwich. (0508) 570829. For full details see entry under Norfolk. **BADA**
BURY AUDIO, 47 Churchgate St, Bury St Edmunds, Suffolk, IP33 1RG. Tel (0284) 724337. Arcam, Castle, Heybrook, LFD, Marantz, Meridian, Monitor Audio, Michell, Musical Fidelity, Oreile, Pink Triangle, Proac, Quad, Rotel, Ruark, Target, van den Hul, etc. Single Speaker Room. No appointments necessary. Home trial fac. Free installation. Access, Visa, Switch. 9.30-6pm Mon-Sat. Closed Wed
EASTERN AUDIO, 41 Bramford Rd, Ipswich. (0473) 217217. Quad Audio Lab, Denon, Dual, Marantz, Mission, NAD, Nakamichi, Technics, Arcam. Mon-Sat 9.30-6. **BADA**

SURREY

AUDIO SOUTH, 24 (The Woolmead) East Str, Farnham, Surrey GU9 7TT. (0252) 714555. Audio Note, Deltec, JPW, Marantz, Rotel, Teac,

etc. AV specialist. Dem room and evening appointments available. Home trial facilities. Free installation. Access, Visa. 10.30-6 Mon-Sat. INFIDELITY, 9 High Str, Hampton Wick, Kingston Upon Thames, Surrey. Tel: (081) 943 3530. Arcam, Creek, Epos, Heybrook, Micromega, Naim Audio, Roksan, Rega Research, Shaninian, TEAC. Single speaker listening room. Apts pref, free installation, service dept. Major credit cards. Closed Mon, Tue-Fri 10.30-7, Sat 10-6.

PJ HI-FI - the Hi-Fi Shop, 3 Bridge St, Guildford, Surrey GU1 4RY. (0483) 504801/304756. 9-6 Mon-Sat. Linn, Meridian, Arcam, Quad, Revox, Rotel, NAD, Nakamichi, Marantz, Yamaha, Deltec, Rega, Audiolab, Mission/Cyrus. **BADA**
RIVERSIDE HI-FI, 422 Richmond Road, East Twickenham. TW1 2EB. Tel: (081) 892 7613. Fax: (081) 892 7749. See main entry under Middlesex. **BADA**

ROGERS HI-FI, 13 Bridge Street, Guildford, Surrey. (0483) 61049. Aiwa, Creek, Denon, JPW, Marantz, Micromega, Rogers, TEAC, Pioneer, Systemdek, Tannoy. Demonstration facilities available, no appointment necessary. Free installation. Service department. Access/Visa. Instant credit up to £1,000 subject to status. Monday-Saturday 9.30-6pm, later by appointment.

SPALDINGS HI-FI, 352-4 Lower Addiscombe Rd, Croydon, Surrey CR0 7AF. 081-654 1231/2040. Linn Naim, Quad, Meridian, Audiolab, Mission, Marantz, Denon, Ruark, Tannoy, Arcam. 3 dem rooms including AV room. Service dept, free install, home trial facilities, appointments advisable. Access, Visa, Amex, Interest free credit, instant credit. Mon-Sat 9-5.45. Tues-8. Closed Wed. Service dept. **BADA**

SURBITON PARK RADIO, 48 Surbiton Rd, Kingston-Upon-Thames, Surrey. (081) 546 5549. Quad, Castle, Dual, Denon, Kenwood, Mordaunt-Short, Rotel, Pioneer, QED, B&W, Tannoy, Demo facilities. Access, Visa. 9.30-5.00 Mon-Sat. Service dept.
ZEBRA 18-24 Brighton Road, South Croydon CR2 6AA. 081 688 2093. See main entry under London.

SUSSEX (EAST)

JEFFRIES HI-FI, 69 London Road, Brighton BN1 4JE. (0273) 609431. Hi-fi, home cinema and multi-room specialist. Range includes Adcom, Arcam, Celestion, Denon, Dynaudio, KEF, Kinshaw, Lexicon, Linn, Meridian, Mitsubishi, Naim, Panasonic, Polk, Rega, REL, Rotel, Royd, Ruark, Shaninian, Sony. 2 dem rooms. Open Tues-Sat, late night Wed. Free parking, bus route, credit facilities. Winner Sony/Hi-Fi News Best Southern Dealer. **BADA**

JEFFRIES HI-FI, 4 Albert Parade, Green Street, Eastbourne BN21 1SD. (0323) 31336, Fax (0323) 416005. Hi-fi, home cinema and multi-room specialist. Range includes Adcom, Arcam, Celestion, Denon, Dynaudio, KEF, Lexicon, Linn, Meridian, Mitsubishi, Naim, Panasonic, Polk, REL, Rotel, Royd, Ruark, Sony. Two demonstration rooms. Open Tues-Sat, late night Wed. Free parking, bus route, credit facilities. Winner Sony/Hi-Fi News Best Southern Dealer. **BADA**

THE POWERPLANT, 66 Upper North Street, Brighton BN1 3FL. (0273) 775978. Cyrus, Roksan, Micromega, Epos, Rega, Arcam, Audiolab, ATC, Theil, Rotel, Audionote etc. Single speaker demonstration room, home trial available, no apts required, service dept, free installation. Access, Amex, Visa, Interest free credit, instant credit. Tue-Sat 10-6pm. **BADA**

SUSSEX (WEST)

AUDIO DESIGNS, 26 High Street, East Grinstead, West Sussex RH19 3AS. (0342) 314569. Arcam, Audiolab, Cyrus, Epos, Linn, Marantz, Naim, Rotel, Mission, Sony. Comfortable listening room.

Installation and service dept. Access, Visa and credit facilities. 9.30-6.00 Mon-Sat, late Tue

BADA

BOWERS & WILKINS LTD. (Est. 1945) 1 Becket Buildings, Littlehampton Rd, Worthing. (0903) 2 64141. 1 minute from A24 & A27. Free local parking. Aura, B&W (inc. Matrix), Castle, Denon, Mission, Nakamichi, Philips, Quad, Technics, Thorens, and many more in 3 Dem Rooms. Systems, Hi-Fi and Home Cinema. Service Dept., Installations. Open 6 days a week. Access, Visa, instant credit to £1000 subject to status.

CHICHESTER HI-FI, 7 St. Pancras, Chichester, W. Sussex PO19 1SJ. Tel: (0243) 776402. Linn, Naim, Rega, Creek, Nakamichi, A&R, Denon, Roksan etc. Tues-Sat, 10-1, 2-5.15 (closed Mon).

BADA

TYNE & WEAR

RED RADIO SHOP AND HI-FI CENTRE, 11 Olive Street (Off Park Lane), Sunderland, Tyne & Wear SR1 3PE. 091-567 2087. Castle, Denon, JVC, Kenwood, Mordaunt-Short, Michell, Pioneer, Teac, Tannoy, TDL. TV, video, stylii, cartridges, components, accessories, portables etc. Audio/visual dem room with cinema sound. On site repair service, interest free credit. 9am-5.30pm daily.

WARWICKSHIRE

FRANK HARVEY HIFI, 163 Spon Street, Coventry, Warwickshire, CV1 3BD. Tel 0203 525200. Arcam, Mission, Cyrus, Musical Fidelity, Marantz, Rotel, NAD, Tannoy, Yamaha, KEF. Open 9:30-5:30 closed Thursday

BADA

HOUSE OF MUSIC, 44 Park Street, Leamington Spa, Warwickshire CV32 4QN. (0926) 881500. Linn, B&O, Meridian, Mission, Celestion, Arcam, Rotel, Sony Esprit, Denon, Aura. Two separate rooms. No appts required, service dept, free install, home trial. Access, Amex, Visa, Diners, Int free credit, instant credit. Open 9.30-5.30 6 days.

BADA

SOUNDS EXPENSIVE, 12 Regent Str, Rugby. (0788) 540772. Arcam, Audiolab, Quad, Meridian, Marantz, Mission, Celestion, KEF, Rotel, Ruark, Rotel, Heybrook. IMPROVE YOUR IMAGE, BE SEEN WITH US. appts required, no service dept, free install, home trial facilities. Access, Amex, Visa, Diners, Instant credit. Open 9-5.30pm Mon-Sat.

BADA

WILTSHIRE

THE AUDIO EXCHANGE, 52 Morse Str, Swindon, Wiltshire SN1 5QP. (0793) 539008. Acoustic Energy, Audio Innovations, Cerwin Vega, CR Developments, Heybrook, Impulse, Micromega, Michell, REL, Sequence, Sugden. AV and single speaker demo room. Home trial facilities, free installation, service dept. 10-6 Mon-Sat.

AUDIO T, 60 Fleet St, Swindon, Wiltshire. SN1 1RA. (0793) 538222, Fax (0793) 487260. Great hi-fi from Arcam, Audiolab, Cyrus, Denon, Linn, Meridian, Mission, Rotel, Sony, Yamaha, and many more. Mon-Sat 9.30-5.30. 3 yr gntee on Hi-Fi. Free del & instal. 30 day upgrade scheme. Home dems. PX. 2 dem rooms. A/V Dept.

BADA

WORCESTERSHIRE

COLORAMA HI-FI, 27 Kingfisher Walk, Kingfisher Centre, Redditch, Worcs B97 4EY. (0527) 597260. Aura, Nad, Onkyo, Kenwood, Denon, TDL, Polk Audio, B&W, Tannoy, Full Pro-Logic products. In-store integrated dem facilities. No appts required, service dept. Access, Visa. Open 9-5.30, closed Thur.

SPAINS HI-FI, 2&2a New Road, Bromsgrove, Worcestershire. Tel: (0527) 872460. B&W, Denon, Kef, Kenwood, Marantz, Mission, Nad, Pioneer, Rotel, Sony, Tannoy and more. Integral demo room/showroom for instant comparisons on hi-fi and AV equipment. Free installation, service dept & credit facilities. Access & Visa.

WEST MIDLANDS AUDIO, 158 Ombersley Road, Worcester WR3 7HA. (0905) 58046. Audiolab, Arcam, Naim Audio, Rega, Kef, Roksan, Epos, Quad, Nakamichi, Absolute Sounds and lots more. 4 demo rooms for budget & high-end audio. Dedicated DSP room. Appointments required. Free install, service dept. Access, Visa, Amex, Diners, Switch. Chartered Trust. Mon-Sat 9.00-5.30 late evenings by appt.

YORKSHIRE (NORTH)

HARROGATE HI-FI, 15 Commercial Str, Harrogate, N Yorks. (0423) 504274. Alchemist, Albarray, Ruark, Cabasse, Tannoy, Lumley Reference, Orelle, Celestion, NAD, Onkyo, Rotel, Yamaha. Single speaker dems, home cinema dems. Appts required, service dept, free install, home trial. Access, Amex, Visa, Int free credit, instant credit. Open 10-6pm closed Mon.

BADA

SCARBOROUGH HI-FI CENTRE, 14 Northway, Scarborough, N. Yorks YO11 1JL. (0723) 374547. Alchemist, Lumley Reference, Nad, Rotel, Onkyo, Mission, Celestion, Orelle, Marantz, Tannoy, Ruark. Dem room, home dems. Appts required, service dept, free install, home trial. Access Visa Int free Credit, Amex, Diners. Open 10-6 Mon to Sat.

BADA

SOUND ORGANISATION YORK, 2b Gillygate, York YO3 7EQ. Tel: (0904) 627108. Closed Mondays. Linn, Naim, Rega, Creek, Meridian, Arcam, Denon, Royd, Rotel and other well chosen makes."You can't go wrong — we wouldn't let you".

BADA

VICKERS HI-FI, 24 Gillygate, York. (0904) 629659. Audiolab, Harman-Kardon, Marantz, Musical Fidelity, Pink Triangle, Quad, Systemdek, Tannoy, Technics, & lots more. 3 demonstration studios (2 by appointment) superb showrooms, 2 year guarantee on all hi-fi products. Appts as above, home trial facilities, free installation, service department. Qualified and experienced staff, over 25 years experience. 12 months interest free credit. 10.30-5.30 Mon-Sat.

YORKSHIRE (SOUTH)

HI-FI STUDIOS, Sunnyfields, Doncaster, S Yorks DN5 85A. (0302) 781387. TDL, Sugden, Proac, Ruark, Teac, Impluse, Systemdek, Alphason, Target, Albarray, Heybrook, Monitor Audio, JPW, Totem, Harbeth, Keswick Audio Research, Michell Engineering, AMC (CD & Valves), CR Developments (Valves), Art Audio (Valves), REL Acoustics, Projects Origin Live, Dual, Yamaha. Home cinema Pro-Logic demonstrations, listening room, dems, home trial, free delivery and install, 2 year guarantee. Access, Visa. 10-8pm Mon-Fri, 10-6 Sat. Phone for further info. & FREE fact pack.

YORKSHIRE (WEST)

AUDIOVISION (BRIGHOUSE) LTD, 5 Bethel Street, Brighouse, W Yorks HD6 1JR. (1 mile from junction 25, M62) (0484) 713996. Yorkshire's experts for the entire range of Technics hi-fi separates and systems, Panasonic Nicam TV, satellite, audio, VCRs and camcorders, Philips widescreen TV, CDI and Laserdisc players and Yamaha cinema DSP separates. Also, Castle Acoustics, Mordaunt-Short, Bose, TDL, Cerwin Vega and Aiwa hi-fi separates. Hi-fi, home cinema and Dolby ProLogic surround sound systems on continuous demonstration. Free specialist advice and expert installation. In store service dept, Access, Visa, Credit charge. Mon-Sat 9-5.30.

DOUG BRADY HI-FI, The Forge Cottage, 19 Crossgate, Otley, Leeds, West Yorkshire LS21 1AA. (0943) 467689, for the very best in hi-fi separates and home cinema. Naim, Arcam, Rotel, Pink Triangle, Meridian, Epos, Castle. Two dem rooms, free install, service. Access/Visa. Open 10-6pm Tues-Sat.

BADA

Huddersfield Hi-Fi Centre, 4 Cross Church St, Huddersfield. (0484) 544668. B&W, Cyrus, Kenwood, Denon, Rotel, Arcam, Musical Fidelity, Quad, Audio Lab, Marantz, Mission, etc. Dem facilities — appointment reqd. Mon-Sat 9-5.30, Thurs 9-8. Closed Wed. Free installation, credit facilities. Access, Visa.

IMAGE HI-FI, 17 The Springs, Wakefield, WF1 1QE. (0924) 200272. Arcam, Linn, Meridian, Mission, Quad, Rotel, etc. 2 Listening Rooms Free Parking, DelL & Instal Mon-Sat 9:30 5:30 pm

BADA

IMAGE HI-FI, 8-10 St Annes Road, Headingley, Meridian, Mission, Quad, Rotel, Etc. 3 Listening Rooms. Free Dem & Instal. Open Mon-Sat 9:30 - 6:00pm

BADA

NORTHERN IRELAND

BELFAST

LYRIC HI-FI, 161/163 Stranmillis Road, Belfast. (0232) 381296, Fax (0232) 661115. Linn, Naim, Rega, Arcam, Castle, Denon, Rotel, Royd, Epos, Shahinian, Sehring etc. Free delivery and installation, service dept, 3 single speaker demo rooms, interest free credit available. Open Mon-Sat 10-6, Late night Thurs, closed all day Wednesday.

ZEUS AUDIO, 2-4 Grt Victoria Str, Belfast BT2 7BA. (0232) 332522. Audio Innovations, Pink Triangle, Roksan, Marantz, Tannoy, Rotel, Micromega, Meridian, Mission Cyrus etc. Open Mon-Sat 10.00-5.30. Late night Thursday.

BADA

COUNTY DOWN

ASTON AUDIO, Unit 8, Kings Road Shopping Centre, Kings Road, Belfast. Tel: 0232 402220. Akai, Aiwa, Technics, JVC, Mitsubishi, Samsug, Toshiba, Panasonic, and many more. Demos available, Open Mon-Fri 10-8pm Sat 10-5pm

SCOTLAND

EDINBURGH

IN HI-FI, Galloway House, 8-10 Bakers Place, Corner of St Stephen St, Stockbridge, Edinburgh EH3 6SY. 031-225 8854. Arcam, Castle, Cyrus, Marantz, Meridian, Mission, Quad, Rogers, Sony, Yamaha, and other good brands. Full home cinema demonstration lounge. 2 hi-fi demo lounges. No appts required, service dept, free install, home trial facilities. Access, Amex, Visa, instant credit. Open Mon-Sat 9.30-6pm.

BADA

GLASGOW

STEREO STEREO, 278 St. Vincent St, Glasgow G2 5RL. (041) 248 4079. Fax 0555 82358 Linn, Naim, Rega, Arcam, Creek, Epos, Castle, Shahinian, Denon and Sehring etc. 3 Single Speaker Demo Rooms. No appointments necessary. Home Trial Facilities. Free Installation. service dept. Interest free credit all standard facilities. Closed Tues Mon-Sat 10-6.

GRAMPIAN

HI-FI EXCELLENCE, 293 Union Grove, Aberdeen, AB1 6TD. Tel 0224 322520. Aiwa, Audio Innovations, Denon, Impulse, Infinity, Musical Fidelity, Rotel, Roksan, TDL. 2 large single speaker dem rooms. Appts necessary after 6.00pm. Home trial facilities, Free Installation, Service Department. Various offers. 3 Yr guarantee. Open 10-6.00pm 6 days.

HIGHLANDS

THE MUSIC STATION, 49 Church Str, Inverness IV 1DR. Tel: (0463) 225 523. Beyer Dynamic, Celestion, Denon, Jamo, Kef, Kenwood, Marantz,

Mission, Musical Fidelity, Pioneer, Rotel, Sony. Listening room service dept, free delivery to local area, part exchange, full range of credit facilities.

STIRLING

STIRLING AUDIO, 19 Barton Str, Stirling, Scotland FK8 1HF. (0786) 479958. Linn, Mission, Cyrus, Marantz, Arcam, TDL, Heybrook, Tannoy, Aiwa, Audio Innovations. Dem room. No appts necessary, service dept, free installation, home trial. Access, Visa, Int free credit, instant credit. Mon-Sat 10-5.30, closed Wed.

TAYSIDE

J.D. BROWN, 28-36 Castle St, Dundee DD1 9NZ. (0382) 26591. Rotel, Denon, Pioneer, Technics, Aiwa, Mission, Castle, Mordaunt-Short, Monitor Audio, Bose, Infinity. All equipment ready for demonstration. No apt nec, free installation, service dept. Open 9.30-6pm six days a week, (close 5pm Sat).

WALES

CLWYD

ACTON GATE AUDIO, 4 Ruabon Rd, Wrexham (0978) 3644500. Audio Visual specialists. Aiwa, Arcam, AMC, Bose, B&W, Beard, Canon, Celestion, Castle, Cyrus, Jamo, Marantz, Michell, Mordaunt-Short, Musical Fidelity, NAD, Nakamichi, Micromega, Quad, Radford, Rotel, Rogers, Rega, Ruark, Spondor, Tannoy, Wharfedale, UKD, Yamaha DSP member. Demonstration room, installation service. Easy parking and motorway access. Access, Visa etc.

BADA

SOUTH GLAMORGAN

AUDIO EXCELLENCE, 134 Crwys Road, Cardiff. (0222) 228565. Great Hi-Fi carefully selected and demonstrated by friendly, enthusiastic staff. Closed Mon.

BADA

WEST GLAMORGAN

AUDIO EXCELLENCE, 9 High St, Swansea. (0792) 474608. Great Hi-Fi carefully selected and demonstrated by friendly, enthusiastic staff. Closed Mon.

BADA

GWYNEDD

I&H GRIFFITHS & SONS, 313 High St, Bangor LL57 1YA. (0248) 370655. Aura, Yamaha, Tannoy, Teac, Sony, B&W, SVC, Rotel. Demos available, no appts nec, home trial facilities, free installation, service dept. Access, Visa, Lombard credit charge. Mon-Sat 9-5.30, Wed 9-1. Audio Visual Specialists.

PETERS HI-FI Victoria Buildings, Mostyn Avenue, Craig-y-don, Llandudno. (0492) 876788. 1 Single speaker dem room. Open 9-5.30. Closed Wed. See Cheshire branch for details

To advertise
in this
section call
**Jennifer
Phillips**
on
071-917 7643



INDICATES MEMBERSHIP OF
THE BRITISH AUDIO DEALERS
ASSOCIATION

Lumley Reference

"FOR REAL MUSIC LOVERS"



'ST70 STEREO'

Anything else
is a compromise

WITH THE SUPERB RANGE OF
PRODUCTS NOW AVAILABLE FROM

'Lumley Reference'

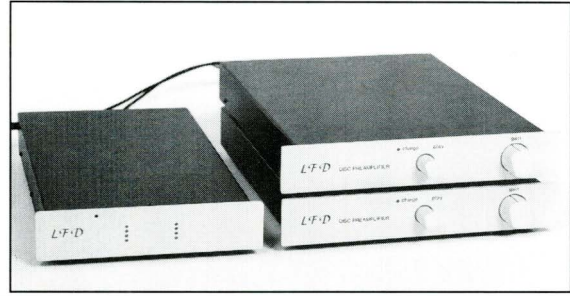
YOU NEED COMPROMISE NO FURTHER

CALL OR WRITE FOR MORE DETAILS
& DEALERS LIST:

REFERENCE
International

PINERIDGE SANDY CROSS, HEATHFIELD,
EAST SUSSEX
TELEPHONE (0435) 868004
FACSIMILE (0435) 864481

LFD Audio



LFD

an affordable high-end alternative for
audiophiles worldwide.

*"It's a diamond necklace in a world of plastic
- but without a Tiffany price tag."*

Eric Baithwaite, HiFi World, Sept 1992.

*"Clearly then, these LFD components are of
outstanding quality."* Jimmy Hughes, Audiophile, Jan 1993.

Airoflex 1 loudspeaker cable,

★★★★★ Recommended. What HiFi? Feb 1994.

Spiro Link 1, Spiro Link 2 & Digi Copper

Please contact LFD Audio for further information
on our complete range of: **AMPLIFIERS,
INTERCONNECTS, LOUDSPEAKER CABLES
AND MAINS ACCESSORIES.**



LFD Audio

MICRON HOUSE • 23 COPPINS ROAD • CLACTON-ON-SEA • ESSEX
CO15 3HP • TELEPHONE (0255) 422533 • FACSIMILE (0255) 221069

CREDIT CARDS WELCOME



24HR DELIVERY SERVICE

HI FI CONFIDENTIAL
FOR YOUR EARS ONLY
(071) 233 7225

OPEN 10 - 6pm
MON-SAT
THURS 10 - 9pm
WORLDWIDE
TAX FREE EXPORT

AMPLIFIERS		ITEM/TYPE	NORMAL PRICE	OUR PRICE	COMPACT DISC PLAYERS		TW355	TN DK+DOLBY S	279	239
PROTON	RA1150	POWER	449	279	MARANTZ	CD72HISE	CD	599	429	
MUSICAL FIDELITY	RAINBOW	INT-AMP	299	199	CDP3333ES	CD	229	179		
	TEMPEST	INT-AMP	259	219	ORELLE	CD260	CD	999	749	
ALCHEMIST	BRACI	PHONO-STAGE	495	339	CD169	CD	749	629		
	FREYA	PRE-AMP	1020	699	LEADER	CD	895	425		
	ODIN	POWER	1020	699	LOGIC	CD	479	275		
	GENESIS	MONO-POWER	1525	999	YAMAHA	CD	329	279		
	KRAKEN	INT-AMP	399	299	CDX570	CD	329	279		
	KRAKEN	PRE-AMP	395	295	CDX860	CD	299	199		
	KRAKEN	POWER	380	280	SONY	CD	329	249		
	UPGRAD	TRANSFORMER	45	35	CDPX229	CD	549	449		
ORELLE	SC101 + SP101	PRE-POWER	849	499	CDPX303ES	CD	349	299		
DENON	PMA450	INT-AMP	249	199	CDP311	CD	169	139		
YAMAHA	AXS70	INT-AMP	289	249	CDP411	CD	199	169		
MARANTZ	PM32	INT-AMP	139	109	PHILIPS	CD	199	159		
	PM44SE	INT-AMP	199	189	CD930	CD	399	299		
	PM40SE	INT-AMP	249	169	CD950	CD	169	149		
	PM52	INT-AMP	209	149	CD935	5 DISC	229	189		
KENWOOD	KA3020	INT-AMP	169	139	TECHNICS	CD	249	219		
PIONEER	A400	INT-AMP	279	219	SLP5740	CD	169	149		
	A400X	INT-AMP	299	249	SLP0440	CD	149	119		
	A300X	INT-AMP	229	209	SLP340	CD	349	299		
SONY	TAF211	INT-AMP	149	119	DR7050	CD	329	279		
	TAF242	INT-AMP	199	159	PIONEER	CD	329	279		
	TAF442	INT-AMP	249	215	PD5701	CD	199	169		
	TAF542	INT-AMP	299	249	AIWA	CD	199	169		
NAKAMICHI	AMP 2	INT-AMP	379	279	XC950	CD	199	169		
	Albury	AMP	429	329	HARMON KARDON	DOLBY S	799	349		
	PP1	AMP	429	329	TD4600	DOLBY S	799	349		
	AP3	PASSIVE PRE-AMP	299	219	KENWOOD	CD	169	139		
	SS08	STEREO POWER AMP	499	399	KX3050	CD	329	259		
NAD	1000 PRE-AMP	PRE-AMP	329	229	KX7050	CD	199	159		
	902 POWER AMP	POWER	209	179	YAMAHA	CD	159	129		
ROTEL MICH	RCH10	POWER	795	595	KX260	CD	159	129		
	RH010	PHONO-STAGE	995	795	KX360	CD	199	159		
	RH10	PRE-AMP	1550	1250	KXW292	TWIN DECK	199	179		
	TOTAL SYSTEM		3340	2499	SONY	TWIN DECK	329	279		
					TCK511	DOLBY S	279	239		
					TCK611	DOLBY S	329	279		
					TCK435	TWIN DECK	169	139		

DCC from Philips and DAT from Sony, Music Systems from Aiwa, JVC, Sony, Kenwood, Pioneer, Technics, Yamaha, Denon and a range of Grundig Audio Products are available on very special prices. A complete list is provided on request. Every product is supplied with a full one year warranty. Some of the items on sale are ex-display models.

HI FI CONFIDENTIAL LTD
34 BUCKINGHAM PALACE ROAD, LONDON SW1W 0RE. TEL: (071) 233 0774. FAX: (071) 233 7226

Readers Classified

LUXMAN L507 AMP (recently serviced) £75, Lentek Entre moving coil head-amp £40, Sound Organisation T/T table £40, 10" Z speaker stands £30, Van den Hul Clearwater speaker cable 2x5m £20. Offers. William ☎ 071-436 1553 (day) ☎ 081-994 0408 (eve).

WANTED TARGET HJ 12" speaker stands, wall shelf, 4-tier equipment stand or similar. William ☎ 071-436 1553 (day) ☎ 081-994 0408 (eve).

DECCA LONDON, export £90, Linn K18 new £100, ATOC5 £60, Loral MC81 new £55, MC88E 30 GOL dring epic £10, Meridian MCD £100, Goodmans SCD100 (Nakamichi)£90. Kent ☎ (0474) 704382

PIONEER F757 tuner JGC, boxed £85 ono. ☎ (0934) 813666, after 6pm.

QUAD Iiv2 power amps Quad 22 Quad FM tuner £250, Gerrard 301 £80 SME 3009 £50. Manchester ☎ 061-2267021

GARRARD 301 African mahogany heavy plinth SME 3009 Mk3, V15 cart, stunning. ☎ (0203) 679165

MISSION 753 loudspeakers (superb condition) rose-wood finish. £500 no offers. Linn K20 speaker cable 4x2.7m runs terminated with banana plugs for bi-wiring £50. Swansea ☎ (0269) 850022

WANTED Pioneer 1750 Laserdisc player. Swop for Rotel RCD-965BX CD player and Arcam Alpha 3 amplifier. Both very good condition. John, Hants ☎ (0256) 20608

LINN ISOBARIKS DMS & stands walnut finish, £700 ono, or swap with cash for SBLs 9150. Naim 32-5 pre-amp fitted with both mm/mc boards £225 ono. ☎ 071-284 2122

THORENS TDI 24 with SME arm and Shure V15 cartridge, offers. Yorks ☎ (0748) 825419

NAIM 01 tuner £450. 72-Hicap £680 Nap 250 £675. W Sussex ☎ (0903) 756582

LINN LP12, Ittok LV1, Isaka £1,000 ono. Pioneer A400 £150, Tannoy J95 £300, Michell Iso £250. ☎ 081-743 1334

WANTED: AUDIO ALCHEMY PS2 and DTI. Must be mint condition. Richard, S london ☎ 081-689 2692 (Day)

NAKAMICHI DRAGON cassette deck boxed VGC £2,350. New accept £999 ono. ☎ 081-981 7896

MARANTZ DD82 DCC used only once in original packing £250. Dunstable ☎ (0582) 867463

MICHELL SYNCRO RB300, Ausio Technica AT-OC 5, very little use, boxed, instructions, £425 ono. Milton Keynes ☎ (0908) 696869

CELESTION SL6 speakers with high quality, high mass stands and cable £200, no offers. Also, wanted Linn Keildh with dedicated stands in walnut, mint condition. Nottingham ☎ (0602) 463693 (evenings)

MUSICAL FIDELITY MA50 £425 Naim NAC12 preamp £70, 12 metres Ixos bi-wired speakers cable £28 target turntable shelf £25. Hereford ☎ (0432) 830599

WANTED FURUKAWA analogue interconnects, unbalanced preferred. Surrey eves ☎ 081-689 6855

REVOX B160 FM tuner £295. FM300A power amplifier £295. ☎ (0483) 69814

WHARFEDALE 505 II speakers with Heybrook stands £120, Cambridge P40 amp £80, both excell. Cleveland ☎ (0429) 235706

PIONEER PL-2470 turntable, F-2570L tuner, A-2370 amplifier, GR2370 graphic equaliser, CT-2370WR double cassette deck, PD-2970M compact disc player, 4 speakers (inc surround sound) 2 years old, exc cond, £750. Clwyd ☎ (0244) 544403

AT-OC 9 £110, RB300 £90, Hitachi D2200M, 3-head, 2 capstan, auto calibrate, £130. ☎ 081-741 2813

AUDIO INNOVATIONS Series 500 amplifier, pristine condition, boxed, £495 Sony DAT-DTC 690, excellent condition 2mths old £295, Sony DAT-TD750, VGC £195. Derby ☎ (0332) 271088

TANNOY original unchanged VGC 15in DC Monitor Gold Lancasters, Roksan DP1 transport, ROK DA1 DAC, ROK DS1 power supply, 12 months old, hardly used. Highest offer takes equipment. Beckenham ☎ 081-658 8765

Sony MZ1 MD recorder as new, boxed £280. Gwent ☎ (0633) 865255

WANTED: ARCAM Alpha CD transport 170.2 or 170.3 must be mint. Leicester ☎ (0533) 350494

TECHNICS amplifier SUA700 RC £175 45RIPC long warranty, replaced by AV amp, well reviewed mint condition. Swansea ☎ (0792) 206948

AUDIOLAB 8000P preamp and 8000C power amp, only 6 months old, in mint condition, 2 year BADA guarantee, cost £1,100, will accept £750. Nottingham ☎ (0602) 878883

LINN ISOBARIKS outboard crossover panel stands 4 years old £1,500 Aktiv £600. Middlesex ☎ (0895) 444911

DENON DCD1520 CD player, excellent condition, boxed £175 ono. London ☎ 071-351 2383

MUSICAL FIDELITY MC4 loudspeakers, black ash finish, excellent condition with Target HS20 stands £300 ono. Ayrshire ☎ (0475) 675996

NAIM 42.5 pre amp VGC £120. QED speaker stands £10. Norfolk ☎ (0379) 853580

ACOUSTIC ENERGY AE1 speakers, with AE stands, cost over £1,000, bargain at only £499 (no offers) can deliver. Cornwall ☎ (0566) 782237

TARGET AUDIO stand 5 tier £60 ono. WANTED: Linn LK100 power amp K400 cable. Bedfordshire ☎ (0767) 312507

CYRUS 1 series 8 amp, boxed as new £200, Audioquest Quartz 1 metre £70 and 0.5 metre £50. Huddersfield ☎ (0484) 649074

WANTED: Stereo DBX decoder type II for tapes, eg model 20 and Toshiba adres unit model AD-2T. Both working or faulty but cheap. Call Drew, Cheshire ☎ (0270) 764624 after 6pm

REGA PLANAR II and Superbias cartridge £100. Denon TU260L £60, Target 5 Tier EQT stand £60. Surrey ☎ (0372) 742659

SONY ST-S370 RDS tuner C/W aerial hardly used £85, no offers. Coventry ☎ (0203) 464937

SYSTEMDEK IIX/E 900AP with Moth arm Goldring 1012 cartridge (£550) £275; Royd Apex loudspeakers (£485) £230. Bucks ☎ (0296) 713311

MUSICAL FIDELITY A1 amp, £150 Linn Helix speakers and matching stands, £150. Norwich ☎ (0603) 35547

EPOS ES11 speakers stands £440. Cheshire ☎ (0625) 420432

ARCAM CD BB3 DAC Audiolab 8000A Thorens TD160 Rega R200 £600 will split ☎ (0256) 389402

PIONEER A-300 amp, as new, boxed £160. John, Manchester ☎ 061-248 8056

NAIM NAT 01, NAC 52 pre amp, NAXO 6X NAP 135, Linn Isobarik. Half price-ish. Sussex ☎ (0323) 870160

TANNOY MERCURY M20 speakers £55 ono. Dual 505 turntable £45. ☎ (0892)835907

KEF CR200s flush fitting wall mounts, as new, never used, cost £360, £220 ono. Somerset ☎ (0963) 350844

WANTED: MAGNEPLANERS KEF1053, Quad 63, Yamaha NS1000, Stax ELSF81, Linn Isobarik, Naim SBL, Stax phones, Bandor and Jordan drivers, Bose AM5, ARMS 774 Mission. Cleveland ☎ (0642) 559543

YAMAHA DSP A2070 AV amplifier, new £800 Kenwood centre speaker and CM5ES surround speakers £100 for both, must collect. Bath ☎ (0225) 337129

LINN KEILDHS, black ash, fast and detailed, 7 months old, VGC, only £450 ovno. John, West Sussex ☎ (0444) 230010

ROGERS CADET 3 valve amp, complete, but not working. Offers to Dominic, Blackheath ☎ 081-852 7553

AUDIOLAB 8000C and 8000P, Quad FM4, Denon DRM24HX cassette. As new, boxed £1,200 ovno. Essex ☎ (0268) 695223

QUAD 606 £380, Musical Fidelity 3B preamp £250, Meridian 263 D/A converter £300 (as new). Yamaha DSP-E1000 pro-logic processor £450 (as new). S Ellerton EC1 ☎ 071-253 1845 (after 7pm)

ROTEL RCD 965BX CD player. Top rated, best buy. As nmew £195 Torquay ☎ (0803) 606220

MERIDIAN 263DAC, superb sound, Delta Sigma chip, 16 months old with 3 year guarantee, immaculate, £295. Musical Fidelity 3B pre-amp & P170 power-amp (cost £1,000) bargain at £350. Reading ☎ (0734) 412221

ROKSAN DA1 DAC brand new £280. Marantz PM40SE amp £100 or both for £350. N'hants ☎ (0604) 712156

NAIM NAP180 £600 NAC42.5 £120 HICAP £280 (old style) Ruark Templars (Burr) £300, excellent condition, boxed. Hereford ☎ (0432) 268484

SOUND ORGANISATION 3 Tier Table £30. Manchester ☎ 061-740 9821

WANTED PIONEER CLD-1750 laser disc player. Edinburgh ☎ 031-664 1358

Place an advert in Hi-Fi Choice — FREE!

That's right, you can sell your hi-fi equipment in the *Choice* Reader Classified pages absolutely free. All you have to do is write your 'sales' or 'wants' advert in block capitals on the coupon below, and send it to us at the address shown. The advert will appear for one issue only and must be no more than 30 words long, including your phone number. Remember to include your own name, address and telephone number. Reader Classifieds are for the use of private individuals only and adverts from dealers will not be accepted. All Reader Classified adverts will be printed subject to available space, and Dennis Publishing Ltd accepts no liability for the accuracy of the information contained therein, nor any consequence arising from it, nor for any minor typographical errors. We reserve the right to amend or refuse adverts at the Editor's discretion.

Name.....
Address.....
.....
.....Tel no.....

Please return the completed coupon to: *Hi-Fi Choice*, Reader Classifieds, 19 Bolsover Street, London W1P 7HJ.

HI-FI CHOICE SPECIAL OFFERS

Choice accessories

This month we are pleased to be able to offer a selection of cables and interconnects to improve the sound of your system. Although some people consider cables to be a mere accessory, in fact without them you'd get no sound at all from your system!

By choosing the very best possible cables you can make the most of the rest of the separates that make up your hi-fi system.

Speaker Cables

AudioQuest F-14

No, it's not a fighter plane, its an affordable flat cable that is ideal for audio visual applications where rear channel speaker cable has to be run under carpets or along skirting boards. Don't let the low price tag fool you, though, it's still a vast improvement over bell wire or other non-specialist alternatives. Earning a Recommended tag back in our August issue, AudioQuest F-14, at a mere 2mm thick, could well be the answer to those tricky cabling dilemmas. Available in white.

Order ref	Length	Price
ZLI4WR/1	1 metre	£28.90
ZLI4WR/2	2 metre	£32.80
ZLI4WR/3	3 metre	£36.70
ZLI4WR/4	4 metre	£40.60
ZLI4WR/5	5 metre	£44.50

If you require longer lengths, add an additional £3.90 per metre

AudioQuest Type 4

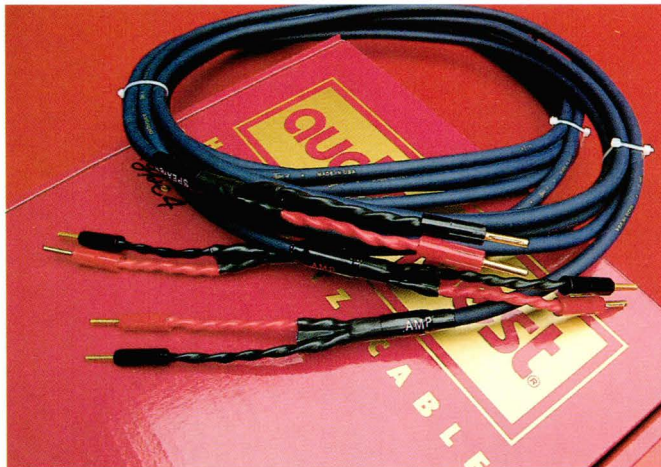
This corking cable uses four solid OFHC conductors wound in a spiralled Hyperlitz configuration. You can either pair up conductors to form a superior single run of cable or the cable can be sent to you pre-terminated for bi-wiring, enabling you to enjoy all the advantages of this method of connection without the mass of spaghetti that normally threatens to take over the living room. A very cost effective up-grade.

Order Ref: ZLT43PR - 3 Metre length £57.00

Order Ref: ZLT45PR - 5 Metre length £75.00

AudioQuest Indigo

The obvious next step up from Type 4, Indigo uses ten solid conductors, again in a Hyperlitz array and finished in a tasteful blue satin jacket. When the five red or black conductors are connected together this gives a 2.6 mm² signal area. Not the cheapest cable on the market, but nonetheless



highly recommended for those wanting to pull the very best from their systems.

Order Ref: ZLI3PR - 3 metre length £75.00

Order Ref: ZLI5PR - 5 metre length £105.00

AudioQuest Crystal

Crystal uses twelve solid conductors, spiralled together in a Hyperlitz array under a slate blue satin jacket. The cable is rather unusual in that it contains a mix of conductors, six conductors are 0.65 mm² PHFC copper and six are 0.52 mm² FPC copper. In normal use Crystal is a 3.51 mm² cable. The FPC copper acts like a bypass, allowing most of the high frequency benefits of this superior material. The less expensive OFHC copper provides bulk so Crystal can provide a powerful full range sound. Together the OFHC and FPC allow Crystal to have extraordinary performance at a reasonable price. Crystal is also an extremely effective single biwire cable, which is best achieved by using the six OFHC conductors for the bass and the six superb FPC conductors for the treble.

Order Ref: ZLCY3SBW - 3 metre £144.00

Order Ref: ZLCY5SBW - 5 metre £200.00

Interconnect cables

Although you could connect your equipment together with a damp piece of string, the chances are the results would be rather disappointing. What is often glossed over is that there are more than one type of interconnect cable on the market and that different cables are needed for different tasks. The first use for interconnects is to enable you to link line level signals between units, for example to wire the analogue output of your CD player to your amplifier, or to use between pre-amp and amplifier. We offer three choices of cable intended for this purpose, AudioQuest Turquoise, Ruby and

Quartz, so there should be one there to suit your budget.

AudioQuest Turquoise

Our cheapest interconnect uses four solid OFHC copper conductors in a novel symmetrical Hyperlitz arrangement. Two of these conductors are insulated and together become the positive conductor. The other two are uninsulated and make contact with the 100% coverage shield, together they become the negative conductor.

Order Ref: ZIUPI - 1 metre £34.95

Order Ref: ZIUP2 - 2 metre £40.95

AudioQuest Ruby

Ruby is one of the most popular cables in the AudioQuest range, and it's easy to see why. A fully balanced cable featuring Hyperlitz construction. Ruby uses four solid FPC copper conductors, all polypropylene insulated. Two together carry the positive signal and two carry the negative. Excellent value for a high performance cable.

Order Ref: ZIRPI - 1 metre £69.95

AudioQuest Quartz

Quartz uses the same Hyperlitz balanced construction as Ruby, but with FPC-6 copper (99% purity). The RCA plug is resistance welded to Quartz in a process which actually commingles the molecules of the cable and plug into an alloy. The plug uses an unusual patented design which eliminates extra internal contacts, ensures a large, self-wiping (cleaning) contact area and provides extraordinary strain-relief. The plug is not difficult to push on, but it does make the best contact.

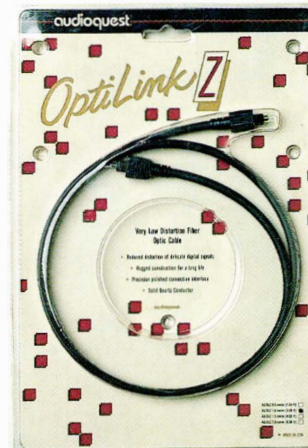
Order Ref: ZIQPI - 1 metre £99.95

Optical cables

Many CD players and transports feature a fibre optic digital output. This allows you to send the digital signal, in the form of light, to a separate digital-to-analogue converter.

The quality of the fibre optic cable used can make nearly as much difference as your choice of CD player. A poor fibre optic cable can totally destroy the value of a separate D/A converter. OptiLink X and OptiLink Z will make sure you get the performance you paid for. Available in 1 metre lengths.

AudioQuest OptiLink X™
Order ref: ZOXT1-OptiLink X (1 metre, Toslink) £49.95



AudioQuest OptiLink Z™
Order ref: ZOZT1-OptiLink Z (1 metre, Toslink) £99.95

Digital cables

The characteristics a cable needs to carry a digital signal are very different from those required of an analogue cable and if you want to get the very best from your system then you need a cable designed to do the job. Video cables, which are designed for high frequency signals in the first place, are ideal for carrying digital signals, and they can also be used to give a boost to your AVV system.

Video X is available in 1, 2 and 5m lengths while for those of you with a little more money to spend, we can also supply the superior Video

Hi-Fi Choice Sweatshirts

Sure to be as popular in '94, the Hi-Fi Choice sweatshirt is still great value at just £15.00. Sporting the Hi-Fi Choice logo in white and red on navy blue — it's an inimitable accessory that will certainly attract admiring glances.

Order ref: JE22A/L
(Large)

Order ref: JE22A/XL
(Extra Large)
Price: £15.00



Z, one of the very few digital interconnects to earn a coveted Best Buy rating in our recent market survey.

AudioQuest Video X

Order ref: ZIXPI

(1 metre) £29.95

Order ref: ZIXP2

(2 metre) £36.95

Order ref: ZIXP5

(5 metre) £57.95

AudioQuest Video Z

Order ref: ZIZPI

(1 metre length) £49.95

If you have any technical queries regarding the cables, please call Alisdair Patrick on 0223 440964.

AudioQuest CD Feet

Improve the performance of your CD player or any other vibration sensitive equipment. Sorbothane® CD feet absorb energy, increasing both damping and isolation. Each foot should not support more than 4 pounds (2kg) or about 16 pounds for a set of four.

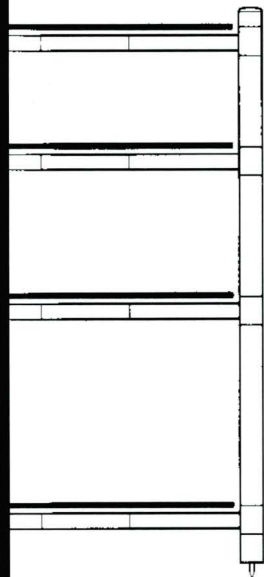
Order ref: ZAFCA
Price: £29.95

AudioQuest Big Feet

Same as the above only bigger, to support heavier equipment.

Order ref: ZAFB4
Price: £47.95

Aria. A new way to look at hi-fi support.



Introducing the Aria Modular Hi-Fi Support System. It can change the way you look at your components.

Build up separate vertical shelves. Or link units side by side. Either way, Aria lets you vary shelf heights to suit your components. Start with a Base Pack and go from there.

There's no limit to the number of ways you can build it up.

Not only does Aria give you more flexibility than any other hi-fi system, it also provides sound deadening and decoupling benefits. With black tubular steel legs. Grey tinted glass or black MDF shelves.

And adjustable carpet-piercing spikes.



The Aria Support System. Hi-Fi will never look the same again.

I want a good look at the Aria system. Please send me a brochure.

Name _____

Address _____

Post Code _____

APOLLO
HI-FI FURNITURE

Our components improve yours

Zenith Crown Ltd., Tipton Road, Dudley, West Midlands, DY1 4SQ Tel: 021 520 5070/1432



AudioQuest LaserGuide

The most effective optical disc treatment available. Using LaserGuide improves virtually all aspects of CD and LaserDisc performance. CD's actually sound smoother, clearer and more dynamic.

Order ref: ZBLGB
Price: £14.95

Hi-Fi Choice CD Rack

Available as single units, the interlocking Choice CD rack is only £1.25 — a small price to pay for keeping your collection in order.

Order ref: JE36A
Price: £1.25

4mm Banana Plugs - Gold Plated

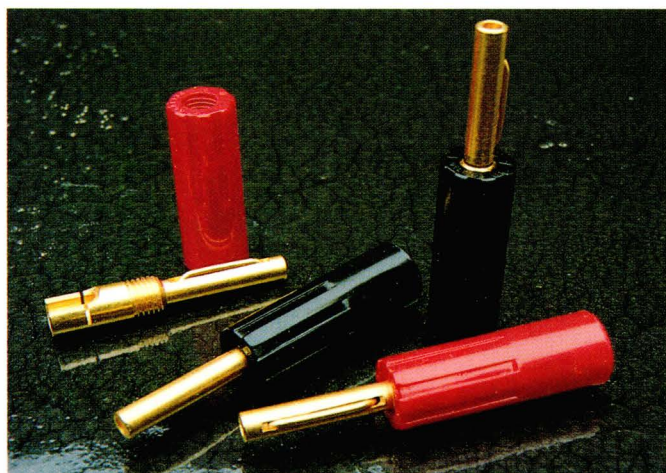
Top quality solderless gold plated banana plugs for use with speaker cables. Simply push the speaker cable into the body of the plug and tighten for a perfect connection. Sold in packs of four.

Order ref: ZCBG
Price: £8.95

CD Jewel Case (Five Pack)

Replace broken CD jewel cases and ensure your discs are properly protected.

Order ref: JE33A
Price: £5.00



Back Issues

Back issues are priced at £4.00 each (UK). £6.95 each (Overseas) inc postage and packing.

December 1993 - Issue 125

STACK SYSTEMS - 6 tested plus Buyer's Guide. 18 pages of products tested and rated.
Order Ref: AE25B

January 1994 - Issue 126

SPEAKERS - four floorstanding loudspeakers reviewed. Plus a FREE 16 page guide to buying blank audio cassettes.
Order Ref: AE26B

March 1994 - Issue 128

CD PLAYERS for under £190
Subwoofers - 8 on test
Your chance to have your Hi-Fi checked by an expert
Order ref: AE28B

Nagaoka Anti-Static Record Sleeves No 102

Packs of 50 plastic record sleeves that can be used on their own or inserted into an existing card or paper sleeve. The sleeves eliminate static and keep records dust free.

Order ref: JE15A
Price: £6.99

Priority Ordering

Use the Dennis Direct orderline - **0789 490 215** or just enter your details on the coupon and fax it to us on 0789 490 878 if you're ordering with a credit card or send with the correct payment to DENNIS DIRECT, PO BOX 2505, ALCESTER B50 4JU.

Prices shown include VAT and fulfilment in the UK. Please add postage as detailed at the bottom of this form. Be aware that all items on offer are subject to availability and a maximum of 28 days should be allowed for delivery.

OVERSEAS ORDERS

Please add £3.50 to your order total to cover the additional postage. Please note that we can only accept Visa/ MasterCard and Eurocheques in £s sterling and sterling cheques drawn on a London bank.

Important: To prevent any delay with processing your order, please enter the correct codes clearly! If necessary, please use a separate sheet.

Order Ref	Description	Quantity	Price
			£
			£
			£
			£
			£
			£
			£

	Order total:	£
For UK add £2.00 per order for postage	Order total:	£
For Europe add £10.00 per order for postage	Order total:	£
For Rest of World add £12.00 per order for postage	Order total:	£

I enclose a cheque made payable to Dennis Direct for £.....

Please charge my Visa MasterCard(Access) for £.....

Credit Card Number.....

Expiry Date..... Signature.....

Mr/Mrs/Ms Surname.....Initials.....

Address.....

.....Postcode.....

Daytime telephone number.....

Please send me a VAT receipt

The above information may be added to our mailing list. Please tick the box if you would prefer not to receive details of special offers. Dennis Direct is a division of Dennis Publishing Ltd.

PIONEER

BEST PRICES GUARANTEED

KENWOOD

LICENSED CREDIT BROKERS ASK FOR DETAILS

LICENSED CREDIT BROKERS ASK FOR DETAILS



ALL BILL HUTCHINSON HI-FI SHOPS ARE DEDICATED AUDIO VISUAL CENTRES

ALL BRANCHES ARE MAJOR LASER DISC STOCKISTS

Bill Hutchinson

Hi-Fi • CD • Audio Visual Centre

THE PROFESSIONALS

When you purchase from Bill Hutchinson you're buying the best names in Hi-Fi from the best name for Hi-Fi.

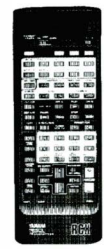
Our Product Guarantee and Pricing Policy ensure you obtain an excellent deal.

My staff and I look forward to being of service to you.

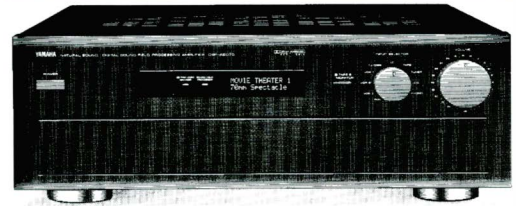
Bill

PRICE PLEDGE

Should you find any local dealer offering a better price for goods currently in stock at Bill Hutchinson and the alternative quoting retailer, we will better that deal.



HEAR YAMAHA'S EUROPEAN AWARD WINNING CINEMA DSP AMPLIFIER



- MARANTZ CD52 MKTISE - CD PLAYER - AWARD WINNER '93 ✓
- MARANTZ PM44SE - AMPLIFIER - AWARD WINNER '93 ✓
- MISSION 751 - SPEAKERS - AWARD WINNER '93 ✓
- SONY TCK-611S - CASSETTE DECK - AWARD WINNER '93 ✓
- SONY STS 311 - TUNER - AWARD WINNER '93 ✓
- AIWA NSX-360 - MINI SYSTEM - AWARD WINNER '93 ✓
- TECHNICS SC-CH950 - PRO-LOGIC SYSTEM - AWARD WINNER '93 ✓

THE LARGEST SELECTION OF QUALITY HI-FI AND AUDIO VISUAL SYSTEMS

LEEDS

26-28 WOODHOUSE LANE
0532-427777
OPEN MONDAY - SATURDAY
9.30AM - 6.00PM
THURSDAY LATE OPENING

MANCHESTER

50-52 DEANSGATE
061-832 1600
OPEN MONDAY - SATURDAY
9.30AM - 6.00PM
THURSDAY LATE OPENING

NEWCASTLE

87A CLAYTON STREET
091-230 3600
OPEN MONDAY - SATURDAY
9.30AM - 5.30PM
THURSDAY LATE OPENING

GLASGOW

43 HOPE STREET
041-248 2857
OPEN MONDAY - SATURDAY
9.30AM - 6.00PM
THURSDAY LATE OPENING

EDINBURGH

43 SOUTH CLERK STREET
031-667 2877
MON - SAT 9.30AM - 6.00PM
SUNDAY 11.00AM - 5.00PM
THURSDAY LATE OPENING

ROTEL

ALL WITH 2 YEAR GUARANTEE

AIWA

YAMAHA MARANTZ JVC SONY TECHNICS

YAMAHA MARANTZ JVC SONY TECHNICS

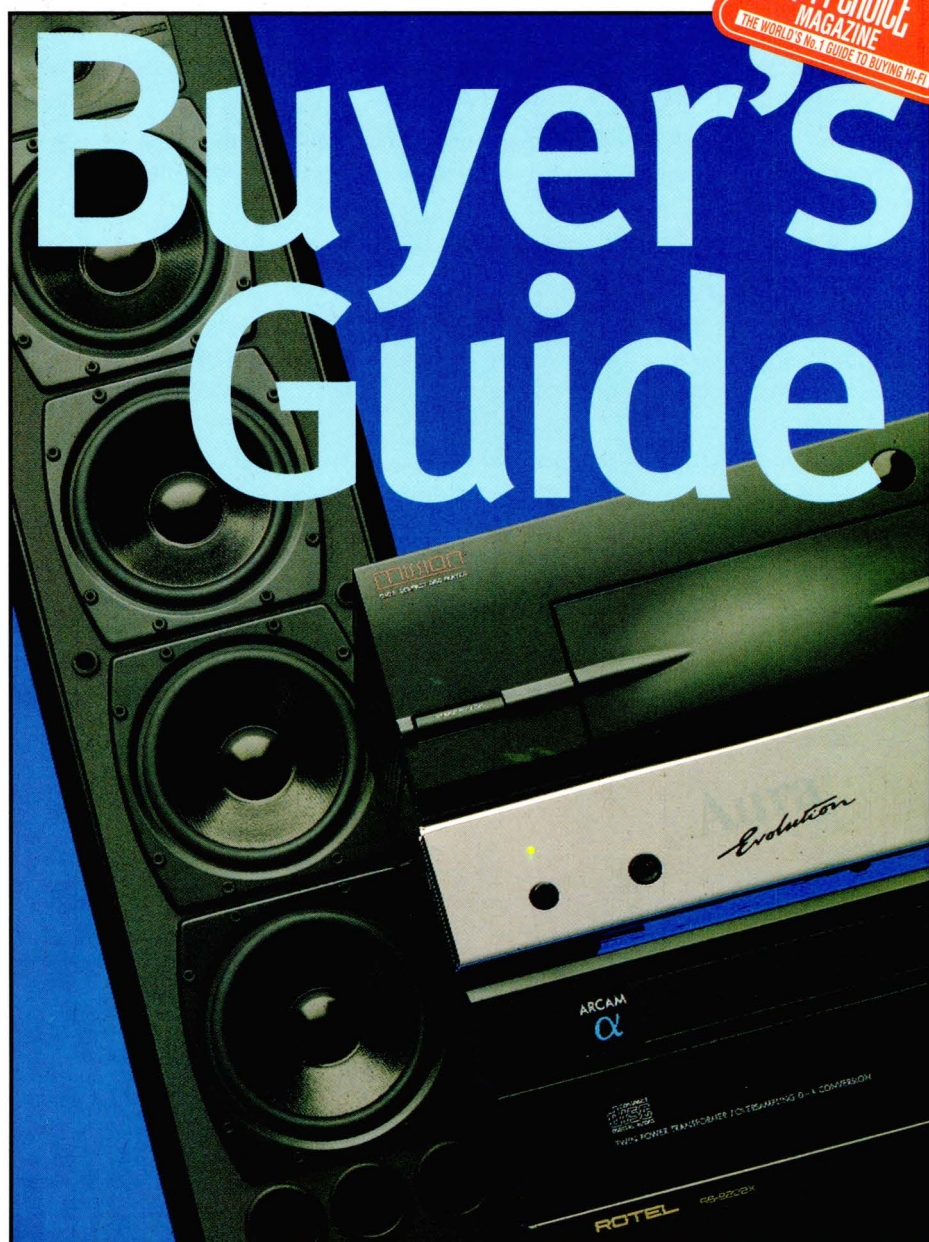
The most comprehensive hi-fi listing in the known universe

HI-FI CHOICE

THE FINEST HI-FI MAGAZINE IN THE WORLD



Welcome to the *Hi-Fi Choice Buyer's Guide*, the UK's biggest and best guide to choosing hi-fi. Over 2,500 items are listed, with up-to-date prices and specifications. Part two comprises the unique review-based *Directory*, containing our views on over 700 components that have been tested and rated by the *Hi-Fi Choice* experts.



Index

PRICE GUIDE	PAGE 89
YOUR AT-A-GLANCE REFERENCE TO HI-FI PRICES, TECHNICAL SPECIFICATIONS AND OPTIONS. OVER 2,500 ITEMS LISTED! IF IT'S HOT AND HI-FI, IT'S HERE.	
PRODUCT CATEGORIES	
AMPLIFIERS	PAGE 89
CASSETTE DECKS	PAGE 95
CD PLAYERS, TRANSPORTS AND DACs	PAGE 97
DIGITAL RECORDERS	PAGE 100
HEADPHONES	PAGE 100
LOUDSPEAKERS	PAGE 106
RECEIVERS	PAGE 110
SYSTEMS	PAGE 110
TUNERS	PAGE 115
TURNTABLES, ARMS AND CARTRIDGES	PAGE 117
THE DIRECTORY	PAGE 123
THE ORIGINAL, THE MOST AUTHORITATIVE, THE BEST. OUR UNIQUE REVIEW-BASED GUIDE TO OVER 700 PRODUCTS TESTED IN <i>HI-FI CHOICE</i> . BEWARE CHEAP IMITATIONS...	

The Forefront of Technology



PIONEER

REFERENCE
POINT



Impresso
S E R I E S

Model No: **Impresso 3**

- Power output of 35 Watts (DIN, 1kHz, 1%, 8 ohms) per channel.
- Stable Platter Mechanism
- CD-Deck Synchro
- Auto BLE
- Horizontal loading cassette deck
- Dolby B/C/HX-Pro noise reduction
- Music power speakers

Considerable time and effort has gone into the creation of the Bill Hutchinson Innovation Award Scheme, drawing from more than two decades of experience and expertise.

The Innovation Award is designed to assist you in identifying state of the art equipment that matches your expectations whilst being of a build quality that ensures many years of enjoyment.

A list of priorities have been drawn up in order to establish the framework of the Award Scheme. The main priorities are, sound, value, construction, design, style and originality.

The choice of dealer should be given the same care and attention as is given to your choice of equipment, so that you may receive the kind of quality service and advice that compliments equipment of the same standard. The type of service you ultimately receive will reflect on your overall enjoyment of the product. A long-term association with a professional dealer has real benefits and will serve as your personal contact for information and advice on the Manufacturers latest Innovations

If it is not possible to visit a Bill Hutchinson Hi-Fi AV Centre, simply contact the Manufacturer for details of your nearest authorised stockist.

PIONEER FREEPHONE 0800 480480

Bill Hutchinson

Hi-Fi • CD • Audio Visual Centre

- GLASGOW 43 Hope Street. Tel: **041-248 2857** • EDINBURGH 40A Queensferry Street. Tel: **031-220 0909**
- LEEDS 26-28 Woodhouse Lane. Tel: **0532 427777** • NEWCASTLE 87A Clayton Street. Tel: **091-230 3600**
- MANCHESTER 50/52 Deansgate. Tel: **061-832 1600**





Key to amplifiers
 Price - typical retail, to nearest pound.
 Power - output power in watts, per channel, RMS.
 Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape.
 A/V - includes Dolby Surround or Pro Logic decoder and amplification.

Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier.
Headphone - Y - yes, N - no.
Remote - Y - yes, N - no.
Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	AV	Power	Inputs	Headphones	Remote	Size	Special
AMPLIFIERS									
Aiwa XA-003	140	Int	N	40	MM,2L,1T	Y	N	-	2 speaker circuits
Aiwa XA-950	230	Int	N	100	MM/MC,2L,2T	Y	Y	-	2 speaker circuits
Albany AP3	300	Pre	N	-	3L,1T	N	N	-	-
Albany AP4	350	Pre	N	-	MM,4L,1T	N	N	-	-
Albany PPI	400	Int	N	45	-	N	N	-	-
Albany PPI	430	Int	N	45	MM,4L,2T	N	N	-	-
Albany PPI Audiophile	500	Int	N	45	MM,MC,4L,1T	N	N	-	-
Albany S508	500	Pwr	N	50	-	-	-	-	-
Albany M408	850	Pwr	N	50	-	-	-	-	2x monoblocks
Albany M100B	1100	Pwr	N	100	-	-	-	-	2x monoblocks
Albany AP2	1500	Pre	N	-	MM/MC,4L,1T	N	N	-	-
Alchemist Kraken/pre Anniv	POA	Pre	N	-	MM,3L,2T	N	N	25,9,25	Stainless steel/gold finish
Alchemist Kraken/Pwr Anniv	POA	Pwr	N	60	-	N	N	32,9,25	Stainless steel/gold finish
Alchemist Kraken/Pre	380	Pwr	N	60	-	-	-	32,9,25	Bridgible
Alchemist Kraken/Mono	380	Pwr	N	60	-	N	N	32,9,25	-
Alchemist Kraken	395	Pre	N	-	5L,1T	N	N	25,9,25	Bridging circuit built-in
Alchemist Kraken/Pwr	399	Int	N	60	3L,2T	N	N	32,9,25	MM £45 option
Alchemist Kraken Anniv	499	Int	N	60	MM,3L,2T	N	N	25,9,25	Stainless steel/gold finish
Alchemist Forseti	899	Int	N	100	4L,2T	N	N	47,10,39	-
Alchemist Freya	1020	Pre	N	-	6L,1T	N	N	31,7,30	-
Alchemist Odin	1020	Pwr	N	80	-	-	-	31,14,30	Stereo
Alchemist Genesis	1525	Pwr	N	110	-	-	-	25,14,30	Pair monoblocks
AMC AV81 Control	289	Pre	Y	-	8L,2T	N	Y	-	-
AMC 2445	299	Pwr	N	45	-	-	-	-	4 channels
AMC 1030	379	Pre	N	-	MM	N	N	-	-
AMC 2030	449	Pwr	N	30	-	-	-	-	-
AMC SB4	479	Pre	Y	-	8L	N	Y	-	Multiroom, bal/unbal inputs
AMC AV81 H.T. Control	499	Pre	Y	-	8L,2T	N	N	-	As AV81 plus Dolby Pro Logic
AMC CVT3030	529	Int	N	30	6L,1T	Y	N	-	Tube amp
Analogue Saturn	75	Pre	N	-	MM	N	N	-	-
Analogue Saturn MC	75	Pre	N	-	MC	N	N	-	-
Analogue Jupiter	330	Int	N	30	MM,4L,1T	N	N	-	-
Arcam Alpha 5	230	Int	N	40	MM,3L,2T	Y	N	43,8,30	By-passable tone controls
Arcam Alpha 6	330	Int	N	50	MM,3L,2T	Y	Y	43,8,30	Remote volume facility
Arcam Delta 290	450	Int	N	75	4L,2T	Y	Y	43,9,32	Opt MM/MC phono module
Arcam Delta 110S	520	Pre	N	-	MM/MC,3L,2T	Y	Y	43,7,30	As Delta 110, w/o DAC
Arcam Delta 120.2	550	Pwr	N	100	-	Y	Y	43,9,30	Bridgible
Arcam Delta 110	750	Pre	N	-	MM/MC,2L,2T	Y	Y	43,7,30	On-board DAC, 2 inputs
Art Audio VPL	699	Pre	N	-	6L,2T	N	N	-	-
Art Audio VPA	750	Pre	N	-	M/MC,3L,1T	N	N	-	-
Art Audio VP1	880	Pre	N	-	MM,3L,1T	N	N	-	-
Art Audio Quintet	1156	Pwr	N	15	-	-	-	-	Class A triode
Art Audio Integra	1395	Int	N	30	5L,2T	N	N	-	-
Art Audio Concerto	1628	Pwr	N	30	-	-	-	-	2x mono Class A triode
Art Audio Tempo	1980	Pwr	N	30	-	-	-	-	2x mono Class A triode
Art Audio Maestro	2960	Pwr	N	10	-	-	-	-	2x mono Class A triode
Audio Innovation L1	299	Pre	N	-	3L,1T	N	N	25,10,30	-
Audio Innovation Alto	299	Int	N	35	4L,2T	N	N	43,8,30	-
Audio 1 Ser 200 Pre	349	Pre	N	-	MM,3L,1T	N	N	50,12,30	-
Audio 1 Ser 200 Pwr	499	Pwr	N	12	-	N	N	50,12,30	-
Audio Innovation Ser 300	499	Int	N	10	MM,3L,1T	N	N	50,12,30	-
Audio 1 Classic 25	699	Int	N	25	4L,1T	N	N	46,15,34	Kit amplifier
Audio Innovation L2	699	Pre	N	-	4L,1T	N	N	50,12,30	-
Audio Innovation P2	699	Pre	N	-	MM	N	N	50,12,30	Phono stage
Audio Innovation Ser 800	849	Pwr	N	25	-	N	N	41,15,34	-
Audio Innovation P2MC	899	Pre	N	-	MM/MC	N	N	50,12,30	Phono stage
Audio Innovation Ser 500	999	Int	N	25	MM,3L,2T	N	N	41,15,34	-
Audio Innovation Ser 700	999	Int	N	25	4L,1T	N	N	41,15,34	-
Audio Innovation 1000	1499	Pwr	N	50	-	N	N	41,15,34	Monoblocks
Audio 1 First Audio	1549	Pwr	N	7.5	-	N	N	41,15,34	-
Audio Innovation 1000SE	2249	Pwr	N	50	-	N	N	41,15,34	Silver circuit board
Audio 1 2nd Audio	2999	Pwr	N	15	-	N	N	41,15,34	Monoblocks
Audio Note Ongaku	22411	Int	N	26	6L	N	N	-	Single-ended Class A tube
Audio Note Oto	1250	Int	N	24	MM/MC,4L,1T	N	N	-	-
Audio Research LS-3	1599	Pre	N	-	5L,1T	N	N	48,14,26	1 direct input
Audio Research PH-1	1649	Pre	N	-	MM/MC	N	N	48,14,26	Phono preamp
Audio Research LS-3b	2250	Pre	N	-	5L,1T	N	N	48,14,26	1 direct input
Audio Research LS-2	2796	Pre	N	-	5L,1T	N	N	48,14,26	1 direct input/hybrid
Audio Research D-200	2800	Pwr	N	110	-	-	-	48,14,31	Single ended, balanced
Audio Research SP9 II	2850	Pre	N	-	MM/MC,4L,2T	N	N	48,14,26	Hybrid
Audio Research PH-2	2895	Pre	N	-	MM/MC	N	N	48,14,26	Balanced
Audio Research LS-2b	3355	Pre	N	-	5L,1T	N	N	48,14,26	1 balanced direct input/hybrid
Audio Research V35	3355	Pwr	N	30	-	-	-	48,18,37	Balanced in, hybrid
Audio Research V70	4480	Pwr	N	60	-	-	-	48,18,40	Balanced in, hybrid
Audio Research D-300	4800	Pwr	N	160	-	-	-	48,18,33	Single ended, balanced
Audio Research LS-5	5290	Pre	N	-	5L,1T	N	N	48,14,30	Full balanced in/out
Audio Research D-400II	6200	Pwr	N	200	-	-	-	48,23,33	Single ended, balanced
Audio Research V140	8960	Pwr	N	120	-	-	-	48,22,30	Monoblocks, hybrid
Audio Research VT150	14900	Pwr	N	130	-	-	-	37,31,56	Monoblocks, tube
Audiolab 8000C	460	Pre	N	-	MM/MC,1T,3T	Y	N	45,8,36	2 pairs of outputs
Audiolab 8000A	480	Int	N	60	MM,MC,1T,3T	Y	N	45,8,36	Preout/main in
Audiolab 8000P	650	Pwr	N	100	-	-	-	45,8,36	-
Audiolab 8000M	700	Pwr	N	125	-	-	-	45,8,36	Single monoblock
Audiolab 8000PPA	800	Pre	N	-	MM/MC	-	-	45,8,36	Phono preamplifier
Audiolink Sterling II	350	Int	N	60	MM/MC	N	N	43,7,270	Available in chrome

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see p123

Audiolab 8000A	450	Int	N	60	MM,MC,1T,3T	Y	N	45,8,36	Preout/main in
----------------	-----	-----	---	----	-------------	---	---	---------	----------------



Key to amplifiers
 Price - typical retail, to nearest pound.
 Power - output power in watts, per channel, RMS.
 Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape.
 A/V - includes Dolby Surround or Pro Logic decoder and amplification.

Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier.
Headphone - Y - yes, N - no.
Remote - Y - yes, N - no.
Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	AV	Power	Inputs	Headphones	Remote	Size	Special
AMPLIFIERS									
Audiolink P400	467	Pre	N	-	4L	N	N	43,7,270	Available in chrome
Audiolink PR401	583	Pwr	N	100	-	N	N	43,10,37	Available in chrome
Aura VA80	280	Int	N	45	5L,1T	Y	N	43,6,31	Chrome finish, £50 extra
Aura VA100	380	Int	N	70	MM,4L,1T	Y	N	43,6,31	Chrome finish add £50
AVI S2000MA	549	Pwr	N	90	-	-	-	-	-
AVI S2000MP	699	Pre	N	-	7L,1T	N	-	-	-
AVI S2000MM	999	Pwr	N	150	-	-	-	-	2x monoblocks
Beard VM-P	795	Pre	N	-	MM/MC,3L,1T	N	N	-	Hybrid tube/MOSFET
Beard CA-35	995	Pre	N	-	MM/MC,3L,1T	N	N	-	Tube Class A
Beard VM-50	995	Int	N	50	MM/MC,3L,1T	N	N	-	Hybrid tube/MOSFET
Beard P-35	1395	Pwr	N	35	-	N	N	-	Tube, Class A
Beard CA-506	1695	Pre	N	-	MM/MC,3L,2T	N	N	-	Tube, Class A
Beard A-70	2895	Pwr	N	70	-	N	N	-	Monoblock, tube, Class A
Beard M-1000	5900	Pwr	N	100	-	-	-	-	Pair monoblocks
Bryston .4	641	Pre	Y	-	4L,1T	N	N	48,5,25	-
Bryston BP1	673	Pre	Y	-	MM or MC	N	N	48,5,25	Phono stepup, bal & unbal
Bryston 2B-LP	750	Pwr	Y	75	-	N	N	48,5,25	Bridgible
Bryston BP4	802	Pre	Y	-	4L,1T	N	N	48,5,25	Balanced out
Bryston BP5	889	Pre	Y	-	MM/MC,3L,1T	N	N	48,5,25	MM or MC, balanced out
Bryston BP20	1126	Pre	Y	-	8L,1T	N	N	48,5,25	Balanced in/out
Bryston 3B-NRB	1159	Pwr	Y	150	-	N	N	48,13,23	Bridgable, bal & unbalanced
Bryston THX3B	1262	Pwr	Y	150	-	N	N	48,13,23	2 channels, THX approved
Bryston 4B-NRB	1756	Pwr	Y	300	-	N	N	48,13,39	Bridgable, bal & unbalanced
Bryston 7B-NRB	1815	Pwr	Y	500	-	N	N	48,13,39	Single monoblock
Bryston THX4B	1858	Pwr	Y	300	-	N	N	48,13,39	2 channels, THX approved
Bryston THX7B	1917	Pwr	Y	500	-	N	N	48,13,39	1 channel, THX approved
Bryston 8B-NRB	2195	Pwr	Y	150	-	N	N	48,13,39	4 channels, bridgable
Bryston THX8B	2400	Pwr	Y	150	-	N	N	48,13,39	4 channels, THX approved
CAT SL1 Sig line	5000	Pre	N	-	3L,1T	-	N	31,48,14	2 outputs, valve
CAT SL1 Sig phono	5500	Pre	N	-	MM,2L	-	N	31,48,14	2 outputs, valve
CAT J1	13500	Pwr	N	200	-	-	-	-	-
Chord SPM800	1749	Pwr	N	160	-	-	-	-	-
Chord SPM1000	2150	Pwr	N	200	-	-	-	-	-
Chord SPM1200	2995	Pwr	N	250	-	-	-	-	-
Chord SPM3000	5327	Pwr	N	250	-	-	-	-	4 amps for biamping
Classe Audio 3D	1320	Pre	N	-	MM/MC,4L,1T	N	N	48,7,28	-
Classe Audio 70	1399	Pwr	N	75	-	-	-	48,12,30	Single ended, balanced
Classe Audio 4L	1697	Pre	N	-	5L,1T	N	N	48,9,34	Remote option
Classe Audio 4	1735	Pre	N	-	MM/MC,4L,1T	N	N	48,9,34	Remote option
Classe Audio 10	2299	Pwr							

The Forefront of Technology



Model No: **DSPA-2070**

- The DSP-A2070 lets you select from among 11 Cinema DSP and 12 HiFi DSP programs.
- Cinema DSP multiplies the effects of Dolby Pro Logic Surround and Digital Sound Field processing to create sound fields such as the Concert Hall, Church or Movie Theatre.
- Cinema DSP gives you the same dynamic, all enveloping experience that the sound director intended you to have.

Considerable time and effort has gone into the creation of the Bill Hutchinson Innovation Award Scheme, drawing from more than two decades of experience and expertise.

The Innovation Award is designed to assist you in identifying state of the art equipment that matches your expectations whilst being of a build quality that ensures many years of enjoyment.

A list of priorities have been drawn up in order to establish the framework of the Award Scheme. The main priorities are, sound, value, construction, design, style and originality.

The choice of dealer should be given the same care and attention as is given to your choice of equipment, so that you may receive the kind of quality service and advice that compliments equipment of the same standard. The type of service you ultimately receive will reflect on your overall enjoyment of the product. A long-term association with a professional dealer has real benefits and will serve as your personal contact for information and advice on the Manufacturers latest Innovations

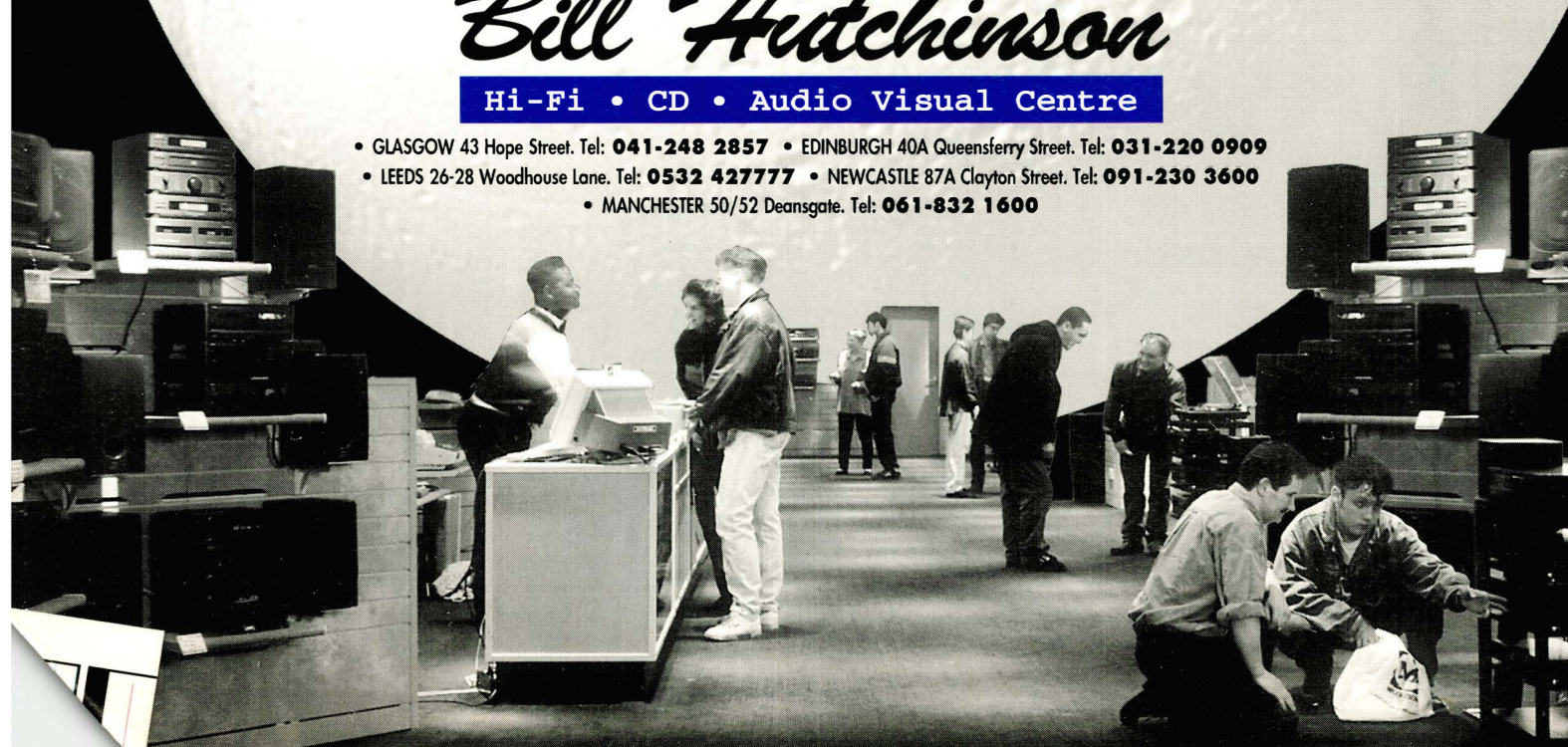
If it is not possible to visit a Bill Hutchinson Hi-Fi AV Centre, simply contact the Manufacturer for details of your nearest authorised stockist.

YAMAHA 0923 233166

Bill Hutchinson

Hi-Fi • CD • Audio Visual Centre

- GLASGOW 43 Hope Street. Tel: **041-248 2857** • EDINBURGH 40A Queensferry Street. Tel: **031-220 0909**
- LEEDS 26-28 Woodhouse Lane. Tel: **0532 427777** • NEWCASTLE 87A Clayton Street. Tel: **091-230 3600**
- MANCHESTER 50/52 Deansgate. Tel: **061-832 1600**



Key to amplifiers
Price - typical retail, to nearest pound.
Power - output power in watts, per channel, RMS.
Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape.
A/V - includes Dolby Surround or Pro Logic decoder and amplification.

Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier.
Headphone - Y - yes, N - no.
Remote - Y - yes, N - no.
Size - width x height x depth in cm.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.



Key to amplifiers
Price - typical retail, to nearest pound.
Power - output power in watts, per channel, RMS.
Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape.
A/V - includes Dolby Surround or Pro Logic decoder and amplification.

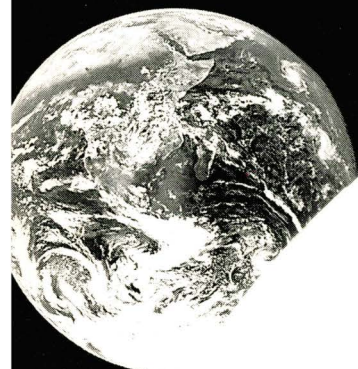
Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier.
Headphone - Y - yes, N - no.
Remote - Y - yes, N - no.
Size - width x height x depth in cm.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	AV	Power	Inputs	Headphones	Remote	Size	Special
AMPLIFIERS									
Credo MMP002	439	Pre	N	-	-	N	N	-	Mic amp, phantom power
Credo IMP702	499	Int	N	70	6L	-	-	44,6,31	-
Credo IMP703	538	Int	N	70	MM/MC, 6L	-	Y	44,6,31	As above, with remote
Credo CMP004	799	Pre	N	-	6L	N	N	44,6,31	3 outputs
Credo CMP005	1119	Pre	N	-	6L	N	Y	-	Remote controlled pre
Credo PMP154	1699	Pwr	N	150	-	-	-	44,16,31	-
Credo PMP303	1699	Pwr	N	30	-	-	-	-	Class A power amp
Credo PMP102	2181	Pwr	N	100	-	-	-	44,21,31	Class A power amp
Credo PMP252	2509	Pwr	N	250	-	-	-	44,21,31	-
Creek P42	250	Pre	-	-	4L,2T	Y	-	42,6,20	Plug-in modules available
Creek R42	250	Pre	-	50	-	-	-	42,6,20	-
Creek 4240	250	Int	N	40	3L,1T	Y	N	42,6,20	Optional phono input
Crimson 620	395	Pwr	N	40	-	-	-	-	-
Crimson 610	395	Pre	N	-	MM/MC,2L,1T	N	N	-	Star earth
Crimson CS610	395	Pre	N	-	MM/MC,2L,1T	N	N	9,10,35	-
Crimson CS610B	395	Pre	N	-	MM/MC,3L,1T	N	-	-	-
Crimson CS620	395	Pwr	N	40	-	-	-	9,10,35	-
Croft Micro	299	Pre	N	-	MM,3T,1T	N	N	-	-
Croft Micro	400	Pre	N	-	MM,3L,1T	N	N	43,10,36	Tube
Croft Series 5	549	Pwr	N	35	-	-	-	-	Ultralinear design
Croft Charisma	599	Pre	N	-	MM,3T,1T	N	N	-	-
Croft Integrated	599	Int	N	35	MM,3L,1T	N	N	-	-
Croft Charisma	700	Pre	N	-	MM,3L,1T	N	N	43,10,36	Tube
Croft Series X	800	Pwr	N	25	-	-	-	43,10,36	OTL amp, triode
Croft Enigma	999	Pre	N	-	MM,3T,1T	N	N	-	-
Croft Enigma	1100	Pre	N	-	MM,3L,1T	N	N	43,10,36	Tube
Croft Series 6	1300	Pwr	N	120	-	-	-	43,10,36	Triode facility
Croft Series III R	1599	Pwr	N	35	-	-	-	-	OTL, regulated PSU
Croft Series III R	1600	Pwr	N	45	-	-	-	50,20,25	OTL amp, triode
Croft Absolut 1	1999	Pre	N	-	MM,3T,1T	N	N	-	-
Croft Series IIR	5500	Pwr	N	100	-	-	-	-	Monoblock OTL
Dawn Audio Cmid 2 by 20	890	Pwr	-	200	-	-	-	38,11,26	Single monoblock
Dawn Audio Prelude +50	951	Pre	N	-	MM/MC,2L,2T	N	N	38,9,26	Pre out line driver
Denon PMA-250 III	160	Int	N	30	MM,3L,1T	Y	N	44,10,28	UK design
Denon PMA-350 II	220	Int	N	50	MM,3L,2T	Y	N	44,12,28	UK design
Denon PMA-480R	220	Int	N	50	MM,3L,2T	Y	Y	44,12,29	-
Denon PMA-450	250	Int	N	60	MM,3L,2T	Y	N	44,14,36	UK design
Denon PMA-880R	300	Int	N	75	MM,3L,2T	Y	Y	44,16,40	-
Denon AVC-1530	480	Int	Y	70	MM,2L,2T	Y	Y	44,14,34	-
Denon AVC-3020	730	Int	Y	80	MM,4L,4T	Y	Y	44,16,43	Learning remote
Denon AVC-3530	1000	Int	Y	110	MM,4L,4T	Y	Y	44,16,43	Learning remote
DNM 3 Start	850	Pre	N	-	MM/MC,2L,1T	N	N	27,13,16	-
DNM 3A Start	1200	Pre	N	-	MM/MC,2L,1T	N	N	27,13,16	-
DNM PA1	1450	Pwr	N	45	-	-	-	27,13,18	Triwire output
DNM 3B Primus E	2050	Pre	N	-	MM/MC,4L,1T	N	N	27,13,16	-
DNM 3B Twin E	3050	Pre	N	-	MM/MC,4L,1T	N	N	27,13,16	-
DNM PA2BE	3550	Pwr	N	90	-	-	-	27,13,18	Triwire output
DNM 3B Six E	4050	Pre	N	-	MM/MC,4L,1T	N	N	27,13,16	-
DNM PA2BS	4450	Pwr	N	90	-	-	-	27,13,18	Triwire output
DNM PA2BS-1	4800	Pwr	N	90	-	-	-	27,13,18	Triwire output
DPA DSP200S	495	Pre	N	-	5L,1T	N	N	-	-
DPA DPA200S	750	Pwr	-	60	-	-	-	-	Bridgable
EAR EAR802	1440	Pre	N	-	MM,2L,2T	N	N	-	Tube
EAR EAR802MC	1580	Pre	N	-	MC,2L,2T	N	N	-	Tube
EAR G88	5770	Pre	N	-	MM/MC,3L,2T	N	N	-	-
ECA Vista	760	Pre	N	-	4L,1T	N	N	39,10,39	Phase coherent design
ECA Lectern	760	Pwr	-	50	-	-	-	39,10,30	Phase coherent design
ECA Prisma	760	Pre	-	-	MM, MC	-	-	39,10,23	Phono stepup
E'paniet ECP-1	502	-	N	-	MM/MC	-	-	24,7,16	Adjustable MC input
E'paniet EC-4 Line	1332	Pre	N	-	5L,2T	-	-	48,9,23	-
E'paniet EC-3MM	1556	Pre	N	-	MM,4L,2T	-	-	48,9,23	-
E'paniet EC-3 MC	1865	Pre	N	-	MC,4L,2T	-	-	48,9,23	-
E'paniet AW100DMB	2018	Pwr	N	100	-	-	-	48,13,36	High current (80A)
E'paniet EC1-1	2081	Int	N	100	5L,2T	-	-	45,13,36	High current (80A)
E'paniet AW250DMB	4370	Pwr	N	250	-	-	-	48,22,45	High current (100A)
EMF Audio Sequel	349	Int	N	50	MM,4L,1T	Y	N	-	-
Exposure XX	625	Int	N	40	4L,2T	N	N	43,85,35	-
Exposure XIX	725	Pre	N	-	5L	N	N	43,85,35	-
Exposure XV	725	Int	N	40	MM,MC,3L,2T	N	N	43,85,35	-
Exposure XIV	750	Pre	N	-	MM,MC,3L,2T	N	N	48,8,30	Digital in
Exposure XVIII	750	Pwr	N	60	-	-	-	43,85,35	-
Exposure XVII	775	Pre	N	-	MM,MC,3L,2T	N	N	43,85,35	-
Exposure XVIII (pr)	1500	Pwr	N	60	-	-	-	43,85,35	2x mono monoblock
Exposure IV	1800	Pwr	N	80	-	-	-	48,13,35	-
Forté Audio Model 40	1250	Pre	N	-	MM/MC/2L,2T	N	N	-	-
Forté Audio Model 5	1295	Pwr	-	100	-	-	-	-	-
Forté Audio Model 7	1295	Pwr	-	75	-	-	-	-	-
Forté Audio Model 4	1795	Pwr	-	60	-	-	-	-	Class A monoblock
Forté Audio Model 6	1795	Pwr	-	150	-	-	-	-	Class A
Fullers Pre 1	599	Pre	N	-	MM/5L,1T	N	N	48,9,30	Optional MC stage
Fullers Pre 1+	649	Pre	N	-	6L,2T	N	N	48,9,30	No phono option - hard wired
Fullers A10	1200	Pwr	-	10	-	-	-	48,13,30	Single ended Class A
Fullers Audio A1	1200	Pwr	-	12	-	-	-	-	Single ended Class A
Grant CD10	482	Pre	N	-	4L	N	N	-	-
Grant G10OP	764	Pre	N	-	MM,2L,1T	N	N	-	-

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see p123
 Audiolab 8000A 450 Int N 60 MM,MC,1T,3T Y N 45,8,36 Preout/main in

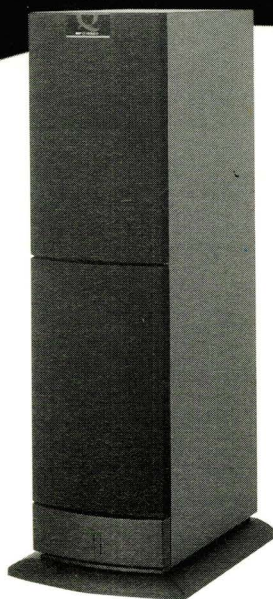
Model	Price	Type	AV	Power	Inputs	Headphones	Remote	Size	Special
AMPLIFIERS									
Grant G50A	1128	Pwr	-	60	-	-	-	-	Monoblocks
Grant G100AMS	1528	Pwr	-	100	-	-	-	-	-
Grant G350A	3455	Pwr	-	350	-	-	-	-	-
Grant G200AMS	3760	Pwr	-	200	-	-	-	-	Monoblocks
Grundig V21	130	Int	N	50	MM,5L,1T	Y	Y	36,12,35	Pre-main split
Grundig V10	150	Int	N	50	MM,5L,1T	Y	Y	43,14,30	Tone defeat
Grundig V310	170	Int	N	70	MM,5L,1T	Y	Y	36,12,30	Pre-main split
Grundig V2	200	Int	N	80	MM,5L,1T	Y	Y	43,14,30	Tone defeat
Grundig V3	250	Int	N	120	MM,5L,1T	Y	Y	43,14,30	Pre-main split
GT Audio Pre	1500	Pre	N	-	MM,3L,1T	N	N	-	Regulated HT/LT PSU
GT Audio Pwr	2000	Pwr	N	30	-	-	-	-	Triode switchable (15w)
Harman-Kardon HK6250	279	Int	N	33	MM,3L,2T	N	N	45,11,37	-
Harman-Kardon PA2100	349	Pwr	-	45	-	-	-	45,11,37	-
Harman-Kardon HK1400	399	Int	N	40	MM/MC,3L,2T	N	N	45,11,37	-
Harman-Kardon HK6350	399	Int	N	25	MM,6L,2T	Y	Y	45,11,37	-
Harman-Kardon HK6550	429	Int	N	60	MM/MC,3L,2T	Y	N	45,14,37	-
Harman-Kardon AP2500	499	Pre	N	-	MM/MC,6L,2T	N	N	45,11,35	-
Harman-Kardon PA2200	579	Pwr	-	70	-	-	-	45,14,38	-
Harman-Kardon HK6650	749	Int	Y	70	MM/MC,4L,2T	Y	Y	45,14,37	Video circuitry
Harman-Kardon HK6850	899	Int	Y	85	MM/MC,4L,2T	Y	N	45,16,40	Video circuitry
Harman-Kardon PA2400	899	Pwr	-	120	-	-	-	45,16,41	-
Harman-Kardon HK6950	1299	Int	Y	120	MM/MC5L,2T	Y	Y	45,16,40	Video circuitry
Heybrook Integra	550	Int	N	70	4L,1T	Y	N	-	-
Inca Tech Oberon Pre	350	Pre	N	-	MM/MC,6L,2T	N	N	43,8,22	CD direct & Two outputs
Inca Tech Oberon Pwr	400	Pwr	-	70	-	-	-	43,8,22	Two inputs
Inca Tech Oberon	450	Int	N	-	MM/MC,6L,2T	Y	N	43,8,22	Preout, biwire
Jadis DEFY-P60	3774	Pre	N	-	MM/MC,4L,1T	-	-	43,17,30	Tube
Jadis JPL	4720	Pre	N	-	5L,1T	-	-	43,17,30	Tube
Jadis JPP-200	4778	Pre	N	-	4L,1T	-	-	-	-
Jadis DEFY-7	5290	Pwr	-	100	-	-	-	49,23,63	Tube
Jadis JA30	5760	Pwr	-	30	-	-	-	21,21,46	Tube, 1x monoblock
Jadis JP-30MC	6444	Pre	N	-	MM/MC,4L,1T	-	-	-	-
Jadis JP-S2	7900	Pre	N	-	6,1T	-	-	-	-
Jadis JA80	9912	Pwr	-	60	-	-	-	23,26,58	Tube, 1x monoblock
Jadis JP-80MC	11250	Pre	N	-	MM/MC,4L,1T	-	-	-	-
Jadis JA-200	15518	Pwr	-	160	-	-	-	26,23,58	Tube, monoblock (four boxes)
Jadis JP-200MC	19000	Pre	N	-	MM/MC,5L,1T	-	-	-	-
Jadis JA-500	21900	Pwr	-	400	-	-	-	28,36,79	Tube, monoblock (four boxes)
JVC AX-A472BK	250	Int	N	65	MM,3L,2T	Y	N	44,15,36	-
JVC AX-R562BK	250	Int	N	80	MM,3L,2T	Y	Y	44,15,31	-
JVC AX-A662BK	330	Int	N	90					

The Forefront of Technology



The experience
of sound

- Frequency response: 50Hz-20kHz+3dB
- Sensitivity: 85dB, 25.3v at 1M
- Amplifier requirements: 10-125W
- Impedance: 6 ohms



Model No: **Q30**

- Net Weight: 9.3kg/20.5lbs
- Dimensions: (HxWxD) 700 x 190 x 301mm,
27.5 x 7.5 x 11.85in

Considerable time and effort has gone into the creation of the Bill Hutchinson Innovation Award Scheme, drawing from more than two decades of experience and expertise.

The Innovation Award is designed to assist you in identifying state of the art equipment that matches your expectations whilst being of a build quality that ensures many years of enjoyment.

A list of priorities have been drawn up in order to establish the framework of the Award Scheme. The main priorities are, sound, value, construction, design, style and originality.

The choice of dealer should be given the same care and attention as is given to your choice of equipment, so that you may receive the kind of quality service and advice that compliments equipment of the same standard. The type of service you ultimately receive will reflect on your overall enjoyment of the product. A long-term association with a professional dealer has real benefits and will serve as your personal contact for information and advice on the Manufacturers latest Innovations

If it is not possible to visit a Bill Hutchinson Hi-Fi AV Centre, simply contact the Manufacturer for details of your nearest authorised stockist.

KEF 0622 672261

Bill Hutchinson

Hi-Fi • CD • Audio Visual Centre

- GLASGOW 43 Hope Street. Tel: **041-248 2857** • EDINBURGH 40A Queensferry Street. Tel: **031-220 0909**
- LEEDS 26-28 Woodhouse Lane. Tel: **0532 427777** • NEWCASTLE 87A Clayton Street. Tel: **091-230 3600**
- MANCHESTER 50/52 Deansgate. Tel: **061-832 1600**





Key to amplifiers
Price - typical retail, to nearest pound
Power - output power in watts, per channel, RMS.
Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape.
A/V - includes Dolby Surround or Pro Logic decoder and amplification.

Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier.
Headphone - Y - yes, N - no.
Remote - Y - yes, N - no.
Size - width x height x depth in cm.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.



Key to amplifiers
Price - typical retail, to nearest pound
Power - output power in watts, per channel, RMS.
Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape.
A/V - includes Dolby Surround or Pro Logic decoder and amplification.

Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier.
Headphone - Y - yes, N - no.
Remote - Y - yes, N - no.
Size - width x height x depth in cm.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	A/V	Power	Inputs	Headphones	Remote	Size	Special
AMPLIFIERS									
LFD Linestage LSB	1750	Pre	N	-	4L,1T	N	N	48,7,37	Balanced LS2
LFD Powerstage PA2M	1750	Pwr	N	100	-	N	N	30,7,37	Mono PA2
LFD Disc Preamp	3999	Pre	N	-	MC	N	N	30,5,36	Battery powered
Linn Majik-1 (Line)	524	Int	N	33	4L,2T	Y	N	32,8,33	Works as pre/freq amp, tuner
Linn LK100	549	Pwr	-	50	-	-	-	32,8,33	Stereo
Linn Majik-1 (Phono)	593	Int	N	33	MM,MC,3L,2T	Y	N	32,8,33	As line Majik
Linn Kairn Pro	998	Pre	N	-	4L, 2T	N	N	32,8,33	Multi-room compatible
Linn Kairn	1398	Pre	N	-	MM, MC 3L,2T	N	N	32,8,32	Multi-room compatible
Linn Klout	1895	Pwr	-	80	-	-	-	32,8,33	Stereo, tri-wire connectors
Lumley Reference PP70	325	Pre	N	-	6L,1T	-	N	36,46,6	Passive, for ST40 or ST70
Lumley Reference PP40	325	Pre	N	-	6L,1T	-	N	29,40,6	Bolts onto ST40 or ST70
Lumley Reference PP1	325	Pre	N	-	6L,1T	-	N	29,44,6	Passive
Lumley Reference LV1	1000	Pre	N	-	6L,1T	N	N	29,44,6	Active valve circuit
Lumley Reference ST40	1250	Pwr	N	40	30,40,17	N	N	-	Pentode optimised for 6 ohms
Lumley Reference PV1	1500	Pre	N	-	MM,5L,1T	N	N	-	Phono version of LV1
Lumley Reference ST70	1950	Pwr	N	70	-	N	N	36,46,18	Switchable triode/pentode
Lumley Reference M120	3200	Pwr	N	120	-	N	N	29,44,18	monoblocks, triode/pentode
Lumley Reference M500	12000	Pwr	N	-	-	N	N	35,80,30	monoblocks, triode/pentode
Luxman L570	3750	Int	N	50	MM/MC,4L,3T	N	N	44,18,47	Class A
Lynwood Opal	685	Int	N	80	7L,1T	N	N	-	-
Lynwood Ruby	985	Pwr	-	120	-	-	-	-	-
Magnum IA120	249	Int	N	50	MM,5L,2T	Y	N	-	-
Magnum Quartet	329	Int	N	36	MM,3L,2T	Y	N	-	-
Magnum MF125	515	Pwr	-	140	-	-	-	-	Monoblocks
Magnum MF300	595	Pwr	-	180	-	-	-	-	Monoblocks
Magnum Class A	599	Int	N	60	MM/MC,3L,1T	N	N	-	-
Magnum MA500	1295	Pwr	-	280	-	-	-	-	Monoblocks
Marantz PM-32	140	Int	N	40	MM,3L,1T	Y	N	42,14,28	-
Marantz PM-44SE	180	Int	N	45	MM,3L,2T	Y	N	42,14,28	Audiophile components
Marantz PM44SEII	200	Int	N	45	MM,3L,2T	Y	N	42,14,28	-
Marantz PM-43	200	Int	N	55	MM,3L,2T	Y	N	42,14,30	-
Marantz MA-500	250	Pwr	N	125	-	-	-	9,15,45	D-bus, monoblocks, bridgible
Marantz PM-53	250	Int	N	65	MM,3L,2T	Y	Y	42,14,30	-
Marantz PM-52SE	300	Int	N	70	MM/MC,3L,2T	Y	N	42,16,34	Audiophile components
Marantz PM-54SE	300	Int	N	65	MM/MC,3L,2T	Y	N	42,16,34	Audiophile components
Marantz PM-63	300	Int	N	70	MM,3L,2T	Y	Y	42,14,30	-
Marantz PM-700AV	450	Int	Y	45	MM,5L,2T	Y	Y	42,16,34	Dolby Pro Logic
Marantz PM-80 II	480	Int	N	100	MM/MC,4L,2T	Y	N	42,17,34	-
Marantz AV-500	550	Pre	Y	-	MM,7L,2T	N	Y	42,10,34	Dolby Pro Logic
Marantz PM-80SE	650	Int	N	110	MM/MC,3L,3T	Y	N	42,17,34	Audiophile components
Mark Levinson No 25	2950	Pre	N	-	MM,3L,2T	N	N	-	-
Mark Levinson 29	3450	Pwr	-	50	-	-	-	-	-
Mark Levinson 27.5	5399	Pwr	-	100	-	-	-	-	-
Mark Levinson No 26	5450	Pre	N	-	MM,3L,2T	N	N	-	-
Mark Levinson 23.5	7399	Pwr	-	200	-	-	-	-	-
Mark Levinson 20.6	15790	Pwr	-	100	-	-	-	-	Monoblocks, Class A
Matisse Fantasy	2300	Pre	Y	-	6L,2T	N	N	-	Line stage
Matisse Reference	3500	Pre	Y	-	MM/MC,5L,2T	N	N	-	-
McIntosh MC7100	959	Pwr	N	100	-	-	-	-	-
McIntosh C712	1249	Pre	N	-	6L, 2T	Y	Y	-	-
McIntosh C38	1995	Pre	N	-	MM, 5L,3T	Y	Y	-	Multi-room, balanced out
McIntosh MC7150	2159	Pwr	N	150	-	-	-	-	-
McIntosh C40	2695	Pre	N	-	MM, 6L, 3T	Y	Y	-	Balanced in/out
McIntosh C39	2795	Pre	Y	-	MM, 10L (6 Vid.)	Y	Y	-	Two zone, THX compatible
McIntosh MC7106	2895	Pwr	Y	100	-	-	-	-	Six channel THX amp
McIntosh MC7300	2995	Pwr	N	300	-	-	-	-	-
McIntosh MC275	3595	Pwr	N	75	-	-	-	-	Classic valve amp
McIntosh MC2600	5195	Pwr	N	600	-	-	-	-	-
McIntosh MC1000	8995	Pwr	N	100	-	-	-	-	Monoblocks
Meridian 501	595	Pre	N	-	MM,4L,T	Y	N	33,9,34	MC option, system handset
Meridian 555	595	Pwr	-	60	-	-	-	33,9,32	Stereo
Meridian 562	625	Pre	N	-	MM,8L,T,6D	N	N	33,9,34	Digital main out. MC option
Meridian 551	695	Int	N	55	MM,4L,T	Y	N	33,9,34	MC option
Meridian 501V	745	Pre	Y	-	MM,4L,T	Y	N	33,9,34	As 501, plus video switching
Meridian 562V	825	Pre	Y	-	MM,8L,T,6D	N	N	33,9,34	As 562, plus video switching
Meridian 601	2750	Pre	N	-	MM,4L,T	Y	Y	-	DSP tone control, MC option
Metaxas Ikarus II	1350	Int	N	40	MM/MC,3L,1T	N	N	40,7,40	-
Metaxas Charisma	1525	Pre	N	-	MM/MC,3L,2T	-	N	36,6,29	Separate PSU
Metaxas Iraklis	1625	Pwr	N	50	-	-	-	43,18,37	-
Metaxas Marquis	2250	Pre	N	-	MM/MC,3L,2T	-	N	29,7,45	Separate PSU
Metaxas Solitaire	2350	Pwr	N	130	-	-	-	52,19,42	Pair monoblocks
Metaxas Opulence	5500	Pre	N	-	MM/MC,3L,2T	-	N	39,7,45	Separate mains isolated PSU
Metaxas Soliloquy	5990	Pwr	N	100	-	-	-	52,19,42	Pair monoblocks
Michell Iso	393	Pre	N	-	MM or MC	N	N	small	Phono stage
Michell Argo	689	Pre	N	-	3L,1T	N	N	33,7,19	2 pairs outputs
Michell Iso HR	850	Pre	N	-	MM or MC	N	N	small	Phono stage
Michell Alecto Stereo	1150	Pwr	N	50	-	-	-	32,20,36	-
Michell Argo HR	1300	Pre	N	-	3L,1T	N	N	36,8,22	2 pairs outputs
Michell Alecto Mono	1879	Pwr	N	100	-	-	-	32,20,36	-
Michi RHC-10	795	Pre	N	-	5L	-	-	47,8,34	Passive
Michi RHQ-10	995	Pre	N	-	MM,MC	-	-	47,8,34	Phono equaliser
Michi RHA-10	995	Pre	N	-	5L	-	-	47,8,34	Active
Michi RHB-10	1550	Pwr	N	200	-	-	-	47,19,37	-
Mission Cyrus III	500	Int	N	50	MM,5L,1T	Y	N	22,8,36	PSX-R outboard PSU option
Moth 30 Passive	149	Pre	N	-	3L,1T	N	N	-	-

Model	Price	Type	A/V	Power	Inputs	Headphones	Remote	Size	Special
AMPLIFIERS									
Moth 30 RIAA	199	Pre	N	-	MM/MC,	N	N	-	-
Moth 30 Series Power	239	Pwr	-	30	-	-	-	-	-
Moth 30 Active	249	Pre	N	-	4L,1T	N	N	-	-
Moth 30 RIAA 100VA	299	Pre	N	-	MM/MC	N	N	-	-
Moth 30 Active 100VA	349	Pre	N	-	4L,1T	N	N	-	-
Mus-Fid The Preamp	219	Pre	N	-	4L,2T	N	N	44,8,32	XLR, opt phono/digital board
Musical Fidelity A1.3	329	Int	N	25	MM,MC,3L,1T	N	N	41,6,25	Near Class A, tape monitor
Mus-Fid Preamp 8	349	Pre	N	-	MM/MC,3L,1T	N	N	41,6,25	Tape monitor, chrome finish
Mus-Fid Typhoon	349	Pwr	N	45	-	-	-	44,8,32	XLR in, bridgeable
Musical Fidelity A120	549	Int	N	40	MM/MC,3L,2T	N	N	44,10,35	Class A
Musical Fidelity MA65	950	Pwr	N	65	-	-	-	41,6,25	Class A
Musical Fidelity F22	999	Pre	N	-	5L,1T	N	Y	49,12,33	Optional phono/digital boards
Musical Fidelity FX	1099	Pwr	N	90	-	-	-	49,12,38	Bal/unbalanced in
Musical Fidelity A1000	1399	Int	N	50	MM/MC,3L,1T	N	N	49,13,36	Separate PSU
Musical Fidelity F15	1899	Pwr	N	100	-	-	-	49,19,38	Bal/unbalanced in/hybrid
Musical Fidelity F18	3999	Pwr	N	220	-	-	-	49,19,67	Bal/unbalanced in/hybrid
NAD 302	169	Int	N	25	MM,3L,2T	Y	N	-	-
NAD Monitor 1000	199	Pre	N	-	MM/MC,3L,2T	Y	N	-	-
NAD 304	229	Int	N	35	MM,4L,2T	Y	N	-	-
NAD Monitor 2100	299	Pwr	-	60	-	-	-	-	-
NAD Monitor 1000S	319	Pre	N	-	MM/MC,3L,2T	Y	N	-	-
NAD 306	329	Int	N	50	MM,4L,2T	Y	N	-	-
NAD Monitor 2700	459	Pwr	-	150	-	-	-	-	THX approved
NAD Monitor 208	799	Pwr	-	250	-	-	-	-	THX approved
Naim NAP90/3	375	Pwr	-	30	-	-	-	32,56,30	Latest style. Suits 92
Naim NAC92	405	Pre	N	-	5 (L or T)	N	N	44,56,30	Latest style. Suits 90/3
Naim NAC72	622	Pre	N	-	2MM/MC, L,2T	N	N	21,76,30	Upgradable with PSU, MC I/P
Naim NAP140	634	Pwr	-	45	-	-	-	21,76,30	-
Naim NAP180	898	Pwr	-	60	-	-	-	43,76,30	-
Naim NAP135	1424	Pwr	-	70	-	-	-	43,76,30	-
Naim NAP250	1424	Pwr	-	70	-	-	-	43,76,30	-
Naim NAC82	1880	Pre	N	-	6 (L or T)	N	Y	43,76,30	-
Naim NAC52	4741	Pre	N	-	6 (see note)	N	Y	43,76,30	Optional phono board
Nakamichi IA3	350	Int	N	40	3L,2T	N	N	43,7,32	-
Nakamichi IA2	600	Int	N	50	MM/MC,3L,2T	Y	Y	43,12,36	-
Nakamichi IA1	750	Int	N	80	MM/MC,3L,2T	Y	Y	43,12,36	-
NVA P-50	260	Pre	N	-	3L,1T	N	N	-	-
NVA AP-20CD	290	Int	N	30	3L,1T	N	N	-	-
NVA AP-20	340	Int	N	30	MM/MC,3L,1T	N	N	-	-
NVA P-90	340	Pre	N	-	5L	N	N	-	-
NVA TSS (Pre)	420	Pre	N	-	5L,1T	N	N	-	-
NVA AP-35CD	450	Int	N	50	3L,2T	N	N	-	-
NVA A60	470	Pwr	-	60	-	-	-	-	-
NVA A70	470	Pwr	-	70	-	-	-	-	Mono
NVA AP-35	500	Int	N	50	MM/MC,3L,1T	N	N	-	-
NVA A80	760	Pwr	-	70	-	-	-	-	Mono
NVA T1S	1100	Int	N	60	5L,1T	N	N	-	-
NVA TCS	2100	Int	N	70	5L,1T	N	N	-	-
NVA TDS	2600	Pwr	-	70	-	-	-	-	Mono
NVA TSS (Power)	3300	Pwr	-	70	-	-	-	-	-
NVA TUS	5000	Pwr	-	80	-	-	-	-	1x Monoblock
Onix OA30	300	Int	N	40	5L,1T	Y	N	43,77,33	-
Onix OA24	400	Pre	N	-	MM/MC,2L,2T	N	N	75,23,37	Internally switchable MM/MC
Onix OA401	400	Pwr	-	50	-	-	-	75,23,37	With internal supply for OA24
Onix OA21S	430	Int	N	50	MM/MC,3L,1T	Y	N	75,23,37	-
Onix OA31	480	Int	N	60	MM/MC,4L,1T	Y	N	43,77,33	-
Onix OA601	699	Pwr	-	70	-	-	-	75,46,36	Regulated PSU
Onix OA801	849	Pwr	-	190	-	-	-	75,46,36	2x monoblocks, massive PSU
Onkyo A801	200	Int	N	40	MM,3L,2T	Y	N	46,12,33	-
Onkyo A803	260	Int	N	60	MM/MC,3L,2T	Y	Y	46,12,33	-
Onkyo A-911	350	Int	N	70	MM,3L,2T	Y	Y	-	Mini component, 4ohm rating
Onkyo A850	370	Int	N	60					

The Forefront of Technology



aiwa
DIGITAL AUDIO & VIDEO



Model No: **ADF-450**



- *Dolby B & C • Dolby HX-Pro • Feather touch IC Logic Control*
- *Amorphous alloy head • Record Mute*
- *Anti-Modulation Tape Stabiliser (AMTS) • Fine Bias adjustment*
- *System remote capable • 8 point LED Level Indicator • Music Sensor*
- *Timer Operation • Auto tape selector • PC.OCC Wire*

Considerable time and effort has gone into the creation of the Bill Hutchinson Innovation Award Scheme, drawing from more than two decades of experience and expertise.

The Innovation Award is designed to assist you in identifying state of the art equipment that matches your expectations whilst being of a build quality that ensures many years of enjoyment.

A list of priorities have been drawn up in order to establish the framework of the Award Scheme. The main priorities are, sound, value, construction, design, style and originality.

The choice of dealer should be given the same care and attention as is given to your choice of equipment, so that you may receive the kind of quality service and advice that compliments equipment of the same standard. The type of service you ultimately receive will reflect on your overall enjoyment of the product. A long-term association with a professional dealer has real benefits and will serve as your personal contact for information and advice on the Manufacturers latest Innovations

If it is not possible to visit a Bill Hutchinson Hi-Fi AV Centre, simply contact the Manufacturer for details of your nearest authorised stockist.

AIWA 081-897 7000

Bill Hutchinson

Hi-Fi • CD • Audio Visual Centre

- GLASGOW 43 Hope Street. Tel: **041-248 2857** • EDINBURGH 40A Queensferry Street. Tel: **031-220 0909**
- LEEDS 26-28 Woodhouse Lane. Tel: **0532 427777** • NEWCASTLE 87A Clayton Street. Tel: **091-230 3600**
- MANCHESTER 50/52 Deansgate. Tel: **061-832 1600**





Key to amplifiers... Price - typical retail, to nearest pound... Power - output power in watts, per channel, RMS... Inputs - MM/MC - phono moving coil and moving magnet, L - line (CD, aux etc), T - tape...

Type: Int - integrated, Pre - preamplifier, Pwr - power amplifier... Headphone - Y - yes, N - no... Remote - Y - yes, N - no... Size - width x height x depth in cm... Products highlighted in red have been tested in Hi-Fi Choice...



Key to cassette decks... Price - typical retail, to nearest pound... Type - T - twin transports, allowing tape to tape dubbing, sequential play etc; S - Single transport, AR - auto-reverse... Dolby - B (10dB noise reduction), C (20dB) S (+addB) - C is standard for prerecorded material...

Heads - 2 - combination record/play heads; 3 - independent record/play heads, allowing real time off tape monitoring... Size - width x height x depth in cm... Products highlighted in red have been tested in Hi-Fi Choice...

Table of amplifiers with columns: Model, Price, Type, A/V, Power, Inputs, Headphones, Remote, Size, Special. Includes models like PS Audio Phono Link, QED C-300CD, and various phono preamps.

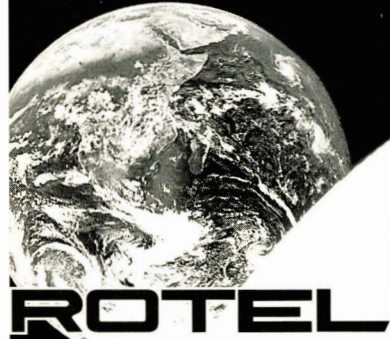
Table of cassette decks with columns: Model, Price, Type, A/V, Power, Inputs, Headphones, Remote, Size, Special. Includes models like Tesserac TAMP-60, Thule IA50, and various hi-fi decks.

Table of cassette decks with columns: Model, Price, Type, Dolby NR, Dolby HX Pro, Heads, Size, Special. Includes models like Aiwa AD-F450, Grundig CCF210, and various hi-fi decks.

Listings marked in red (as shown below) are covered in the Hi-Fi Choice Directory, see p123

Listings marked in red (as shown below) are covered in the Hi-Fi Choice Directory, see page 123

The Forefront of Technology



ROTEL



• **RC-970BX STEREO PRE-AMPLIFIER**

- Line inputs only • Tone controls • Tone defeat
- Independent record out • Twin outputs

• **RB-970BX STEREO POWER AMPLIFIER**

- 60 Watts RMS Per Channel • 200 Watts RMS Mono
- High Current capability • Twin power supplies

Considerable time and effort has gone into the creation of the Bill Hutchinson Innovation Award Scheme, drawing from more than two decades of experience and expertise.

The Innovation Award is designed to assist you in identifying state of the art equipment that matches your expectations whilst being of a build quality that ensures many years of enjoyment.

A list of priorities have been drawn up in order to establish the framework of the Award Scheme. The main priorities are, sound, value, construction, design, style and originality.

The choice of dealer should be given the same care and attention as is given to your choice of equipment, so that you may receive the kind of quality service and advice that compliments equipment of the same standard. The type of service you ultimately receive will reflect on your overall enjoyment of the product. A long-term association with a professional dealer has real benefits and will serve as your personal contact for information and advice on the Manufacturers latest Innovations

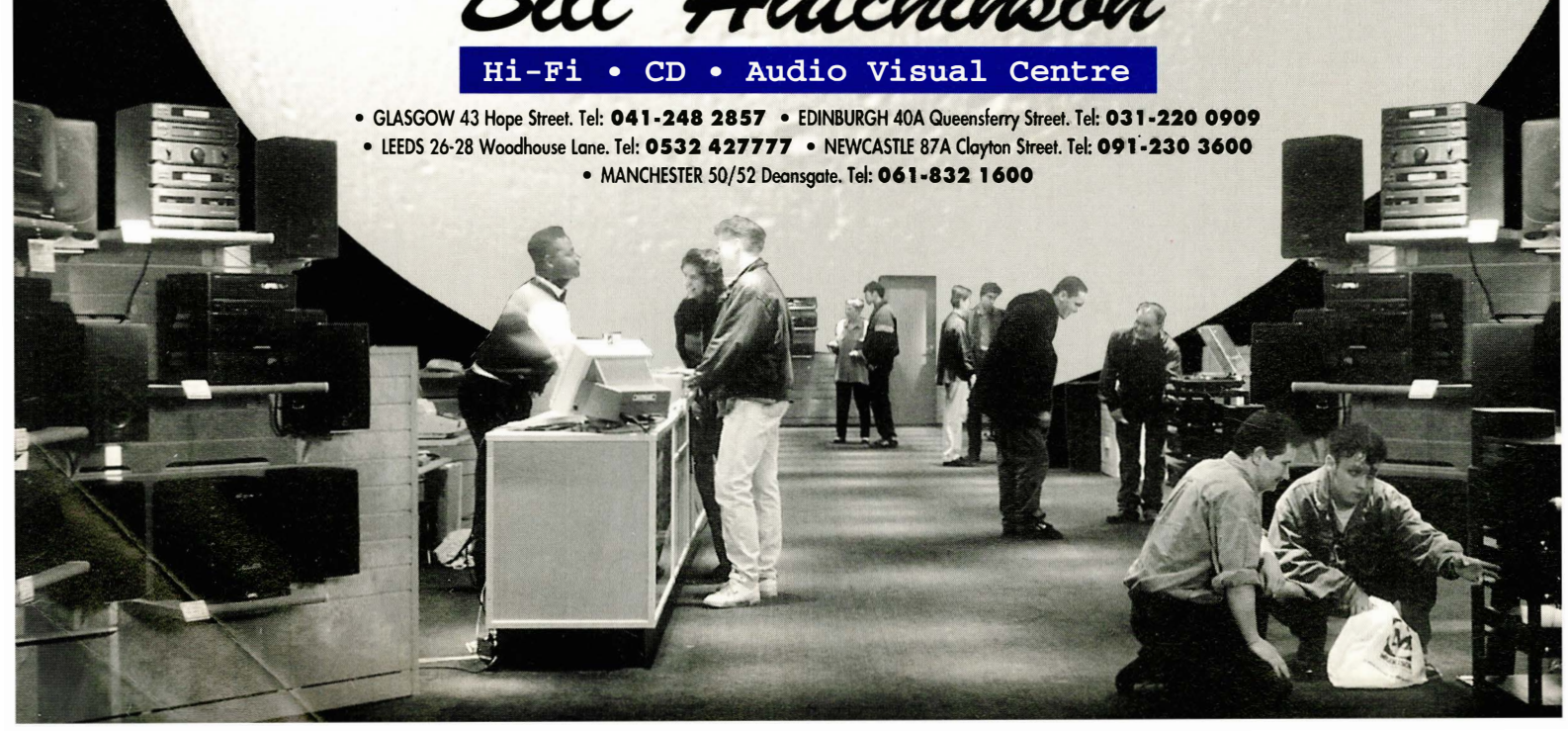
If it is not possible to visit a Bill Hutchinson Hi-Fi AV Centre, simply contact the Manufacturer for details of your nearest authorised stockist.

ROTEL 0908 317707

Bill Hutchinson

Hi-Fi • CD • Audio Visual Centre

- GLASGOW 43 Hope Street. Tel: **041-248 2857** • EDINBURGH 40A Queensferry Street. Tel: **031-220 0909**
- LEEDS 26-28 Woodhouse Lane. Tel: **0532 427777** • NEWCASTLE 87A Clayton Street. Tel: **091-230 3600**
- MANCHESTER 50/52 Deansgate. Tel: **061-832 1600**

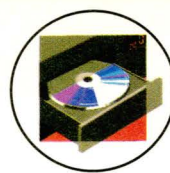




Key to cassette decks
Price - typical retail, to nearest pound.
Type - T - twin transports, allowing tape to tape dubbing, sequential play etc.; S - Single transport, AR - auto-reverse.
Dolby - B (10dB noise reduction), C (20dB), S (24dB). B is standard for prerecorded material.

Heads - 2 - combination record/play heads; 3 - independent record/play heads, allowing real time off tape monitoring.
Size - width x height x depth in cm.

Products highlighted in red have been tested in Hi-Fi Choice. Please refer to The Directory on page 123 for full test results.



Key to compact disc players, transports and DACs
Price - typical retail, to nearest pound.

DAC Type - MB - multibit, 1 bit - single bit, BS - Bitstream, DS - Delta Sigma, M - MASH, Hybrid - combines multibit and single bit.

Outputs Digital: Opt - optical (usually Toslink), Et - electrical (usually coaxial S/PDIF).

Remote Control - Y - yes, N - No. Size - width x height x depth in cm.

Products highlighted in red have been tested in Hi-Fi Choice. Please refer to The Directory on page 123 for full test results.

Table listing various cassette decks with columns: Model, Price, Type, Dolby NR, Dolby HX Pro, Heads, Size, and Special. Includes models like Marantz SD-53, Pioneer CT-S320, and Sony TCFX211B.

Table listing various compact disc players with columns: Model, Price, Dac Type, Outputs Dig, Remote, Size, and Special. Includes models like Aiwa XC-300, Denon DCD-995, and Marantz CD-53.

Advertisement text: "DON'T MISS NEXT MONTH'S FREE SUMMER SOUND SPECTACULAR. FOR MUSIC ON THE BEACH, ON THE PLANE, TRAIN AND IN THE AUTOMOBILE - JUST ABOUT ANYWHERE YOU CARE TO ROAM. THIS IS THE ULTIMATE GUIDE TO PORTABLES AND PERSONALS." Includes footer text: "Listings marked in red (as shown below) are covered in the Hi-Fi Choice Directory, see page 123"

Listings marked in red (as shown below) are covered in the Hi-Fi Choice Directory, see page 123.

THE hi-fi ROOM

MANCHESTER



**THE OASIS OF SOUND
FOR HI-FI AND AV**

M A N C H E S T E R

50 BRIDGE STREET 061-832 0888



Key to compact disc players, trans-ports and DACs
Price - typical retail, to nearest pound.
DAC Type - MB - multibit, 1 bit - single bit, BS - Bitstream, DS - Delta Sigma, M - MASH, Hybrid - combines multibit and single bit.
Outputs Digital: Opt - optical (usually Toslink), El - electrical (usually coaxial S/PDIF).

Remote Control - Y - yes, N - No.
Size - width x height x depth in cm.

Products highlighted in red have been tested in HI-FI Choice. Please refer to The Directory on page 123 for full test results.



Key to compact disc players, trans-ports and DACs
Price - typical retail, to nearest pound.
DAC Type - MB - multibit, 1 bit - single bit, BS - Bitstream, DS - Delta Sigma, M - MASH, Hybrid - combines multibit and single bit.
Outputs Digital: Opt - optical (usually Toslink), El - electrical (usually coaxial S/PDIF).

Remote Control - Y - yes, N - No.
Size - width x height x depth in cm.

Products highlighted in red have been tested in HI-FI Choice. Please refer to The Directory on page 123 for full test results.

Model	Price	Dac Type	Outputs Dig	Remote	Size	Special
CD PLAYERS						
Onkyo DX750	350	1bit	0	Y	46,11,31	
Orelle CD480	400	MB	E	Y	44,10,28	DC coupled
Orelle CD160	750	MB	E	Y	44,7,32	Passive filtering, DC coupled
Orelle CD260 II	900	MB	E	Y	44,7,32	Audiophile components, DC cpd
Philips CD732	140	BS	E	Y	44,11,30	
Philips CD920	160	BS	E	Y	44,11,30	
Philips CD930	200	BS	E	Y	44,13,30	
Philips CDC935	230	BS	E	Y	44,13,38	Five disc CD player
Pioneer PD-102	150	1-bit	-	N	42,11,28	Display off
Pioneer PD-202	170	1-bit	-	Y	42,11,28	As 101, variable output & remo
Pioneer PD-S502	230	1-bit	-	Y	42,11,29	Stable Platter Mechanism
Pioneer PD-S602	270	1-bit	0	Y	42,11,29	SPM, optical out
Pioneer PD-M602	270	1-bit	-	Y	42,11,30	Six disc
Pioneer PD-S702	300	1-bit	0	Y	42,13,27	SPM, Legato Link filter
Pioneer PD-M701	330	1-bit	-	Y	42,13,30	Six disc
Pioneer PD-S802	350	1-bit	E,0	Y	42,14,27	SPM, Legato Link filter
Pioneer PD-M901	450	1-bit	-	Y	42,13,33	Six disc, DSP soundfield contr
Pioneer PD-DM802	450	1-bit	-	Y	42,14,31	Dual magazine 12-disc
Pioneer PD-S901	499	1-bit	E,0	Y	42,13,33	SPM, Legato Link, Twin DAC
Pioneer PD-TM3	500	1-bit	-	Y	42,18,35	Triple magazine, 18-disc
Pioneer PD-77	1100	1-bit	E,0	Y	44,13,33	Satin gold finish
Pioneer PD-95	2500	1-bit	E,0	Y	44,16,34	Balanced out, Legato, SPM
Quad CD67	825	DS	E	Y	33,8,26	For use with 66 system
Roksan ATT-DP2P	1495	DS	E	Y	46,12,35	Player, four level isolation
Rotel RCD-945AX	230	BS	E	Y	44,10,32	
Rotel RCD-965BX	300	BS	E	Y	44,10,32	Audiophile components
Rotel RCD-965BX D	375	BS	E	Y	44,10,32	Discrete output
Rotel RCD-965BX LED	425	BS	E	Y	44,10,32	Discrete & slit foil caps
Sansui CD-270	180	BS	N	N	-	
Sansui CD-117K II	200	MB	N	N	-	
Sansui CD-X217i	200	MB	E	N	-	
Sansui CD-X317	250	BS	E,0	Y	-	
Sansui CD-X617	350	BS	E,0	Y	-	
Sentec Diana	1100	MB	E,0	N	12,5,23	20 bit
Sherwood CD3020R	130	BS	Y	N	-	
Sherwood CD5010R	160	BS	Y	N	-	
Sherwood CDC5030	200	1bit	N	Y	44,10,38	Five disc carousel
Sony CDP-M302	130	1bit	N	Y	36,10,33	Mid-size, full remote control
Sony CDP-312	150	1bit	-	Y	43,10,29	Digital servo
Sony CDP-C325M	230	1bit	N	Y	36,10,39	Mid-size, 5-disc player
Sony CDP-C345	230	1bit	-	Y	43,13,39	Five disc player
Sony CDP-715E	250	1bit	0	Y	43,11,30	UK optimised sound
Sony CDP-915E	300	1bit	0	Y	43,11,36	UK optimised sound
Sony CDP-CX100	800	1bit	0	-	43,13,38	100 disc autochanger
Teac CD-P3500	200	BS	E	Y	44,12,28	
Teac CD-P4500	280	BS	E	Y	44,12,29	Digital attenuator
Teac VRDS-7	600	BS	E,0	Y	45,15,34	Twin BS
Teac VRDS-10	770	BS	E,0	Y	45,15,34	Twin DAC7, balanced output
Teac VRDS-20	1300	BS	E,0	-	50,15,34	Twin DAC7, balanced output
Teac X-1	2500	MB	-	Y	46,14,40	Balanced out, 4x20bit
Teac X-1S	3500	MB	0	Y	46,14,40	Balanced out, 4x 20bit
Technics SL-PG360A	140	M	N	Y	43,10,29	Remote control capable
Technics SL-PG440A	170	M	N	Y	43,10,29	4-DAC
Technics SL-PG560A	180	M	0	Y	43,11,30	Selected audio parts
Technics SL-PS620A	200	M	0	Y	43,12,29	
Technics SL-PS740A	250	M	0	Y	43,13,29	Centre tray
Technics SL-PS840	420	M	0	Y	43,13,34	Advanced MASH converter
Technics SL-P2000	1000	M	0	Y	45,13,33	THCB base, R-Core transformer
Wadia 6 Player	3995	MB	E,0	Y	35,14,41	Digital volume, AT&T, balanced
Yamaha CDX-670	290	BS	E,0	Y	-	
Yamaha CDC-635	300	BS	-	Y	-	
Yamaha CDX870	330	BS	0	Y	-	
Yamaha CDX-1000	599	BS	E,0	Y	-	
YBA 2	2999	MB	E,0	Y	43,10,33	Outboard power supply

Model	Price	Dac Type	Outputs Dig	Remote	Size	Special
CD TRANSPORTS						
Arcam Delta 250	750	-	2E, 0	-	43,9,28	BNC out. Has sync lock input
Audiolab 8000CDM	1250	-	E,0	Y	45,8,36	Precision master clock
Audiomeca Kreatura	999	-	E,0	Y	25,14,39	Heavily modified CD
Audiomeca Mephisto	1999	-	-	Y	43,15,33	Integral platter, layer suspen
Counterpoint DA-11E	1495	-	E,0	Y	-	
DPA T1 Transport	895	-	-	Y	-	'Deltan' clock locking (with
Jadis JCDT	8000	-	-	Y	-	Top load
Krell MD-20 trans	4999	-	E,20	Y	42,13,28	Top load, AT&T optical out
Krell MD-10 trans	7990	-	2E,0	Y	42,13,28	
Krell DT-10 trans	9090	-	2E,0	Y	42,13,28	Front loader
Meridian 200	895	-	E,0	Y	32,32,10	
Meridian 500	975	-	E,0	Y	32,33,9	
Meridian 602	1750	-	E,0	Y	32,33,10	
Micromega Drive 1	600	-	E,0	Y	43,28,88	Upgradable, AES/EBU out
Micromega Drive 2	900	-	E,0	Y	43,28,88	Upgradable, AES/EBU out

Listings marked in red (as shown below) are covered in the HI-FI Choice Directory, see page 123.

Marantz CD-52 II SE	300	BS	E	Y	42,12,28	Selected passive components
---------------------	-----	----	---	---	----------	-----------------------------

Model	Price	Dac Type	Outputs Dig	Remote	Size	Special
CD TRANSPORTS						
Micromega T-Drive	1200	-	E	Y	22,28,88	Tray loading, AES/EBU out
Micromega Duo CD3-1	1350	-	E,0	Y	34,9,31	Top loading, AES/EBU out
Micromega Duo CD2-1	2500	-	E,0	Y	34,9,31	Top loading, AES/EBU out
Orelle CD10-T	799	-	E	Y	44,10,32	Isolated PSU, silver wiring
PS Audio Lambda tr	1990	-	E	Y	38,8,34	AT&T, AES/EBU optional
Roksan ATT-DP2	1295	-	E	Y	46,12,35	Four level isolation
Roksan ATT-DP2A	1490	-	-	Y	46,12,35	AT&T optical
Teac P-700	900	-	E,0	Y	23,14,40	Half width, anti-resonance cha
Teac P-2	3500	-	E,0	Y	23,14,49	
Teac P-2S	4300	-	0,E	Y	23,14,49	Gold plate circuit boards
Theta Data Basic	1990	-	E	Y	42,8,34	AT&T, AES/EBU option
Theta Data II NTSC	3290	-	E	Y	42,12,40	AT&T, AES/EBU option
Wadia 8	3195	-	-	Y	35,16,41	
Wadia 7	9995	-	-	Y	35,16,46	

Model	Price	Dac Type	Outputs Dig	Remote	Size	Special
D/A CONVERTERS						
Arcam Black Box 50	450	Hybrid	E,0	-	43,7,28	Two inputs, sync lock
Audio A DAC-in-the-box	200	MB	E	-	-	
Audio Alchemy DDev1.0	420	BS	E,0	-	-	Upgradable external PSU
Audio Note DAC1	600	MB	E,0	Y	-	
Audio Note DAC3	1650	MB	E/0	Y	-	
Audio Research DAC2	3940	MB	-	-	48,14,26	20bit, 8x o/s
Audiolab 8000DAC	750	BS	-	-	45,8,36	Balanced AES/EBU input
AVI S2000MD	549	MB	-	-	-	
Beard DAP-2 DAC	999	BS	E,0	Y	-	Hybrid tube
Beard DAP-1	1250	MB	-	-	-	
Counterpoint AD20	255	MB	-	-	-	DACCARD for DA-10E
Counterpoint CS18	355	MB	-	-	-	DACCARD for DA-10E
Counterpoint BB69	595	MB	-	-	-	DACCARD for DA-10E
Counterpoint UA20	995	MB	-	-	-	DACCARD for DA-10E
Counterpoint DA-11E	1495	-	E,0	Y	49,6,27	Optional AT&T & AES/EBU balanc
Counterpoint DA-10E	1675	-	E,0	Y	-	Interchangeable DACs, optional
DPA Little Bit II	450	BS	E,0	-	-	
DPA Bigger Bit	695	BS	E,0	-	-	
DPA PDM256	2995	-	-	-	-	Unique DPA DX64 DAC
DPA PDM10924	5995	-	-	-	-	Unique DPA DX128 DAC
EMF Audio Crystal	500	BS	-	-	-	
Krell Studio 2	3198	MB	-	-	42,13,27	AT&T in
Krell Studio	4450	MB	-	-	42,6,32	AT&T in
Krell Reference 64	14300	MB	-	-	42,13,39	AT&T in
Linn Numerik	1075	MB	-	-	32,8,33	
Meridian 563	695	DS	3E,0	N	33,9,34	
Metaxas Mas DAC	2800	MB	E,0	Y	26,15,45	External PSU, 20 bit
Micromega Microdac	349	BS	E,0	-	22,5,15	Coax/optical
Micromega DAC	600	BS	-	-	43,28,88	AES/EBU input
Micromega Duo BS2	600	BS	-	-	8,28,9	AES input
Micromega T-DAC	800	BS	-	-	22,28,88	Four inputs
Micromega Duo Pro 2	1350	BS	-	-	34,48,31	AES input
Mission DAC5	300	BS	-	-	7,11,29	Outboard DAC, matches DAD5
Musical Fidelity Tubalog	499	MB	E,0	N	44,8,32	Tube o/p
NVA Dacon	1010	BS	E	N	-	
Orelle DA-180	599	MB	E	N	44,7,28	2 outputs, twin transformers
Perception DAC	695	MB	-	-	-	
Pink Triangle Ordinal	790	BS	E,0	-	23,8,35	Interchangeable DAC & filter
Pink Triangle DaCapo	1450	BS	E,0	-	46,8,35	Interchangeable DAC & filter an
Pink Triangle DC	1500	-	-	-	46,8,35	Massive battery PSU for DaCapo
PS Audio Digilink II	688	MB	-	-	38,8,16	
PS Audio SuperLink 2	1230	MB	-	-	38,8,16	
PS Audio UltraLink	2390	MB	-	-	38,6,20	AT&T input option
PS Audio Reference L	5490	MB	-	-	38,8,36	AT&T input
Roksan ATT-DA2	549	DS	-	N	22,8,33	DAC 4 inputs, optional AT&T
Sentec Diana	993	MB	E,0	-	-	
Teac D-700	600	MB	E,0	-	23,14,40	Matches P-700, 4x20bit
Teac D-2	2500	MB	-	-	23,14,49	18 bit, balanced output
Theta Pro-Prime	1449	BS	-	-	42,5,23	
Theta Probasic II	2299	MB	-	-	42,5,29	
Theta Pro Gen III	4600	MB	-	-	42,8,34	AT&T input option
Wadia 12	1530	MB	E,0	N	-	Balanced and AT&T outputs
Wadia 15	3790	MB	E,0	Y	35,9,41	Software upgradable
Wadia 64.4	4750	MB	E,0	N	35,8,28	Balanced output
Wadia 9	12790	MB	E,0	Y	44,9,36	Digital volume, separate PSU
Woodside DAC2	509	MB	E,0	-	-	
Woodside DAC1	909	MB	E,0	-	-	

Listings marked in red (as shown below) are covered in the HI-FI Choice Directory, see page 123.

Marantz CD-52 II SE	300	BS	E	Y	42,12,28	Selected passive components
---------------------	-----	----	---	---	----------	-----------------------------



Key to digital recorders
Price - typical retail, to nearest pound.
Type - MD - MiniDisc, DCC - Digital Compact Cassette, DAT - Digital Audio Cassette.
Digital In & Out - E - Electrical (usually coaxial S/PDIF), O - optical (usually Toslink).

DAC Type - MB - multibit, 1 bit - single bit, BS - Bitstream, DS - Delta Sigma. Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.



Key to headphones
Price - typical retail, to nearest pound.

Type - Opn - open back, vented or velocity type; gives less environmental isolation, but is usually more natural feeling in extended use. Sid - sealed - the headphones form an air seal around the ears, helping reduce sound leakage. IR - Infra red cordless. Ear - in-ear model.

Weight - without cable. Impedance - in ohms.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Dig. In	Dig. Out	DAC Type	Size	Special
DIGITAL RECORDERS							
JVC XM-D1BK	900	MD	E,O	E,O	BS	18,5,13	
Marantz DD-82	399	DCC	E,O	E,O	MB/BS	42,15,34	DAC7 output
Marantz DD-92	800	DCC	E,O	E,O	MB/BS	46,15,34	DAC7, zinc side panels
Meridian CDR	4500	CD-R	E,O	E	BS in/	-	
Nakamichi 10007	0	DAT	E,O	E,O	MB in/	-	
Philips DCC300	250	DCC	E	Y	BS in/	36,11,30	
Philips DCC600	300	DCC	E	Y	BS in/	44,12,30	
Philips DCC900	350	DCC	E,O	Y	BS in/	44,14,30	
Sharp MD-D10E	400	MD	-	Y	-	3,9,11	World's smallest MD player
Sony DTC690	600	DAT	E,O	Y	1bit i	43,11,35	UK sound, SCMS
Sony MDS101	700	MD	O	Y	1bit i	23,8,29	Title display, full remote
Sony MBS501	800	MD	E,O	E,O	-	-	Sample rate converter
Sony DTC60ES	800	DAT	E,O	E,O	-	-	SBM
Technics RS-DC8	700	DCC	E,O	E,O	BS	43,12,35	

Model	Price	Type	Weight	Impedance	Special
HEADPHONES					
Aiwa HP-V141	7	Ear	5	16	Bass resonator ducts
Aiwa HP-A160	7	Opn	45	32	Banded, 3.5/6.3mm
Aiwa HP-JB33	8	Opn	18	16	Vertical ear fit, ultra light
Aiwa HP-V143	9	Ear	5	16	Bass resonator ducts
Aiwa HP-A260	9	Opn	54	32	Banded, bass resonator ducts
Aiwa HP-V145	10	Ear	5	16	Carrying case included
Aiwa HP-V147	10	Ear	5	16	Bass resonator ducts
Aiwa HP-X201	13	Sid	230	-	Dual plug
Aiwa HP-A360	13	Opn	65	40	Banded, bass resonator ducts
Aiwa HP-X301	20	Sid	230	-	3m lead, dual plug
Aiwa HP-VX303	25	Sid	230	-	In-line controls, dual plugs
Aiwa HP-X705	40	Sid	130	-	Dual plug, 2m ext cable
AKG K2	23	Opn	70	200	Mini
AKG K33	25	Opn	90	50	
AKG K44	42	Opn	90	50	
AKG K135	46	Opn	160	150	
AKG K141	74	Opn	225	600	
AKG K240 Monitor	82	Opn	240	600	
AKG K270	112	Sid	250	75	
AKG K280 Parabolic	117	Opn	250	75	
AKG K400	118	Opn	250	120	
AKG K270 Studio	121	Sid	250	75	
AKG K500	138	Opn	250	120	
AKG K340	191	Opn	380	400	
AKG K1000	646	Opn	270	120	
Audio Technica ATH-309	36	Opn	140	30	
Audio Technica ATH-M4X	39	Opn	140	30	
Audio Technica ATH-909	60	Opn	200	600	
Audio Technica ATH-01	80	Opn	200	600	
Audio Technica ATH-910	90	Sid	200	600	
Audio Technica ATH-9000	245	Opn	240	32	
Beyer DT311	45	Opn	120	40	
Beyer DT331	49	Opn	120	250	
Beyer DT411	59	Opn	120	250	
Beyer DT431	69	Opn	250	250	
Beyer DT-511	85	Opn	200	40	
Beyer DT990	119	Opn	200	600	
Beyer DT801	129	Sid	250	250	
Beyer DT100	135	Sid	350	600	
Beyer DT770 Pro	140	Sid	250	600	
Beyer DT811	159	Opn	245	250	
Beyer IRS790	165	Opn	120	-	Cordless infra-red
Beyer DT990 Pro	169	Opn	250	600	
Beyer DT-901	179	Sid	280	250	
Beyer IRS890	199	Opn	120	600	
Beyer DT911	199	Opn	275	250	
Jacklin Float Model 1	75	Opn	400	200	
Jacklin Float Model 2	99	Opn	400	200	
Jacklin Float ELS	399	Opn	600	8	Electrostatic
JVC HA-M3	6	Sid	33	32	1.2m dual plug lead
JVC HA-F15	9	Opn	6	16	Mini 1.2m, 3.5/6.3mm plug
JVC HA-X55	12	Sid	45	32	2m dual plug lead
JVC HA-D410	15	Sid	90	32	2m, 3.5/6.3mm plug
JVC HA-X77	16	Sid	40	32	2m dual plug lead
JVC HA-F35	16	Opn	6	32	Mini 1.2m, 3.5/6.3mm plug
JVC HA-X99	17	Sid	50	32	2m dual plug lead
JVC HA-D510	20	Sid	110	32	3m, 6.3/3.5mjacks
JVC HA-D610	25	Sid	120	32	3m, 6.3/3.5mjacks
JVC HA-D690	40	Sid	220	32	3m, 6.3/3.5mjacks
JVC HA-D710	55	Sid	210	32	3m, 6.3/3.5mjacks
JVC HA-D910	65	Sid	220	32	3m, 6.3/3.5mjacks
JVC HA-D1000	250	Sid	340	32	5m, 6.3/3.5mjacks
Kenwood KH-535	15	Ear	-	32	3.5mm plug
Kenwood KH-757	20	Ear	-	32	3.5mm plug
Kenwood KH-1000	20	Opn	30	32	2m OFC lead

Model	Price	Type	Weight	Impedance	Special
HEADPHONES					
Kenwood KH-959	25	Ear	-	32	3.5mm plug
Kenwood KH-2020	40	Sid	210	32	2.5m OFC lead
Kenwood KH-5000	70	Sid	280	32	2.5m OFC lead
Koss TD60	29	Sid	150	27	
Koss TD65	45	Sid	150	100	
Koss MAC5	45	Opn	100	60	
Koss TD75	59	Sid	330	150	
Koss Porta Pro Jnr	59	Opn	65	60	
Koss Porta Pro 1	65	Opn	65	60	
Koss MAC7	65	Sid	160	60	
Koss Pro 480	115	Cid	250	100	
Koss Pro 4AA	129	Sid	425	230	
Koss JCK200	195	Sid	240	100	Cordless infra-red
Koss JCK300	350	Sid	240	100	Cordless infra red
Koss ESP950	1995	Opn	350	-	Electrostatic
Maxell HP100	4	Ear	3	32	Replaceable pads, 1m lead
Maxell HP200	5	Opn	30	32	Replaceable pads, 1m lead
Maxell HP-400	8	Ear	4	32	With pouch, 6/3/3.5mm fit
Maxell HP300	8	Opn	40	32	6.3/3.5mm fit
Maxell HP-350	9	Eiar	5	32	Winder case, fold plug,
Maxell HP-500	13	Opn	45	22	2.7m lead, 6.3/3.5mm fit
Maxell HP1000	15	Opn	95	32	2.7m lead, digital ready
Maxell HP-4000	20	Ear	5	16	Volume control, winder case
Maxell HP2000	20	Opn	140	32	Volume control digital ready
Maxell HP-3000	30	Sed	120	32	Volume control digital ready
Nakamichi SP7	70	Opn	150	45	
Pioneer SE-5	16	Opn	-	30	2m cable
Pioneer SE-15	20	Opn	-	30	2m cable
Pioneer SE-32	23	-	-	40	Litz cable
Pioneer SE-52	25	-	-	32	Litz cable
Pioneer SE-15V	30	Opn	-	30	5m cable
Pioneer SE-330D	35	Sid	-	35	3m cable, bass boost duct
Pioneer SE-400D	37	Sid	-	35	3m cable
Pioneer SE-500D	48	Sid	-	35	3m cable
Pioneer SE-700D	60	Sid	-	35	3m cable
Ross RE-233	5	Opn	25	8	Micro
Ross RH-150	6	Ear	5	16	Inner ear headphone
Ross RE-235	6	Opn	5	16	Personal stereo
Ross RE-234	6	Opn	5	16	Personal stereo
Ross RE-229	6	Opn	35	8	Folding
Ross RE-2030	6	Opn	5	8	Personal stereo
Ross RMH-300	7	Opn	51	8	Lightweight
Ross RE-280	7	Ear	10	16	Vertical inner ear
Ross RE-246	7	Opn	5	16	Micro stereo phones
Ross RE-223	7	Sid	155	8	Stereo/mono
Ross RMH-500CD	9	Opn	48	16	Lightweight
Ross RH-360CD	9	Ear	16	16	Vertical inner ear
Ross RE-2060CD	9	Opn	5	16	Inner ear headphone
Ross RMH-310TV	10	Opn	51	8	For video and TV
Ross RH-550	10	Ear	5	16	Inner ear, with volume control
Ross RH-460CD	12	Ear	16	16	Vertical inner ear, volume pot
Ross RDH-200CD	13	Sid	150	8	Closed back
Ross RDH-100CD	15	Sid	144	8	CD headphone
Ross RDH-300CD	17	Sid	155	8	CD headphone
Ross RDH-400CD	22	Sid	186	8	Digital headphone
Sennheiser HD16	8	Opn	45	32	Mini, 1.2m lead, dual plug
Sennheiser HD36	11	Opn	62	32	Mini, 1.2m lead, dual plug
Sennheiser HD56	13	Opn	72	32	Mini, 1.2m lead, dual plug
Sennheiser Vegas	25	Opn	118	32	3m lead, 3.5/6.3mm
Sennheiser Manhattan	25	Opn	118	32	3m lead, 3.5/6.3mm
Sennheiser HD60TV	35	Opn	118	32	6.8m lead (inc vol control)
Sennheiser HD440 II	35	Opn	125	60	3m lead, 3.5/6.3mm
Sennheiser HD320	40	Opn	120	60	3m lead, 3.5/6.3mm
Sennheiser HD330	55	Opn	120	100	3m lead, 3.5/6.3mm
Sennheiser HD340	65	Opn	120	100	3m lead, 3.5/6.3mm
Sennheiser HD25 SP	80	Sid	115	85	3m lead, 6.3mm plug
Sennheiser HD520 II	90	Opn	210	300	3m lead, 3.5/6.3mm
Sennheiser HD530 II	100	Opn	210	300	3m lead, 3.5/6.3mm
Sennheiser HD540 II	120	Opn	195	300	3m lead, 3.5/6.3mm
Sennheiser Set 90/UK	130	Ear	40	-	Infra-red cordless
Sennheiser HD560 Ovn II	140	Opn	210	300	3m lead, 3.5/6.3mm
Sennheiser HD25	140	Sid	140	70	1.5m lead, 3.5/6.3mm
Sennheiser S450	150	Opn	160	-	Infra-red cordless - hi-fi
Sennheiser Set 180/UK	150	Ear	43	-	Infra-red cordless
Sennheiser IS550	180	Opn	170	-	Infra-red cordless
Sennheiser HD 580	190	Opn	260	300	3m lead, 3.5/6.3mm
Sennheiser Charleston	224	Opn	210	140	3m lead, dual plug, leather tr
Sennheiser HE60/HEV70	998	Opn	260	-	Electrostatic with energiser
Sennheiser Orpheus	9652	Opn	365	-	Electrostatic, valve energiser
Sony MDR-E515EX	8	Ear	5	-	1m lead, mini plug
Sony MDR-007 Mk II	8	Opn	36	-	2m, 3.5/6.3mm plug
Sony MDR-009	10	Opn	40	-	2m, 3.5/6.3mm plug
Sony MDR-W07L	11	Ear	13	-	1m mini plug
Sony MDR-E505	12	Ear	-	-	
Sony MDR-A009	12	Opn	-	-	

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice Directory*, see page 123.

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice Directory*, see page 123.

Philips DCC600 300 DCC F Y BS in/out 44 12 30

Kenwood KH-959 25 Sid - 32

PRICE WAR

SALE

HYPER-FI

**FREE HEADPHONES
WITH ALL SCOOP
PURCHASES**

**OPENING TIMES
MON-SAT 9am-6pm
FRI 7pm
CLOSED THURSDAYS**

HUNDREDS OF LOWER PRICES PHONE FOR DETAILS

BRITAIN'S LARGEST INDEPENDENT HI-FI/VIDEO BULK BUYER

Our Massive Buying Power gives you the Best Possible Deal. Brand New Factory Sealed units - All Fully Guaranteed.

(NO REPAIRED UNITS, MAIL ORDER RETURNS OR GREY IMPORTS)

All prices include V.A.T.

We have Friendly Expert Advisers on hand at our 10,000sq. ft. Superstore at Barking. They can offer Advice and Full Demonstrations.

We offer the Fastest Mail Order Department in the Business. Fully insured, specially packed 24 Hour securicor delivery

14 day exchange on all goods

We Care. We have Fully Trained Service Personnel.

We want your custom...

If you have been satisfied with the Service at Hyper-Fi tell others. If you're not happy for any reason don't hesitate to tell us.

JUST WRITE TO: HYPER-FI P.R. DEPT. (RICHSIDE), FREEPOST, RM90, CHIGWELL, IG7 6BR.

THIS MONTH'S STAR BUYS

SONY



STS311

- RDS TUNER WITH EON
- 3 BAND AM/FM DIGITAL SYSTEM
- DISPLAY MODEL 30 PRESETS
- DIAL TUNING SYSTEM
- WHAT HI-FI AWARD WINNER

SAVE
£52

£147.95

TECHNICS



SLP440

- HIGHLY REVIEWED PLAYER
- MASH 4 DAC SYSTEM
- CD/SYNCHRO EDIT
- HEADPHONE SOCKET & VOL CONTROL
- FULL REMOTE CONTROL

SAVE
£33

£149.95

SONY



TCK611S

- 3 HEAD DOLBY S CASSETTE
- POWER OPEN/CLOSE
- DISPLAY MODEL 3 MOTOR SYSTEM
- CERAMIC CASSETTE HOLDER
- WHAT HI-FI AWARD WINNER

SAVE
£90

£239.95

BARGAIN OFFERS

**NAKAMICHI MISSION
HALF PRICE
SUPER SYSTEM**

NAKAMICHI IA3 AMPLIFIER

"Smooth sophisticated sounding amp" What Hi-Fi? ****

NAKAMICHI CD4 CD PLAYER

"Clean shimmering sound" What Hi-Fi? Sound Quality ****

MISSION 760i SPEAKERS

"Open exciting presentation" What Hi-Fi? Sound Quality ****

£860

HALF PRICE

£429.95

ALSO DR3 CASSETTE UNBEATABLE

MORDAUNT SHORT

Special Purchase Deal

All brand new factory sealed. Most at trade price or less

SONY
Special Purchase

All equipment brand new sealed cartons fully guaranteed direct from SONY (U.K.) LTD.

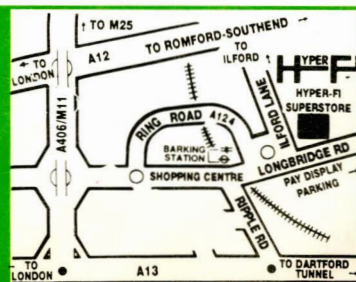
**WE WILL BEAT
ANY GENUINE
ADVERTISED PRICE
BY UP TO £25** PHONE FOR DETAILS

HYPER-FI

**67-73 LONGBRIDGE ROAD
BARKING, ESSEX.**

HOTLINE: 081-591 6961

**NOW ONLY MINUTES AWAY FROM THE NEW M11 (A406) MOTORWAY
CLOSE TO BARKING UNDERGROUND/MAINLINE STATION**



PHILIPS
FB290
QUALITY
SPIKED
SPEAKER
STANDS
£ **19.95** PAIR

HYPERS

MONITOR AUDIO
SPEAKER
STANDS
HALF PRICE
PHONE FOR DETAILS

HOTLINE 0150160012

AMPLIFIERS

PIONEER



- HIGHLY REVIEWED RANGE
 - 2 x 25 WATTS OUTPUT
 - 5 INPUTS 2 TAPE DUBBING
 - BASS TREBLE TONE CONTROLS
 - LOUDNESS SWITCH
 - HEADPHONE SOCKET BLACK 420mm
- A201**
Also A102
2 x 30 WATT
£99.95

SAVE £60 **£69.95** SCOOP

AMPLIFIERS

KENWOOD



- HIGHLY REVIEWED WHAT HI-FI
 - 44 KEY REMOTE CONTROL
 - 2 x 60 WATTS 20HZ - 20KHZ
 - 2 x 140 WATTS DYNAMIC POWER
 - PURE SIGNAL GROUND LINE
- KA4040R**

SAVE £80 **£169.95**

RECEIVERS

SONY



- A.V. REMOTE RECEIVER
 - DOLBY SURROUND SOUND
 - 2 x 60 WATTS FRONT 2 x 10 WATTS REAR
 - 6 AUDIO 2 VIDEO INPUTS
 - VIDEO OUT COPY FACILITY
 - DYNAMIC BASS FEEDBACK SYSTEM
 - 30 RANDOM PRESET 3 WAVEBAND
- STRD590**

SAVE £60 **£189.95**

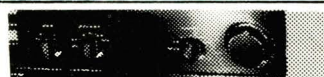
SONY



- 2 x 30 WATTS OUTPUT
 - 5 INPUTS SPEAKER A/B
 - DISPLAY MODEL SOURCE DIRECT
 - TWIN DRIVE POWER SUPPLY
- TAF211**
Also TAF319R
40 WATT REMOTE £129.95

SAVE £50 **£99.95** SAVE £50

SONY



- EXCLUSIVE U.K. AUDIOPHILE DESIGN
 - HIGHLY REVIEWED
 - 2 x 90 WATTS RMS 8 OHMS
 - PURE STRAIGHT PATH DESIGN
 - MM + MC CART INPUTS
- TAF540E**
Also TAF 442ED
£159.95
TAF 542ED £169.95

SAVE £80 **£169.95**

TUNERS

PHILIPS



- QUALITY DIGITAL TUNER
 - AM/FM 30 PRESET
 - REMOTE CONTROL OPTION
 - REMOTES WITH FA920 AMP
 - 435MM WIDE
- FT910**
Also FT920
£99.95

HALF PRICE **£79.95** SCOOP

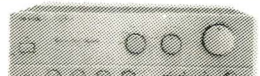
NAD



- EUROPEAN AMP OF THE YEAR
 - BEST BUY HI-FI CHOICE
 - 2 x 25 WATTS RMS
 - HEAVY DUTY BINDING POSTS
 - PRE/POWER OUT TERMINALS
- NAD 302**
Also 304 & 705
UNPRINTABLE

SAVE £££ **£Censored**

PIONEER



- 2x95 WATTS 20HZ - 20KHZ
 - 2 x 200 WATTS DYNAMIC POWER
 - SUPER LINEAR CIRCUIT
 - DIRECT SWITCH 7 INPUTS
 - RECORD SELECTOR HIGH GAIN PHONE EQ.
- A676G**
Also A676BL
£249.95

SAVE £120 **£179.95**

KENWOOD



- FM/LW/MW/ 30 PRESETS
 - 12 STATION NAME PRESETS
 - 6 EVENT PROGRAMME TIMER
 - 60 MINUTE SLEEP TIMER
 - SUPERB QUALITY
- KT2030L**

SAVE £60 **£89.95** SAVE £60

YAMAHA A/V



- FULL AUDIO/VISUAL FUNCTION
 - 90 WATTS PER CHANNEL
 - INFRA-RED REMOTE
 - 6 INPUTS INC TWO TAPE
 - SOURCE DIRECT, LOUDNESS
 - TWIN SPEAKER OUTPUTS
- AXV401**

SAVE £60 **£139.95**

SONY



- 100 WATTS RMS 8 OHMS * GIBRALTER CHASSIS
 - 7 INPUTS, TWIN DRIVE POWER SUPPLY
 - SOURCE DIRECT/RECORD OUT SELECT
 - MM/MC PREOUT AB SPEAKERS
 - HIGHLY REVIEWED AMP
- TAF670ES**

SAVE £100 **£299.95** SCOOP

TECHNICS



- QUALITY TECHNICS TUNER
 - 13 WAVE BAND M.W./L.W./FM.
 - QUARTZ LOCKED SYNTHESIZER
 - 20 PRESETS
 - DELUXE BLACK FINISH
- ST610L**

SAVE £££ **£109.95**

NAKAMICHI



- HIGHLY REVIEWED WHAT HI-FI & HI-FI CHOICE
 - "SWEET CRISP DETAILED AMPLIFIER"
 - AUTHORISED U.K. DEALER STOCK
 - 2 x 40 WATTS 8 OHMS
 - 2 x 57 WATTS DYNAMIC POWER
- 1A3**

HALF PRICE **£169.95**

KENWOOD



- 5 STAR REVIEW WHAT HI FI
 - GOOD REVIEW HI-FI CHOICE
 - ULTIMATE HOME THEATRE
 - 2 x 85 WATTS FRONT 2 x 45 WATTS REAR
 - 1 x 45 WATTS CENTRE * DOLBY PRO LOGIC DSP
 - SIX AUDIO SIX VISUAL CONNECTIONS
 - FULL REMOTE CONTROL
- KAV 8500**

SAVE £210 **£489.95**

PIONEER



- DIGITAL DIRECT DECODER
 - 3 BAND FM/MW/LW
 - 36 RANDOM PRESETS
 - SYSTEM REMOTE
 - 3 SPEED SEARCH
- F401L**
Also F301RDS
£149.95

SAVE £50 **£119.95**

IMPORTANT NOTICE AUTHORISED DEALERS

Not all advertisers in this magazine are authorised dealers for the products they stock. If you check with major manufacturers they will advise you to buy from authorised dealers to ensure full company guarantee back up.

Hyper-Fi only sells brand new factory sealed stock direct from the manufacturers and is an authorised dealer for all its brands

1
0
1
5
6
6
1
0
0
1
5
6
6
1
0
0
1
5
6
6

COMPACT DISC

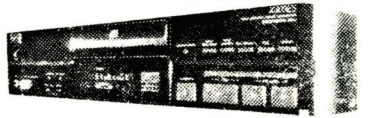
PIONEER



- "RECOMMENDED" HI-FI CHOICE
- 4 STAR SOUND QUALITY WHAT HI-FI
- SUPERB TOP OF THE RANGE BUILD QUALITY.
- STABLE PLATTER MECHANISM
- CENTRE TRAY FULL REMOTE

SAVE £200
£299.95

SONY



- TOP OF THE RANGE ES. QUALITY
- HIGHLY REVIEWED HI-FI CHOICE
- DIGITAL OPTICAL OUTPUT.
- FULL REMOTE CONTROL
- FIVE STAR REVIEW WHAT HI-FI

SAVE £220
£329.95

SPEAKERS

MORDAUNT SHORT AV

MS5.10S

- FULLY SHIELDED MAGNETS SUITABLE FOR ALL A/V APPLICATIONS
- HIGHLY REVIEWED HI-FI SPEAKER
- NEW IMPROVED TWEETER
- POSITEC PROTECTION SYSTEM
- SHELF OR FLOOR STAND USE
- 100 WATTS HANDLING
- DELUX BLACK FINISH
- IDEAL CENTRE SPEAKER



SAVE £33
£49.95 SAVE £33

J.P.W.

MINIM

- IMPROVED MODEL UP FROM MINI MONITOR
- RECOMMENDED HI-FI CHOICE
- 70 WATTS POWER RATING
- FERRO FLUID DOME TWEETER
- HARD WIRED X/OVERS
- LARGE DIAMETER TERMINALS
- WALNUT FINISH



SAVE £30
£49.95 SAVE £30

J.P.W.

SONATA

- HIGHLY REVIEWED WHAT HI-FI
- WHAT HI-FI AWARD WINNER
- HI-FI CHOICE BEST BUY
- 70 WATTS HANDLING
- FREQ RANGE 70HZ - 20KHZ
- WALNUT FINISH
- 320 x 230 x 210mm



SAVE £30
£69.95 SAVE £30

SPEAKERS

MORDAUNT SHORT

MS.10



- HIGHLY REVIEWED HI-FI CHOICE
- FIVE STAR REVIEWED WHAT HI-FI
- 100 WATTS RECAP UNITS
- ALUMINIUM DOME TWEETER
- DELUXE BLACK FINISH

SAVE £30
£99.95 SAVE £30

MORDAUNT SHORT

MS30

- HIGHLY REVIEWED NEW RANGE
- TWO WAY INFINITE BAFFLE
- 100 WATTS RECAP UNITS
- ALUMINIUM DOME TWEETER
- MCS WOOFER BI. WIRE
- 25 x 43 x 28cm BLACK FINISH



SAVE £80
£169.95

CELESTION

CELESTION 9

- HIGHLY REVIEWED HI-FI CHOICE
- HIGHLY REVIEWED WHAT HI-FI
- 100 WATTS HANDLING
- 3 WAY BASS REFLEX
- SUPERB BLACK FINISH



ALSO DELUXE OAK FINISH £199.95
SAVE £100
£169.95

CELESTION

CELESTION 15

- RECOMMENDED HI-FI CHOICE
- HIGHLY REVIEWED WHAT HI-FI
- FLOOR STANDING 2 WAY DESIGN
- TITANIUM DOME TWEETER
- 100 WATTS HANDLING
- SUPERB BLACK FINISH



ALSO DELUXE OAK FINISH £299.95
SAVE £140
£249.95

MORDAUNT SHORT AV

MS5.50

- HIGHLY REVIEWED SPEAKER
- FLOOR STANDING BASS REFLEX
- 89 DB 1 WATT SENSITIVITY
- TWIN BASS UNITS DOME TWEETER
- ROSEWOOD FINISH



ALSO DELUXE BLACK FINISH £349.95
SAVE £70
£329.95

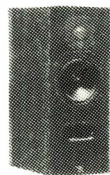
SPEAKERS

MONITOR AUDIO

MA800GOLD

- HIGHLY REVIEWED SPEAKER
- UNIQUE FRONT REFLEX
- 120 WATTS HANDLING
- GOLD ANODIZED ALLOY TWEETER DIE CAST BASS
- DELUXE ROSEWOOD

Also
MA1800RO
£699.95



SAVE £70
£349.95

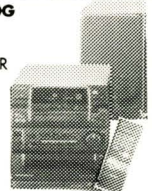
SYSTEMS

AIWA

NSX360G

- AWARD WINNING SYSTEM
- 2 x 30 WATTS OUTPUT
- 5 BAND SPECTRUM ANALYSER
- KAROKE MIC MIXING
- FULL REMOTE CONTROL
- 3 WAY SPEAKERS £30 PAIR

Also NSX 500
3 Disc Auto
7 Band Spectrum
£279.95



SAVE £33
£239.95

PIONEER

J20

- DOLBY SURROUND SOUND SYSTEM
- 2 x 50 WATTS FRONT
- 2 x 10 WATTS REAR
- SOUND FIELD CONTROL + MOVIE MODE
- 7 BAND EQUALIZER, VIDEO INPUT
- 36 PRESET AM/FM TUNER
- 1 BIT 24 TRACK CD PLAYER
- TWIN A/REV DOLBY B & C
- QUALITY TURNTABLE



SAVE £150
£399.95

PIONEER

J40

- 2 x 100 WATTS RMS OUTPUT
- SEPARATE POWER AMPLIFIER
- A/B A+B SPEAKER SWITCHING
- 7 BAND EQUALIZER
- STABLE PLATTER C.D. PLAYER
- 36 PRESET AM/FM TUNER
- TWIN AUTO/REV B.C. HX PRO
- QUALITY BELT DRIVE T/TABLE



MR100 Multi Room
Adaptor £29.95

SAVE £200
£599.95

PIONEER

N93T

- DOLBY PRO LOGIC
- 2 x 66 WATTS 3 x 15 WATTS (RMS)
- MULTI ROOM COMPATIBLE
- VOCAL CANCEL & MIC MIXING
- TWIN AUTO/REV B.C. HX PRO
- 1 BIT SINGLE C.D. PLAYER



MR100 Multi Room
Adaptor £29.95

SAVE £200
£699.95

WE WILL BEAT ANY GENUINE ADVERTISED PRICE!

BY UP TO
£25
PHONE FOR DETAILS

SALE PRICES

<p>AMPLIFIERS</p> <p>AKAI AMM659 £89.95 AM47 £129.95</p> <p>AIWA XA003 £99.95 XA950 £149.95</p> <p>CAMBRIDGE A75 £49.95 P75 £99.95</p> <p>DENON PMA250 £119.95 PMA350 £149.95 PMA480R £219.95 PMA450 £249.95 PMA880R £299.95</p> <p>JVC AXA662 £229.95</p> <p>KENWOOD KA1030 £119.95 KA3020ED £139.95 KA3050R £169.95 KA4040R £169.95 KA5040R £169.95 KA7020 £169.95 KA5050RED £249.95 KA7050R £449.95 KAV8500 £489.95 KAV7700 £489.95</p> <p>MARANTZ PM42 £99.95 PM40SE £129.95 PM32 £139.95 PM52 £149.95 SP50 ED £149.95 PM44SE £299.95 PM45SE £299.95 PM700ED £349.95</p> <p>NAD 302 P.O.A. 304 P.O.A. 306 P.O.A.</p> <p>NAKAMICHI 1A3 £169.95 1A2 P.O.A. 1A1 P.O.A.</p> <p>PHILIPS FA920 £119.95 FA930 £149.95 FA890 £149.95</p> <p>PIONEER A201 £69.95 A102 £99.95 A351R £149.95 A202 £119.95 A300X P.O.A. A40 P.O.A. A67G £179.95 A400X P.O.A. A602 £249.95 A675BL £249.95</p> <p>ROTEL RA920AX £89.95 RA 930 £169.95 RA935 £199.95 RA 980 BX P.O.A. RA 980 P.O.A.</p> <p>SONY TAF211 £99.95 TAF242ED £119.95 TAF319R £129.95 TAF442ED £159.95 TAF440E £159.95 TAF244E P.O.A. TAF540E £169.95 TAF542ED £169.95 TAF670ES £299.95 TAAV570B P.O.A. TAAV670 £329.95</p> <p>TECHNICS SUV220ED £99.95 SUV230 £139.95 SUA500K P.O.A. SUVX600 £149.95 SUA700K P.O.A. SUA800K £329.95 SUA900K P.O.A.</p> <p>YAMAHA AX350 £99.95 AX470 P.O.A. AXV401 £139.95</p>	<p>AX550 £139.95 AX570 P.O.A.</p> <p>AUDIO VISUAL</p> <p>CELESTION FULL RANGE P.O.A.</p> <p>DENON AVCI 530ED £399.95 AVC3020ED £599.95 AVR1000 P.O.A. AVC 3530 P.O.A.</p> <p>JPW FULL RANGE P.O.A.</p> <p>KENWOOD KR76050 £289.95 KR76060ED £299.95 KR76050ED £349.95 KAV8500 £489.95</p> <p>MARANTZ SP50ED £149.95 PM700ED £349.95 AV500 P.O.A. MA500 P.O.A. SR73 P.O.A. SR82 P.O.A. MV6633 P.O.A.</p> <p>MORDAUNT SHORT FULL RANGE P.O.A.</p> <p>MONITOR AUDIO FULL RANGE P.O.A.</p> <p>PIONEER CLD2600 £229.95 VS4740 £349.95 VS701S P.O.A. VSAD802S P.O.A. VSX452 P.O.A. CLD1850 P.O.A. CLD2850 P.O.A. CLDM45 P.O.A.</p> <p>ROTEL RB956AX £324.95 RSP960AX £399.95</p> <p>SONY STRD590 £189.95 STRD511ED £189.95 STRD790 £199.95 STRD611 P.O.A. TAAV570B P.O.A. TAAV670 £329.95</p> <p>TANNOY FULL RANGE P.O.A.</p> <p>TECHNICS SAG530 P.O.A. SAGX550LK P.O.A.</p> <p>YAMAHA DSPA500 P.O.A. DSPA1000 P.O.A. DSPA2070 P.O.A. DSPA2000 P.O.A. DSPA1000 P.O.A. RXV470 P.O.A. DSPA970 P.O.A. NSE80 P.O.A. NSC80 P.O.A. NSC110 P.O.A.</p> <p>TUNERS</p> <p>AIWA XT003 £99.95</p> <p>CAMBRIDGE TS0 £79.95</p> <p>DENON TU260L £119.95 TU560L £159.95 TU380RD £189.95 TU580 P.O.A.</p> <p>KENWOOD KT1030L £79.95 KT2030L £89.95 KT3050LED £129.95 KT7020 £129.95 KT6040 £169.95</p> <p>MARANTZ ST35L £99.95 ST40 £119.95 ST50L £139.95 ST72LED £199.95</p> <p>NAD 402ED £149.95</p> <p>NAKAMICHI ST2ED £199.95</p>	<p>PHILIPS FT910 £79.95 FT930 £99.95 FT920 £99.95</p> <p>PIONEER F201L £79.95 F202L £99.95 F676 £119.95 F550RDS £119.95 F401L £119.95 F301RDS £149.95 F502RDS P.O.A.</p> <p>ROTEL RT930AX £159.95 RT950BX £199.95</p> <p>SONY STS211LB P.O.A. STS170 £119.95 STS311LB P.O.A. STS570ES £199.95 STS505ES P.O.A. STS770 ES £199.95</p> <p>TECHNICS ST610LED £99.95 STG630RDS P.O.A. STG3550 P.O.A. ST610L £109.95 STG90LKED £199.95 STG7650 P.O.A.</p> <p>YAMAHA TX550 £99.95 TX350 £129.95 TX950 £149.95</p> <p>RECEIVERS</p> <p>DENON DRA435 £199.95 DRA345R £249.95 DRA545R £319.95</p> <p>JVC RX506VBK £199.95</p> <p>KENWOOD KRA5040 £199.95 KR76050 £289.95 KR76060 £299.95 KR7050ED £349.95</p> <p>MARANTZ SR53 £199.95</p> <p>NAD 701/705 £249.95</p> <p>PIONEER SX777 £199.95</p> <p>SONY STRD311 P.O.A. STRD390 £179.95 STRD590 £189.95 STRD511ED £189.95 STRD790 £199.95 STRD711 P.O.A.</p> <p>TECHNICS SAGX530LK P.O.A. SAGX130DK £159.95 SAGX230DK £199.95 SAGX550LK P.O.A. SAGX350LK £329.95</p> <p>YAMAHA RX550 £199.95 RXV470 P.O.A. RX360 £359.95</p> <p>CASSETTE DECKS</p> <p>AKAI DX57 £199.95 GX95 II £329.95</p> <p>AIWA ADF450 P.O.A. ADF410 £99.95 ADWX727ED £149.95 ADWX828ED £169.95 ADWX929ED £199.95 ADF850 P.O.A. ADF810 £179.95 XK57000 £299.95</p> <p>DENON DRM510 £99.95 DRM450 £159.95 DRM610 £169.95 DRS810 P.O.A. DRM710ED £219.95 DRW760 £249.95</p>	<p>KENWOOD KK3050 P.O.A. KK5050 P.O.A. KKX: 30 £129.95 K-W8040 £149.95 KK9050S P.O.A.</p> <p>MARANTZ SD52 £139.95 SD62 £149.95 SD63 £229.95 SD53 £269.95</p> <p>NAKAMICHI DR3 P.O.A. DR2 P.O.A.</p> <p>PHILIPS DCC900 £249.95</p> <p>PIONEER CTS210 £69.95 CTS10 £89.95 CTW420R P.O.A. CTS410 £149.95 CTS320 £149.95 CTW620R P.O.A. CTS520 £169.95 CTS510 £169.95 CTS620 £199.95 CTS810 £199.95 CTS610 £199.95 CTW820R £249.95 CTS900S £399.95</p> <p>SONY TCFX211 £59.95 TCFX170B £69.95 TCK311 ED £109.95 TCK370 £119.95 TCK411 £139.95 TCK470 £149.95 TCWR435 £169.95 TCWR535B £169.95 TCK511S £169.95 TCC5 £229.95 TCK611S P.O.A. TCWR635S £249.95 DTC690 £399.95</p> <p>TECHNICS RSBX404ED £139.95 RSTR232KED £139.95 RSTR333KED £159.95 RSBX646KED £179.95 RSTR515KED £199.95 RSBX747KED £249.95</p> <p>YAMAHA KK260 £139.95 KKW162 £149.95 KKW262 £149.95 KK360 £159.95 KK650 £229.95</p> <p>TURNTABLES</p> <p>DUAL CS431 £59.95 CS435 P.O.A. CS503/2 P.O.A. CS505/4 P.O.A.</p> <p>KENWOOD KD491F P.O.A. P26 £79.95</p> <p>SONY PSLX100B £54.95 PSLX150B £99.95 PSLX431B £149.95</p> <p>TECHNICS SLD822K P.O.A. SL1200 P.O.A. SL1210 P.O.A.</p> <p>SPEAKERS</p> <p>B & W DM600IMP P.O.A. DM610IMP P.O.A. DM620IMP P.O.A.</p> <p>CELESTION CEL1 P.O.A. CEL 3 P.O.A. 3RD DIM £99.95 CEL 5 £129.95 DITTON 1 £139.95 DITTON 2BL £149.95 CEL 7 £169.95 DITTON 2W £169.95</p> <p>CEL 9BL £169.95 CEL 9 OAK £199.95 CEL 15BL £249.95 CEL 15 OAK £299.95 S000 £399.95 CERWIN VEGA AT40 £249.95 AT60 £299.95 AT80 £399.95 V510 P.O.A. V512 P.O.A. AT100 £499.95 V51515 P.O.A.</p> <p>JPW MINIM WL £49.95 MINIM BL P.O.A. SUBWOOFER P.O.A. SONATA WL £69.95 SONATA BL £99.95</p> <p>MISSION F1 P.O.A. AF3 P.O.A. M1 £129.95 7601SE £149.95 7611 £179.95 7805E £239.95 7821 £249.95 781 £249.95 783 £379.95 764: £479.95 7651 £679.95 STANDS £59.95</p> <p>MONITOR AUDIO STUD5 £299.95 MA800G R0 £349.95 MA14GII £399.95 MA800G BL £399.95 STUD 6 £499.95 STUD 10 £699.95 MA1800 R0 £699.95 STUD 15 £799.95</p> <p>MORDAUNT SHORT MS5.10.SBL £49.95 MS10 P.O.A. MS5.10 BL £99.95 MS20 P.O.A. MS30 £169.95 MS5.50R0 £329.95 MS5.50BL £349.95 MS40 P.O.A. MS50 P.O.A.</p> <p>NAD 801 P.O.A. 802ED £169.95 804ED £289.95</p> <p>SONY SSA505 £49.95 SS85 P.O.A. SS125E P.O.A. APM181ES £199.95 SS570ES £319.95</p> <p>TANNOY 603.2ED £99.95 605.2ED £129.95 607.2ED £169.95 609.2ED £199.95 611.2ED £349.95 613.2ED £499.95 615.2ED £599.95</p> <p>WHARFEDALE Delis 30 II £49.95 Diamond 5 £59.95 CRS3ED £59.95 CRS5 £129.95 CRS3 £129.95 CRS7 £199.95 CRS9 £299.95</p> <p>YAMAHA NSB50 £129.95</p> <p>EQUALISERS</p> <p>KENWOOD GE 4030 £149.95 GE 7030ED £199.95</p> <p>SONY SEQ411 £99.95</p> <p>TECHNICS SHGE70EK P.O.A. SHGE90K P.O.A.</p>	<p>MINI SYSTEMS</p> <p>AKAI MX92 £269.95 MX570 £349.95 MX570 £399.95 MX770 £449.95 MX970 £499.95</p> <p>AIWA NSX270 £199.95 LCX9 P.O.A. NSX360G £239.95 NSX340 £249.95 LCX7 £269.95 LCX10 P.O.A. NSX430 P.O.A. NSX520 P.O.A. NSX500 £279.95 NSXD707 £399.95 NSXD909 £449.95</p> <p>DENON D65 P.O.A. D70 £449.95 D100 £499.95 D90 P.O.A. D110 P.O.A. D250 P.O.A. DF10 P.O.A.</p> <p>JVC UX1 £229.95 UX A3 £259.95 UXT £259.95 UX45 £319.95 ADA20 P.O.A. ADA 52 £299.95 UXA4 £299.95 ADA30 P.O.A. ADA S3 £349.95 ADA S4 £399.95 ADA S6 £469.95 ADA S7 £469.95 ADA S9 £899.95</p> <p>KENWOOD MSA7 £299.95 UD301 £339.95 UD351M £389.95 UD500 £399.95 UD531M £399.95 UD701 £599.95 UD751M £649.95 UD901 £699.95 UD951M £849.95</p> <p>PIONEER N33 £199.95 N53 £299.95 N53M £349.95 N63T £349.95 N73T £399.95 N73M £449.95 N93T £699.95 N93M £799.95</p> <p>SONY MHC450 £299.95 MHC550 £329.95 MHC510CD £329.95 MHC650 £379.95 MHC710CD £399.95 MHC500CD £449.95 MHC2900 £499.95 MHC2800CD £499.95 MHC700CD £539.95 MHC3800CD £599.95</p> <p>TECHNICS SCCH550 £399.95 SCCH404 £429.95 SCCH450 £449.95 SCCH505 P.O.A. SCCH655 £499.95 SCCH750 £749.95 SCCH950 £799.95</p> <p>MIDI SYSTEMS</p> <p>AKAI M55CD £249.95 FX430CD £299.95 FX630CD £349.95 FX830CD £449.95</p> <p>AIWA Z720 £299.95 ZD3000 £399.95 ZD5000M £449.95 ZD7000M £599.95</p> <p>JVC W37CD £299.95 W58CD £399.95 W78CD £499.95</p> <p>KENWOOD CM5ES £79.95 CM7ES £99.95 CS6 £149.95 SN900 £219.95 M28 P.O.A.</p> <p>M27 £449.95 M46 £499.95 M47 £499.95 M76 £599.95 M57 £699.95 M77 £799.95 M97 £949.95</p> <p>PIONEER J10 £299.95 J20 £399.95 J10M £349.95 J30 £399.95 J20M £549.95 J30M £499.95 J40 £599.95 J40M £599.95 J50 £599.95 J50M £599.95</p> <p>SONY C108CD £269.95 C109CD £269.95 C190 £329.95 C195 £379.95 C159CD £399.95 C209CD £399.95 C259CD £349.95 C359CD £549.95 C559CD £499.95 C759CD £549.95</p> <p>TECHNICS CDX120 P.O.A. CDX320 P.O.A. CDX520 P.O.A.</p> <p>COMPACT DISCS</p> <p>AIWA XC300 P.O.A. XC750 £129.95 XC950* £149.95</p> <p>DENON DCD690* £129.95 DCD595* £179.95 DCD695 £199.95 DCD890* £269.95 DCD1290* £329.95 DCM340* £349.95 DCD2560* £599.95</p> <p>KENWOOD DP5040 £129.95 DP2050 £149.95 DP3050 £179.95 DP5050 £229.95 DPM6650 £239.95 DP7050ED £299.95</p> <p>MARANTZ CD53 P.O.A. CD42II £129.95 CD52IED £149.95 CD63 P.O.A. CD62 IJESD £199.95</p> <p>CD72 £269.95 CD10 P.O.A.</p> <p>NAD 501ED £149.95 502ED £179.95</p> <p>NAKAMICHI CD4 £399.95</p> <p>PHILIPS CD162 £69.95 CD164 £89.95 CD692 £99.95 CD732 £119.95 CD930 £129.95 CD920 £129.95 CD935 £169.95</p> <p>PIONEER PD201 £99.95 PD202 £119.95 PD5501 £149.95 PD5601 £149.95 PD5502 £149.95 PDM602ED £169.95 PD5701 £179.95 PD5702 £179.95 PDS801ED £199.95 CLD2600 £229.95 PDS802 £269.95 PDS901 £299.95</p> <p>ROTEL RCD945AX* £229.95 RCD965 £299.95 RCD965BX £399.95</p> <p>SONY CDPM33 £69.95 CDPM43 £99.95 CDP497 £99.95 CDPM54 £99.95 CDP597 £129.95 CDP797 £129.95 CDP311ED £129.95 CDP4011ED £139.95 CDP711ED £169.95 CDP791 £199.95 CDP911ED £229.95 CDPX30ES £329.95</p> <p>TEAC CDP3500 £149.95 VRD510 £169.95</p> <p>TECHNICS SLP38 £99.95 SLP340ED* £129.95 SLP520A £129.95 SLP440ED* £139.95 SLP540AK* £199.95 SLP5740AK* £249.95 SLP5840AK* £419.95 SLP2000 P.O.A.</p> <p>YAMAHA CDX470 £159.95 CDX660 £169.95 CDX635 £169.95 CDX860 £169.95 CDX570 £189.95 CDX870 £199.95 CDX670 £229.95</p>
--	---	--	--	---

ALL PRICES SPECIAL TO HI FI CHOICE READERS, USE COUPONS TO QUALIFY
V.A.T. FREE PERSONAL ORDERS WELCOME. PRICES SUBJECT TO CHANGE E. & O.E.
ALL SYSTEMS AVAILABLE WITH SPEAKERS FROM £20 A PAIR. E.D.: EX DISPLAY FULLY GUARANTEED

HALF PRICE

SONY

**DOLBY SURROUND
SOUND SPEAKERS**
60 WATTS
2 FRONT 2 REAR
1 CENTRE
£129.95
FOR ALL FIVE

OPENING TIMES
MON - SAT 9-6 pm FRIDAY 7 pm
CLOSED THURSDAYS

USE COUPON TO CLAIM
SIX FREE
C.D. DISCS
WITH ALL STAR
PURCHASE C.D. PLAYERS
AT PRICE LIST ABOVE

HYPER

**LONGBRIDGE ROAD
BARKING, ESSEX IG11 8TG.**

081-591 6961
FAX: 081-594 3996

HC8

MAIL ORDER CUT OFF COUPON

Please add £6 per item for insured Securicor deliveries.

Please supply (make/model)

I enclose Cheque/P.O. Payable "Hyper-fi"

Mastercard or Visa No. EXPIRY DATE / /

Name

Address

..... Postcode

Daytime/Works Tel: (STD CODE) No



Key to headphones
Price - typical retail, to nearest pound.
Type - Opn - open back, vented or velocity type; gives less environmental isolation, but is usually more natural feeling in extended use. Sid - sealed - the headphones form an air seal around the ears, helping reduce sound leakage. IR - Infra red cordless. Ear - in-ear model.

Weight - without cable.
Impedance - in ohms.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to the Directory on page 123 for full test results.

Model	Price	Type	Weight	Impedance	Special
HEADPHONES					
Sony MDR-E515V	12	Ear	5	-	1m lead, mini plug
Sony MDR-V50	13	Sld	-	-	-
Sony MDR-E525	15	Ear	5	-	1m lead, mini plug
Sony MDR-24	15	Opn	-	-	7m, 3.5/6.3mm plug
Sony MDR-W12L	16	Ear	-	-	1.2m mini plug
Sony MDR-008TV	17	Opn	-	-	5m, 3.5/6.3mm plug
Sony MDR-E535	18	Ear	5	-	1.2m lead, mini plug
Sony MDR-44	18	Opn	-	-	7m, 3.5/6.3mm plug
Sony MDR-009TV	19	Opn	-	-	5m, 3.5/6.3mm plug
Sony MDR-CD30	20	Sld	-	-	2m, 3.5/6.3mm plug
Sony MDR-E747MP	20	Ear	6	-	1.2m lead, mini plug
Sony MDR-CD50	20	Sld	180	24	2m, 3.5/6.3mm plug
Sony MDR-5747	20	Ear	6	-	1.2m lead, mini plug
Sony MDR-P1TV	22	Sld	-	-	5m, 3.5/6.3mm plug
Sony MDR-A22L	22	Ear	-	-	1.2m mini plug
Sony MDR-CD250EX	28	Sld	-	-	3m, 3.5/6.3mm lead
Sony MDR-CD450	45	Sld	260	24	3m, 3.5/6.3mm plug
Sony MDR-CD550	60	Sld	270	45	3m, 3.5/6.3mm plug
Sony MDR-D33	70	Sld	120	45	1.5m, 3.5/6.3mm plug
Sony MDR-IF210K	80	IR	170	-	Seven meter range infra red
Sony MDR-D55	90	Sld	120	45	1.5m, 3.5/6.3mm plug
Sony MDR-CD750	90	Sld	290	45	3m, 3.5/6.3mm plug
Sony MDR-D77	120	Sld	140	45	1.5m, 3.5/6.3mm plug
Sony MDR-610k	190	IR	470	-	Seven meter range infra-red
Sony MDR-CD1000	200	Sld	330	45	1.5m, 3.5/6.3mm plug
Stax SR34	169	Opn	170	-	-
Stax SR Gamma	239	Opn	300	-	-
Stax SR84	259	Opn	160	-	-
Stax SR Lambda	349	Opn	325	-	-
Stax Gamma Pro	399	Opn	300	-	-
Stax Lambda Pro	449	Opn	325	-	-
Stax Lambda Sig	549	Opn	325	-	-
Technics RP-HT77	30	Sld	150	32	3m lead
Technics RP-HT86	40	Sld	150	35	3m lead
Technics RP-HT116	60	Sld	190	35	3m lead
Technics RP-F10	100	Sld	300	32	3m lead
Technics RP-F30	180	Sld	340	32	3m lead
Vivanco SR35 Micro	12	Ear	4	18	For personal stereos
Vivanco SR65 Mini	13	Opn	30	32	For portable CD players
Vivanco SR25 Micro	14	Ear	4	18	Includes case
Vivanco SR45 Micro	15	Ear	4	18	Including volume control
Vivanco SR474	32	Opn	110	36	Soft ear cushions
Vivanco SR606	40	Opn	225	32	3.5/6.3mm plug
Vivanco SR808	55	Opn	250	30	3.5/6.3mm plug
Vivanco SR909	70	Opn	285	600	Remote control lead, all plugs
Vivanco IR900	70	Opn	235	-	Infra-red cordless
Vivanco SR1000/1	110	Opn	265	100	In-front localisation
Vivanco SR9001s	120	Opn	280	-	Infra-red cordless

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
Acoustic Energy Aegis 1	452	2x Pt	86	8	150	21,39,26	Stand mount, metal cone
Acoustic Energy Aegis 2	799	2x Pt	86	8	200	33,106,26	Floor, reflex, metal cone
Acoustic Energy AE1	950	2x Pt	88	8	200	26,30,18	Metal dome/cone, solid enc
Acoustic Energy AE2	1175	2x Pt	91	6	200	24,40,32	Twin bass, metal cone
Acoustic Energy AE3	1650	3x Pt	87	4	250	37,27,63	Simplified metal dome/cone
Advent Mini	99	-	88	8	120	16,28,14	Bookshelf/stand mount
Advent Baby 2	149	2x	89	8	75	26,39,15	Bookshelf/stand mount
Advent Graduate	219	2x	89	8	210	28,44,17	Bookshelf/stand mount
Advent Prodigy	299	-	89	8	300	24,68,20	Floor standing, free space
Advent Legacy 2	349	-	90	8	500	38,67,22	Floor standing, free space
Advent Laureate	499	-	90	8	500	21,80,29	Floor standing, free space
Advent Heritage	579	-	90	8	600	25,89,31	Floor standing, free space
Allison AL100	100	2x	90	4	150	33,24,19	Boundary, stand mount
Allison AL105	170	2x	90	4	150	24,37,21	Boundary, stand mount
Allison MS200	220	-	90	4	75	13,25,14	Boundary, stand mount
Allison AL110	220	-	90	4	150	24,40,23	Floor standing, free space
Allison AL115	280	-	90	4	150	28,51,26	Boundary, stand mount
Allison CD6	300	-	90	4	150	29,29,29	Cuboid, wall mount
Allison CD7	380	-	90	4	150	24,70,24	Floor standing, free space
Allison AL120	420	-	90	4	200	28,61,29	Floor standing, free space
Allison CD8	550	-	90	4	200	27,73,27	Floor standing, free space
Allison AL125	650	-	90	4	200	28,78,29	Open space, free standing
Allison AL130	800	-	90	4	200	32,95,34	Open space, free standing
Allison I.C. 10	2500	-	87	6	200	48,102,27	Floor standing, free space
Allison I.C. 20	5500	-	87	6	400	53,122,31	Floor standing, free space
AMC WM50	120	-	86	8	60	19,28,7	Ceiling mount
AMC WM75	160	-	86	8	80	22,30,9	Ceiling mount
AMC WM100	210	-	86	8	100	26,36,10	Ceiling mount
Apogee Grand	0	Ribbon	86	-	-	71,194,86	Three way ribbon, active sub
Apogee Centaur Minor	1345	Hybrid	88	4	100	30,88,20	Ribbon/dynamic
Apogee Ribbon Wall	1690	Hybrid	89	-	-	27,120,7	Ribbon/dynamic

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.

Allison AL110	220	N/A	90	4	150	24.40,23	Floor standing, free space
---------------	-----	-----	----	---	-----	----------	----------------------------



Key to loudspeakers
Price - typical retail, to nearest pound.
Type - 2x, 3x etc - number of independent drive units. Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver. ABR - auxiliary bass radiator. Sub - subwoofer. Uni-Q - KEF prop. coaxial drive unit. Horn - horn loading. MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top.
Sens - output at given power input level.
Impedance - in ohms. Power - maximum recommended amplifier output.
Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to the Directory on page 123 for full test results.

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
Apogee Centaur	2300	Hybrid	88	4	150	33,102,25	Ribbon/dynamic
Apogee CDD Subwoofer	3490	Hybrid	87	-	-	63,38,55	Active moving coil sub
Apogee Stage Sub	3645	MC	86	-	-	58,25,42	Active moving coil sub
Apogee Caliper Sig	3995	Ribbon	87	-	-	58,127	Two way
Apogee Stage	4000	Ribbon	86	-	-	55,82,5	Two way
Apogee Centaur Major	4980	Hybrid	88	4	200	40,141,27	Ribbon/dynamic
Apogee Studio Grand	14900	Hybrid	87	-	-	63,160,55	Three way ribbon, active sub
AR M.5	139	2x	88	6	-	18,21,15	Boundary, bookshelf mount
AR Pi One	149	-	90	8	60	19,32,17	Stand mount, boundary siting
AR Fun Partner	170	-	90	6	75	27,15,20	Utility model
AR Pi Two	199	-	90	8	100	27,44,2	Stand mount, boundary siting
AR M1	199	-	88	8	100	28,27,20	Boundary, bookshelf mount
AR Pi Three	219	-	89	8	100	21,51,22	Stand mount, boundary siting
AR Active Partner	230	Active	-	-	-	19,27,15	Utility model
AR Rock Partner	240	-	90	8	100	24,37,22	Utility powered (active)
AR M2	299	-	90	8	125	24,42,36	Boundary, bookshelf mount
AR Subwoofer 1MS	300	-	90	4	180	30,21,48	Compact subwoofer
AR M3	349	-	90	8	125	24,55,40	Boundary, bookshelf mount
AR Powered Partner	350	Active	-	-	-	19,27,15	Stand mount, free space
AR Pi Four	399	-	88	8	125	25,57,27	Stand mount, free space
AR M4	429	-	88	8	150	20,72,40	Floor standing, free space
AR M5	799	-	90	8	175	22,92,27	Floor standing, free space
AR M6	899	-	90	8	200	22,106,27	Floor standing, free space
Arcam Delta 2	300	2x Pt	88	8	75	22,38,28	Stand mount
ATC SCM10	995	2x IB	80	8	300	18,38,26	-
ATC SCM20	1461	2x IB	83	8	300	31,72,34	Massive build
ATC SCM20 Tower	1999	2x IB	83	8	300	24,103,34	Floor standing SCM20
ATC SCM50	3218	3x Pt	85	8	150	31,72,43	To special order
ATC SCM100	3683	3x Pt	88	8	-	40,84,53	To special order
ATC SCM50A	4497	Active	-	8	350	31,72,48	With crossover and amplifiers
ATC SCM100A	5006	Active	-	8	350	40,84,59	With crossover and amplifiers
Audio Note AN-KB	499	-	90	8	100	28,46,23	Free space, stand mount
Audio Note AN-K/SP	699	-	90	6	100	28,46,23	Free space, stand mount
Audio Note AN-J/B	799	-	93	8	150	38,58,25	Free space, stand mount
Audio Note AN-J/SP	999	-	93	8	150	38,58,25	Free space, stand mount
Audio Note AN-E/B	1299	-	94	8	150	36,84,28	Free space, stand mount
Audio Note AN-E/SP	1599	-	94	8	150	26,84,28	Free space, stand mount
Aura SP-50	400	Pt	87	4	120	21,40,24	Carbon fibre bass unit
B&O Beovox RL1000	215	3x	86	8	60	32,40,13	Simplified RL6000
B&O Beovox CX50	285	2x IB	89	6	100	12,21,21	-
B&O Beovox CX100	395	2x IB	89	6	200	12,32,21	-
B&O Beovox RL6000	435	3x	87	8	100	41,54,18	Simplified RL7000
B&O Beovox 4500	450	2x Pt	87	8	90	45,38,8	-
B&O Beovox RL7000	665	3x	88	8	200	50,70,24	Twin bass
B&O Beolab 4500	1125	Active	-	-	45	45,38,8	Attaches to wall, display
B&O Beolab 6000	1350	Active	-	-	80	20,110,21	Column, two amps, shielded
B&O Beolab 8000	2025	Active	-	-	100	15,132,15	Column, two built in amps
B&O Beolab Penta 3	2375	Active	-	-	150	22,165,34	Line array column, three-way
B&W 2001	120	Pt	87	4	80	18,28,20	Budget hi-fi range, black ash
B&W Solid Team	140	Pt	87	4	75	14,20,14	White & black finish
B&W CWM5	150	2x	89	8	70	16,22,7	In wall
B&W Solid Team Bass	160	Sub	91	4	100	20,45,34	White & black finish
B&W 2002	160	Pt	87	4	80	18,35,20	Budget hi-fi range, black ash
B&W DM600i	190	2x IB	87	4	100	21,36,25	Stand/shelf mount
B&W 2003	190	Pt	89	4	100	20,43,24	Budget hi-fi range, black ash
B&W CWM6	220	2x	89	8	70	23,32,8	In wall
B&W Solid Twin Bass	230	Sub	91	4	150	45,20,60	White & black finish
B&W Solid Monitor	250	Pt	90	8	150	17,24,15	Various colours
B&W DM610i	250	2x IB	89	4	150	24,49,31	Stand/shelf mount
B&W CWM8	250	2x	90	4	100	28,38,9	In wall
B&W 2004	250	Pt	91	4	120	20,65,24	Budget hi-fi range, black ash
B&W Solid Ovale	300	Sat/sub	88	4	100	-	Lifestyle speaker, 3 boxes
B&W Solid Verticale	400	Sat/sub	88	4	100	-	Lifestyle, 3 boxes
B&W DM620i	430	2x ABR	90	4	150	24,75,31	Floor standing
B&W DM630i	700	3x Pt	91	4	200	24,85,41	Floor standing
B&W Matrix 805 V/H	895	Pt	87	8	120	33,33,21	Outdoor tweeter (vert/horiz)
B&W DM640i	900	3x Pt	91	4	200	24,97,41	Floor standing
B&W Matrix 804	1495	Pt	89	8	200	26,92,26	Matrix enclosure
B&W Matrix 803 S2	1945	Pt	90	8	250	26,101,34	Matrix enclosure
B&W Matrix 802 S3	2445	Pt	90	8	500	30,104,37	Matrix enclosure
B&W Matrix 801 S3	3500	Pt	87	8	600	44,100,56	Floor, studio monitor
B&W Silver Signature	4500	Pt	88	8	120	25,45,24	External crossover
Bose XL1000	115	Pt	-	8	50	29,19,17	-
Bose XL2000	160	Pt	-	8	70	36,23,18	-
Bose XL3000	180	Pt	-	8	90	47,29,23	-
Bose 101 M'ble Monitor	190	-	-	4	60	13,23,15	Black finish
Bose XL4000	220	Pt	-	8	100	57,32,30	-
Bose VS100	250	-	-	8	-	23,15,15	-
Bose 151 Environmental	270	-	-	6	60	24,14,16	Waterproof/suitable for extrem
Bose 161 Freestyle	275	-	-	6	60	25,14,16	-
Bose 201 Ser III	290	-	-	8	60	38,20,25	Direct/reflecting technology
Bose C'puter RoomMate	300	Active	-	-	60	24,14,16	Self powered AC/shielded, vol
Bose Video RoomMate	300	Active	-	-	60	24,14,16	Self powered AC/shielded, vol
Bose Roomate II	300	Active	-	-	60	24,14,16	Self powered AC/12V DC
Bose 301 VM	380	-	-	8	75	24,43,27	Direct/reflecting technology

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.

Allison AL110	220	N/A	90
---------------	-----	-----	----



Key to loudspeakers
Price - typical retail, to nearest pound
Type - 2x, 3x etc - number of independent drive units, Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver, ABR - auxiliary bass radiator, Sub - subwoofer, Uni-Q - KEF prop. coaxial drive unit, Horn - horn loading, MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top.
Sens - output at given power input level.
Impedance - in ohms. Power - maximum recommended amplifier output.
Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.



Key to loudspeakers
Price - typical retail, to nearest pound.
Type - 2x, 3x etc - number of independent drive units, Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver, ABR - auxiliary bass radiator, Sub - subwoofer, Uni-Q - KEF prop. coaxial drive unit, Horn - horn loading, MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top.
Sens - output at given power input level.
Impedance - in ohms. Power - maximum recommended amplifier output.
Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
Bose 305	430	2x	-	8	100	23,45,28	Tall stand mount, boundary
Bose A'mass AM3 II	500	-	-	4-8	50	36,20,20	Acoustimass technology
Bose 401	500	-	-	4	100	30,30,76	Direct/reflecting technology
Bose SE-5 Ser II System	760	-	-	4-8	100	90,100,18	
Bose A'mass AM511	760	-	-	4-8	200	49,35,19	Acoustimass direct/reflecting
Bose A'mass AM7	830	-	-	4-8	100	35,49,19	Acoustimass direct/reflecting
Bose 601 MKIII	880	-	-	8	200	32,31,76	Direct/reflecting technology
Bose 901 V1	1650	1x	-	8	-	33,53,32	Direct/reflecting technology
Boston Acoustics HD5	139	2x	89	8	50	25,16,18	Bookshelf, black
Boston Acoustics 325	139	-	90	4	50	17,17,5	Wall/ceiling white flush mount
Boston Runabout	169	-	89	8	50	22,15,16	White indoor/outdoor system
Boston Acoustics HD7	169	2x	90	8	75	36,23,18	Bookshelf, black
Boston Satellites	170	2x	89	8	-	-	Satellite speakers
Boston Acoustics 350	179	-	-	4	50	24,17,6	Wall/ceiling white flush mount
Boston Acoustics 335	179	-	90	8	50	18,9	Wall mount, round
Boston Acoustics HD8	199	-	90	8	75	46,29,20	Stand/shelf, black
Boston 360 Ser II	209	-	89	8	60	22,15,7	Wall/ceiling, white, flush mou
Boston Acoustics HD9	249	2x ABR	90	8	100	62,32,25	Stand/shelf mount
Boston Acoustics 380	249	-	90	8	75	31,24,8	Wall/ceiling white flush mount
Boston Acoustics Voyager	299	-	89	8	60	26,16,17	White indoor/outdoor, metal
Boston Acoustics SW10	449	Sub	-	-	100	34,17,42	Powered subwoofer
Boston SubSat Six	450	Sat/sub	89	8	100	-	Passive subs and two satellite
Boston SubSat 7	549	-	89	8	125	-	PAssive sub & 2 satellites
Boston Lynfield 300L	1499	-	83	8	250	23,34,28	Stand mount, black
Boston Lynfield 500L	4449	-	85	5	350	122,23,47	Free stand, separate bass/top
Canon S-30	180	2x Pt	90	6	75	25,31,28	Wide imaging stereo
Canon V-100	210	2x Pt	90	4	75	25,325,17	Corner mount
Canon V-SB100	250	Sub	88	6	150	37,34,21	Subwoofer for V100
Canon S-50	350	2x Pt	89	8	100	25,31,25	Wide imaging stereo
Canon S-70	695	2x Pt	89	6	150	25,780,25	Wide imaging stereo
Castle Trent II	189	Pt	89	8	60	20,34,18	Shelf/stand, nine finishes
Castle Durham II	249	Pt	89	8	75	22,40,23	Shelf/stand, nine finishes
Castle Durham 900	279	Pt	90	8	85	22,40,23	Shelf/stand, nine finishes
Castle York	349	Pt	89	8	100	26,43,22	Shelf/stand, nine finishes
Castle Chester	649	-	90	8	100	23,91,25	Free standing, nine finishes
Castle Howard	999	-	90	8	125	26,104,41	Free standing, nine finishes
Castle Winchester	1499	3x	90	8	150	42,108,23	Free standing, quarter wave
Celestion 1	109	-	86	8	50	16,27,21	
Celestion CSC	129	-	89	6	75	33,13,15	
Celestion 3 MKII	129	-	88	8	75	21,31,18	Integrated LF/baffle moulding
Celestion CS135	139	-	86	8	90	52,19,34	
Celestion CS2	149	-	86	8	60	16,29,22	
Celestion CS4	169	-	87	8	75	18,33,23	
Celestion 5 MkII	169	-	89	8	90	25,35,21	Larger version of Celestion 3
Celestion 9	269	-	89	8	100	21,50,25	
Celestion 15	389	-	89	8	100	21,100,23	
Celestion SL6Si	429	2x	84	8	120	20,38,27	Compact stand mount, free spac
Celestion CS6	449	-	88	8	100	19,85,31	
Celestion CS8	499	-	88	8	120	19,100,31	
Celestion 100	539	-	84	8	120	21,42,26	
Celestion SL12si	629	-	86	8	150	20,53,29	
Celestion SL600si	820	-	82	8	120	20,37,24	Aerolam lightweight enclosure
Celestion 300	1099	-	84	8	120	21,97,33	
Celestion 700SE	1435	-	82	8	120	20,37,24	
Cerwin Vega L-7	150	2x	92	8	75	23,36,23	Bookshelf, high sensitivity
Cerwin Vega VS8	250	2x	94	6	100	28,51,29	Bookshelf
Cerwin Vega SAT-6	300	Sat/sub	95	-	125	22,25,32	3 box satellite/subwoofer
Cerwin Vega VS10	350	3x	95	6	125	33,70,29	Floor standing
Cerwin Vega VS12	550	3x Pt	97	4	250	42,81,38	Floor standing
Cerwin Vega DC10	550	3x Pt	96	-	200	29,94,35	Floor standing
Cerwin Vega DC12	650	3x Pt	98	-	300	36,98,35	Floor standing
Cerwin Vega VS15	700	3x Pt	102	4	400	46,90,47	Floor standing
Cerwin Vega DC15	850	3x Pt	100	-	500	44,103,46	Floor standing
Cerwin Vega VS15	1300	6x Pt	103	4	600	44,135,46	Floor standing, hi sensitivity
Chord Sys Audio 905	249	2x	-	-	-	-	
Clements 300Si	645	-	89	4-8	90	24,36,36	
Clements 600Si	995	-	88	4-8	100	24,81,36	
Clements Reference 1	1695	-	86	8	100	20,43,29	
Clements Reference 7	3750	-	88	4.5	200	25,114,4	
Dali 102	250	-	88	6	100	21,32,26	
Dali 104	400	-	93	4	120	86,22,27	
Dali 400	700	-	93	4	180	24,97,34	
Dali Skyline 1000	1600	-	88	-	120	-	
Dali Skyline 2000	2200	-	88	4	120	51,160,45	
Dawn Audio Chorus BS	482	2x IB	89	8	-	26,38,21	Bookshelf
Dawn Audio Chorus FS	698	2x IB	89	8	-	26,88,21	Floor standing
Dawn Audio Symphony	1995	3x IB	91	8	-	34,113,32	Floor standing
Denon SCM2	80	IB	87	6	70	19,28,20	UK designed & built
ESCA SERVA A.2	1850	2x Pt	80	8	150	22,102,30	True ribbon tweeter
Epos ES11	395	Pt	87	8	75	20,38,25	Free space, stand mount
Epos ES14	595	Pt	87	8	100	23,49,29	Free space, stand mount
Faraday FS1	225	-	87	8	75	27,46,25	
Faraday SG	345	-	89	4	75	27,26,25	
Faraday FS5	575	-	90	4	80	27,46,25	
Fullers Sultan	399	2xPt	91	8	50	24,51,30	3 finishes

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.

Allison AL110 220 N/A 90 4 150 24,40,23 Floor standing, free space

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
Fullers Sultan H.E.	439	2xPt	96	8	90	24,51,30	High sensitivity, 3 finishes
Fullers Pharaoh 1	649	2xPt	88	8	60	20,30,20	Curved sides, various finishes
Fullers Audio Pharaoh 1	649	-	88	8	70	20,30,20	
Fullers Sphinx	839	3x	89	8	70	25,91,30	Floor standing, var finishes
Fullers A Sphinx	999	-	89	8	70	25,91,30	
Fullers Pharaoh 2	1200	3xPt	88	8	80	39,100,31	Pharaoh 1 with added bass encl
Fullers A Pharaoh 2	1200	-	88	8	80	39,100,31	
Fullers Pharaoh 3	2499	4xPt	88	8	150	46,118,45	Pharaoh + bass & subbass encls
Fullers A Pharaoh 3	2499	-	88	-	-	46,118,45	
Genelec 1019A	1572	Active	-	-	28	23,31,25	
Genelec Blamp 1031A	2068	Active	-	-	104	25,39,29	
Genelec Triamp S30	3055	Active	-	-	108	32,50,32	
Genelec Triamp 1037A	4982	Active	-	-	191	40,68,30	
Genexxa GX330	80	-	-	6	50	35,21,24	
Genexxa GX650	140	-	90	8	60	23,76,26	
GLL Arena	89	-	87	6	70	26,23,14	
GLL Maxim	119	-	86	6	100	10,26,17	
GLL Mezzo	159	-	88	6	100	21,36,25	
GLL Magnum	199	-	86	6	100	25,42,29	
Goodmans Active 75	65	Active	-	-	80	-	
Goodmans M100	80	2x	86	8	75	17,26,20	Bookshelf, close to wall
Goodmans HT100	100	-	86	8	60	25,53,20	
Goodmans HT170	150	-	92	8	100	25,70,22	
Grundig MBX310	80	3xPt	-	4	70	18,42,29	3 drivers, 2 way
Grundig BX1	150	2x Pt	-	4	60	23,40,30	16 litre
Grundig BX2	230	3x Pt	-	4	80	24,49,33	22 litre
Grundig BX3	350	2x Pt	-	4	120	24,107,34	53 litre, 3 drivers, 2 way
Harbeth HL-P3	479	IB	83	4	100	19,31,17	Free standing, shielded, biwir
Harbeth BBC LS3/5A	539	IB	82	10	75	19,31,19	Free standing
Harbeth HL-5	999	Pt	86	8	100	63,33,32	Free standing
Harbeth BBC LS5/12A	999	Pt	82	8	120	60,19,22	Free standing, biwire, shielded
Harman-Kardon LS0200	149	-	87	8	50	21,35,30	
Harman-Kardon LS0300	199	-	88	8	75	21,38,80	
Helius Syrius IV	830	-	90	4	200	23,61,28	
Helius Syrius III	1330	Pt	90	8	250	31,97,16	
Helius Syrius II	1975	Pt	95	4	300	36,107,16	
Helius Syrius I	2500	Pt	93	4	500	36,107,16	Floor standing, biwire
Heybrook Prima	130	Pt	87	6	60	20,29,18	Bookshelf or stands
Heybrook Solo	189	2x	89	6	75	23,36,23	Boundary design, stands requir
Heybrook HB1	259	2x	90	8	75	29,47,23	Boundary, stands required
Heybrook Trio	359	2x	89	8	75	24,47,25	
Heybrook Quartet	555	-	90	8	80	24,41,22	
Heybrook Sextet	1099	3x	88	8	200	27,90,20	With stands
Impulse H7	835	Horn	88	8	70	14,80,29	Floor standing
Impulse H6	1425	Horn	89	8	100	19,91,35	Floor standing
Impulse H5	1675	Horn	93	8	100	27,90,45	Floor standing
Impulse H2	2385	Horn	94	8	100	26,116,45	Floor standing
Impulse H1	3400	Horn	96	8	100	36,103,68	Floor standing
Infinity Ref 10	200	IB	90	6	75	23,37,23	Pedestal
Infinity Ref 20	300	IB	90	6	100	27,47,26	Pedestal
Infinity Inf IV Sat	300	IB	90	6	80	16,24,18	Wall mount, shielded
Infinity Ref 30	400	IB	90	6	100	27,84,25	Floor standing
Infinity Inf Micro	400	Pt/sub	90	6	100	21 x 127d	Two satellites and passive sub
Infinity SSW-10 Sub	500	Active	-	-	-	34,34,33	
Infinity Modulus	795	Pt	86	5	200	27,31,18	High end compact
Infinity Modulus Sats	795						



Key to loudspeakers
 Price - typical retail, to nearest pound.
 Type - 2x, 3x etc - number of independent drive units. Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver, ABR - auxiliary bass radiator, Sub - subwoofer, Uni-Q - KEF prop. coaxial drive unit, Horn - horn loading, MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top.
 Sens - output at given power input level.
 Impedance - in ohms. Power - maximum recommended amplifier output.
 Size - width x height x depth in cm.
 Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.



Key to loudspeakers
 Price - typical retail, to nearest pound.
 Type - 2x, 3x etc - number of independent drive units. Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver, ABR - auxiliary bass radiator, Sub - subwoofer, Uni-Q - KEF prop. coaxial drive unit, Horn - horn loading, MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top.
 Sens - output at given power input level.
 Impedance - in ohms. Power - maximum recommended amplifier output.
 Size - width x height x depth in cm.
 Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
Jamo D365	390	-	96	4-8	200	46,78,35	
Jamo BX150	390	3x Pt	82	8	150	28,83,31	Floor mount
Jamo Silhouette	400	-	90	5	80	25,122,17	
Jamo SW500 System	430	2x	90	8	140	41,38,53	Passive stereo subwoofer
Jamo BX200	450	3x Pt	83	8	250	43,72,33	Floor mount
Jamo 477	500	2x Pt	86	4	100	19,77,29	Floor standing
Jamo 507	700	3x Pt	88	4	150	22,91,37	
Jamo 707	900	3x Pt	90	4	200	24,104,39	
Jamo Oriol	6000	3x	87	6	300	40,178,30	Floor standing, coupled cavity
JBL Control One	115	2xPt	87	4	150	24,156,14	Shielded, wall mountable
JBL 4208	449	-	89	8	300	29,45,23	
JBL L1	479	2x Pt	87	8	200	25,40,20	Asymmetric, time aligned
JBL HTS-1	629	-	-	-	150	-	
JBL L3	699	2x Pt	89	8	200	30,86,24	Asymmetric, time aligned
JBL HTS-2 system	800	-	-	-	150	-	
JBL HTS-3	999	-	-	-	180	-	
JBL L5	1299	3x Pt	90	6	300	26,45,33	Asymmetric, time aligned
JBL Ti 1000	1500	2x IB	89	4	150	20,30,13	Asymmetric, double wall
JBL L7	1699	4x Pt	89	4	200	117,25,45	Asymmetric, time aligned
JBL Ti 2000	2000	3x IB	89	4	200	33,82,30	Asymmetric, double wall
JBL Ti 3000	2499	3x IB	90	6	200	46,105,35	Asymmetric, double wall
JBL i 5000	3499	3x IB	91	6	300	48,114,38	Asymmetric, double wall
Jordan Watts JHFLG	420	-	-	-	-	-	Flagon pottery colour
Jordan Watts JH200	510	1x IB	86	8	80	19,33,17	Bookshelf or stand mount
Jordan Watts JH400	820	1x IB	86	8	80	28,32,17	Marble finish available E970
J Watts Aspect JH1+1	2745	2xIB	85	8	100	40,93,23	Matt - alt finishes extra
Jordan Watts JH2K	3230	-	-	-	-	-	
J Watts Classic JH2KM	4250	2x	87	8	150	47,82,34	Line tweeter array
J Watts Classic JH5K	4875	2x IB	89	8	250	47,126,40	Floor stand, line array
J Watts Classic JH5KM	5860	2x	89	8	250	47,125,40	Line driver array
J Watts Classic JH10K	9340	2x IB	92	8	500	47,156,40	Floor stand, line array
Jordan Watts JH10EM	10495	2xIB	92	8	500	47,156,40	Line driver array
JPW Minim SGL SHD	50	2x	87	6	70	13,23,10	
JPW Satellite SGL SHD	50	2x	85	8	70	13,23,10	
JPW Satellite	80	2x	85	8	70	13,24,10	
JPW Minim	80	2x	87	6	70	19,28,20	135mm bass, 14mm treble
JPW Minim Pair Solid	89	2x	87	6	70	19,28,20	
JPW Sonata Vinyl	100	2x	87	8	70	13,23,10	
JPW Sonata	120	2x	87	8	70	23,32,22	165mm bass, 14mm treble
JPW Subwoofer	130	1x	95	8	80	25,51,27	
JPW Sonata Plus	140	2x	87	8	70	23,32,22	165mm bass, 25mm treble
JPW P1 Vinyl	150	2x	89	8	70	13,23,10	
JPW P1	170	2x	89	8	70	26,44,25	200mm bass, 19mm treble
JPW AP2	200	2x	89	8	80	26,44,25	200mm bass, 19mm treble
JPW AP3	230	2x	88	8	100	26,52,29	200mm bass, 19mm treble
JVC SPX220TBK	100	3x Pt	90	8	60	24,66,24	
JVC SPX550BK	120	3x Pt	90	8	60	24,66,24	
JVC SPX770BK	150	3x Pt	90	8	80	28,75,25	
JVC SPX990BK	230	3x Pt	91	8	100	31,86,27	
JVC SX-SW9	300	2xPt	90	6	100	-	Satellite subwoofer system
JVC SX911WD	660	3x Pt	91	6	150	38,63,35	
JVC SX500	700	2x Pt	90	6	180	27,45,28	
KAL Mini-Ref MKII	395	-	86	8	120	23,27,17	
KAL Mini-Tower	619	-	89	6	150	17,90,22	
KAL Compact Ref	650	-	89	8	140	23,36,27	
KAL Tuneal	795	-	89	8	150	23,100,27	
KAL Trans-double	1500	-	89	8	250	23,112,36	
KAL Warlock	1600	-	90	6	250	25,113,36	
KEF K120	169	2x IB	87	8	80	21,34,25	Stand/bookshelf
KEF Q10	199	2x Pt	88	6	100	19,28,24	Uni Q, shielded
KEF K140	239	2x IB	89	8	100	26,49,25	Stand/bookshelf
KEF K160	329	2x ABR	89	8	150	26,75,25	Floor standing
KEF Q30	349	2x Pt	88	6	125	19,70,28	Uni Q, shielded, floor standin
KEF Q60	419	2x Pt	90	6	175	19,102,28	Uni Q, 3 shielded, floor standin
KEF Q50	499	3x Pt	89	6	150	19,80,28	Uni Q, shielded, floor standin
KEF 101/3	549	2x	89	4	150	22,50,27	Uni Q bass EO option
KEF Q80	569	2x ABR	89	8	125	25,86,28	Uni Q floor standing
KEF Q70	699	3x	90	6	175	19,102,28	Uni-Q, shielded, floor standing
KEF Q90	739	3x Pt	89	8	150	25,89,32	Uni Q floor standing
KEF 102/2MS	749	2x	87	6	150	22,33,27	Uni Q, shielded shelf/stand mo
KEF 103/4MS	1199	3x Pt	91	4	200	22,90,31	Uni Q, shielded, coupled cavit
KEF 103/4S	1249	3x CC	91	4	200	22,90,31	'Audiophile' 103/4MS
KEF 104/2	1595	3x	92	4	250	28,90,41	Floor standing, coupled cavity
KEF 105/3	2295	4x Pt	93	4	300	28,111,41	Uni Q, coupled cavity bass
KEF 105/3S	2345	4x Pt	93	4	300	28,111,41	Uni Q, audiophile 105/3
KEF 107/2	3695	3x	92	4	350	33,117,45	Floor standing, Kube equaliser
Kenwood LS-770G	260	Pt	88	4	110	27,48,26	European design
Kenwood LS-300G	300	Pt	82	8	60	21,35,30	European design
Kenwood LS-880G	360	Pt	86	4	160	28,51,26	Titanium tweeter
Kenwood LS-500G	500	Pt	87	4	100	22,44,28	European design
Kenwood LS-700G	1200	Pt	87	4	120	30,90,30	European design
Kenwood LS-1000G	1700	Pt	87	4	160	34,110,38	European design
Keswick Audio Aria	269	2x	88	8	70	21,42,27	Bookshelf
Keswick Audio Volante	499	-	90	8	85	21,85,27	Floor standing
Keswick Audio Figaro	799	-	86	8	125	19,28,27	Features solid timbers

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
Keswick Audio Alto	999	Sub	87	8	150	19,70,27	To match Figaro
Koss SA10	19	Active	-	-	-	-	High imp
Koss SA30	36	Active	-	-	-	-	High impedance
Lineaum LFX Wood	649	Hybrid	90	-	-	16,22,18	Modified ribbon/dynamic
Lineaum LSII	991	Hybrid	90	-	-	30,150,38	Modified ribbon/dynamic
Lineaum LFX Corian	1399	Hybrid	90	-	-	16,22,18	Modified ribbon/dynamic
Linn Index	259	2x IB	87	8	-	21,44,24	30 watts minimum
Linn Tukan	398	2xIB	87	8	30	19,30,18	Multipurpose
Linn Keilidh Passive	595	2x IB	87	4	60	20,83,28	Floor standing, 60w min
Linn Keilidh Aktiv	1090	2x IB	-	-	-	20,83,28	Floor standing, boundary
Linn Kaber Passive	1298	3x IB	87	4	60	20,90,28	Integral stands, 60w minimum
Linn Kaber Aktiv	1995	3x IB	-	-	-	20,90,28	Integral stands, boundary
Linn Keltic Aktiv	4400	3x IB	-	-	-	26,104,37	Integral stands, boundary
Linn Voice Tone Scout	5000	-	99	8	100	64,110,70	Floorstanding, three-way
Living Voice Air Partner	11990	-	99	8	100	64,160,90	Floorstanding, Vitavox drivers
Lowther Fidelio	1299	Horn	96	8	100	29,100,43	
Lowther Academy	1499	Horn	98	4	100	29,100,43	16ohm option
Lowther Bel Canto	1899	Horn	97	8	100	28,132,44	Including adjustable stand
Lowther Delphic	2195	Horn	98	4	100	28,137,44	With adjustable stand, 16ohm o
Lumley Reference LM4	375	2x	86	6	120	18,36,22	Stand mount
Lumley Reference LM5	499	2x	88	6	150	25,46,21	Stand mount
Lumley Reference LM6	650	2x	88	6	150	25,81,21	Floor standing
Lumley Reference LM3	895	3x	90	8	120	27,87,28	Floor standing
Lumley Reference LM2	2300	4x	88	8	200	33,110,29	Open baffle
Lumley Reference LM1	8500	5x	89	4	500	71,122,40	2 box, open baffle
MAG Audio Audio A90	3600	Ribbon	80	3.7	300	52,150,8	Two-way full range ribbon
Magnepan SMGa	688	-	90	8	150	-	
Manticore Minaret	450	IB	94	8	100	23,15,11	Nearfield monitor
Manticore Minaret F1	750	IB	94	8	100	23,15,11	Nearfield monitor
Manticore Matisse	1300	-	90	8	200	100,28,22	Fibre/mat cabinets
Martin-Logan Statement	POA	Hybrid	87	-	-	23,140,10	ESL/dynamic, biwire,
Martin-Logan Aeriuss	2222	Hybrid	89	-	-	23,122,30	Two-way
Martin-Logan Stylos	2495	Hybrid	2x	88	-	23,35,28	In wall
Martin-Logan Sequel II	3222	Hybrid	89	-	-	31,160,29	Dynamic bass/electrostatic, tw
Martin-Logan CLS liz	4333	ESL	86	-	-	62,127,32	Full range panel
Martin-Logan Quest	4991	Hybrid	90	-	-	42,160,29	Dynamic bass/electrostatic, tw
M-L Monolith IIP	8730	Hybrid	89	-	-	59,163,28	ESL/dynamic, two-way
M-L Monolith IIX	9354	Hybrid	89	-	-	59,163,26	ESL/dynamic, active crossover
Metaxas Empress	3850	ESL	88	8	100	50,150,8	Full range single panel ESL
Metaxas Czar	8250	ESL	94	8	100	70,230,8	Full range 3-panel ESL
Metaxas Emperor	19500	ESL	99	8	250	100,230,8	Full range, multi-panel ESL
Mission 760i	130	2x Pt	89	6	75	18,30,20	Stand mount, boundary siting
Mission 760i SE	150	2x Pt	89	6	75	18,30,20	Stand mount, boundary siting
Mission 780	200	2x pt	89	6	75	18,30,26	Stand mount, near wall siting
Mission 762i	250	2x Pt	92	8	125	25,50,29	Stand mount, boundary siting
Mission 751	300	2x Pt	89	6	75	19,32,27	Stand mount, inverted
Mission 763i	380	2x Pt	92	8	125	25,80,29	Floor standing, near wall siti
Mission 752	500	2x Pt	90	8	125	20,84,26	Floor stand, near wall siting
Mission 765i	680	2x Pt	93	4	200	25,100,34	Floor stand, free space
Mission 753	700	2x Pt	90	6	150	21,88,32	Floor stand, transverse folded
Modulus Subwoofer	1750	Active	-	-	250	49,45,45	Variable phase, high/low filter
MA Monitor 1 Gold	190	2x IB	88	8	70	16,24,16	Miniature stand/shelf mount
Monitor Audio MA201	250	2xPt	90	8	100	22,41,27	Gold dome tweeter, pulp bass
MA Monitor 7 Gold II	250	2x Pt	89	8	7		



Key to loudspeakers Price - typical retail, to nearest pound. Type - 2x, 3x etc - number of independent drive units, Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver, ABR - auxiliary bass radiator, Sub - subwoofer, Uni-Q - KEF prop. coaxial drive unit, Horn - horn loading, MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top. Sens - output at given power input level. Impedance - in ohms. Power - maximum recommended amplifier output. Size - width x height x depth in cm.

Products highlighted in red have been tested in Hi-Fi Choice. Please refer to The Directory on page 123 for full test results.



Key to loudspeakers Price - typical retail, to nearest pound. Type - 2x, 3x etc - number of independent drive units, Pt - ported, IB - sealed, Active - dedicated active crossover, needs amps for each driver, ABR - auxiliary bass radiator, Sub - subwoofer, Uni-Q - KEF prop. coaxial drive unit, Horn - horn loading, MC - moving coil, ESL - electrostatic, CC - coupled cavity, Hybrid - dynamic

bass/ESL or ribbon top. Sens - output at given power input level. Impedance - in ohms. Power - maximum recommended amplifier output. Size - width x height x depth in cm.

Products highlighted in red have been tested in Hi-Fi Choice. Please refer to The Directory on page 123 for full test results.

Table with columns: Model, Price, Type, Sens, Impedance, Power, Size, Special. Lists various loudspeaker models including Origin Live, Philips Legend, Pioneer, Polk, and others.

Listings marked in red (as shown below) are covered in the Hi-Fi Choice Directory, see page 123. Allison AL110 220 N/A 90 4 150 24,40.23 Floor standing, free space

Table with columns: Model, Price, Type, Sens, Impedance, Power, Size, Special. Lists various loudspeaker models including Royd The Sorcerer, Ruark, Sansui, SD Acoustics, and others.

Listings marked in red (as shown below) are covered in the Hi-Fi Choice Directory, see page 123. Allison AL110 220 N/A 90 4 150 24,40.23 Floor standing, free space

110 HI-FI CHOICE BUYER'S GUIDE



Key to receivers

Price - typical retail, to nearest pound.
 A/V - minimum requirements - Dolby Surround/Pro-Logic circuitry
 Power - watts/channel - both channels driven RMS 8ohms, 20Hz - 20kHz
 Wavebands - FM, L - long wave, M - medium wave.
 Presets - number thereof.
 In/outputs - MM/MC - moving coil/moving magnet, L - line, T - tape.

V - audio input or tape circuit with video signal routing. Remote - control. Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Sens	Impedance	Power	Size	Special
LOUDSPEAKERS							
UKD Callas	750	Pt	88	8	120	34,22,32	Solid mahogany, stand mount
UKD Super Pavarotti	875	Pt	88	8	150	23,55,23	Solid mahogany, stand mount
UKD Caruso	1850	Pt	88	8	200	22,97,28	Solid walnut, floor standing
Vandersteen 2Ce	1395	4x	88	7	160	41,101,27	Free standing, phase aligned
Visonic David 5001	132	-	-	-	4-8	50	10,17,10
Visonic Sub 4	154	-	-	-	4-8	100	36,49,31
Visonic David 6001	163	-	-	-	4-8	60	13,20,12
Visonic David 8001	228	-	-	-	4-8	80	16,25,17
Wharfedale Centre Cube	45	Pt	87	8	75	14,13,12	Shielded centre speaker
Wharfedale Modus Cube	69	Pt	87	8	75	14,17,12	Shielded
Wharfedale CRS3	89	2x Pt	89	8	100	22,38,17	Stand/bookshelf mount
Wharfedale D30.2	99	Pt	89	8	100	22,38,17	Stand/bookshelf mount
Wharfedale Modus Centre	99	Pt	87	8	75	46,14,12	Shielded centre speaker
Wharfedale Modus Micro	99	2x Pt	86	8	75	14,23,12	Shielded
Wharfedale Diamond V	129	Pt	87	8	100	18,26,20	Stand mount, near wall
Wharfedale CRS5	129	2x Pt	89	8	140	26,48,20	
Wharfedale Modus Mini	129	ABR	86	8	75	14,39,12	Shielded two-way
Wharfedale Modus Sub-bass	139	Pt	88	8	200	57,23,26	Two channel double tuned sub-w
Wharfedale 415	149	IB	87	8	100	24,35,20	
Wharfedale CRS7	199	Pt	91	8	150	26,60,21	
Wharfedale 425	199	IB	88	8	100	26,40,25	
Wharfedale 535	249	IB	90	8	120	27,48,29	
Wharfedale CRS9	299	Pt	93	8	160	31,80,28	Floor standing, three way
Wilson X1 Grand Slam	0	3x	94	-	-	-	Three-way reference
Wilson Puppy II	5500	Sub	91	-	-	25,53,35	Passive subwoofer for WATT
Wilson WATT III	7645	2x	91	-	-	27,31,36	
Wilson WHOW II	12500	Sub	98	-	-	88/65,36	Active subwoofer for WATT
Yamaha NS-C80	99	-	90	6	80	14,45,17	
Yamaha NS-E80	120	-	90	6	50	27,20,7	
Yamaha NS-C110	149	-	90	6	120	15,47,18	
Yamaha NS10M	250	-	90	8	100	21,38,20	
ZYP A1	199	IB	88	8	50	14,22,12	Wall mount
ZYP A1T	219	IB	88	8	50	14,22,12	Magnetically shielded
ZYP A2S	299	IB	88	8	50	22,14,12	Studio nearfield monitor

Model	Price	A/V	Power	Wavebands	Presets	In/outputs	Remote	Size	Special
RECEIVERS									
B&O Beomaster 7000	835	N	75	FM,M,L	20	MM,2L,2T	Y	-	
Denon DRA-345R	250	N	45	FM,M	24	MM,3L,1T	Y	44,12,32	System remote
Denon DRA-545RD	320	N	60	FM,M	24	MM,3L,2T	Y	44,12,32	RDS
Denon AVR-1000	520	Y	70	FM,M	16	MM,2L,2T	Y	44,15,33	Auto input balance
Dual CR900RS	200	N	55	FM,M,L	30	MM,4L,2T	Y	44	
Grundig R210	170	N	50	FM,M,L	59	MM,5L	Y	36,12,30	Gain switch, remote
Grundig R2	250	N	50	FM,M,L	59	MM,5L	Y	44,14,30	RDS, Radio text, remote
Harman-Kardon HK3300	379	N	20	FM,M	-	MM,3L,2T	Y	45,13,35	
Harman-Kardon HK3400	499	N	35	FM,M	-	MM3L,2T	Y	45,13,35	
Harman-Kardon HK3500	699	N	50	FM,M	-	MM,4L,2T	Y	45,13,35	
Harman-Kardon HK3600	799	N	75	FM,M	-	MM,4L,2T	Y	45,13,35	
Harman-Kardon AVR-30	999	Y	50	FM,M	16	MM,3L,3T,6V	Y	45,13,35	Dolby Pro Logic
JVC RW212BX	200	N	40	FM,M,L	40	MM/MC,4L,3T	Y	44,13,34	
JVC RX-212BXK	200	N	50	FM,M,L	40	MM,3L,1T	Y	44,13,34	4ch surround
JVC RX-308BK	250	N	50	FM,M,L	40	MM,3L,1T	Y	44,13,34	4 channel surround
JVC RX-508VBK	350	Y	50	FM,M,L	40	MM,1L,3T	Y	44,13,34	5ch Dolby Pro Logic
JVC RX-808VBK	600	Y	70	FM,M,L	40	MM,1L,3T	Y	44,16,40	5ch Dolby Pro Logic
JVC RX-1010VTN	920	Y	120	FM,M	-	MM/MC,4L,3T	Y	44,13,34	Dolby Pro Logic
Kenwood KR-A0406	230	N	80	FM,M	20	MM,3L,2T	Y	44,13,33	RDS
Kenwood KR-V6060	350	Y	100	FM,M	20	MM,3L,2T	Y	44,15,40	RDS
Kenwood KR-V7050	400	Y	100	FM,M	20	MM,3L,2T	Y	44,15,40	RDS
Marantz SR-53	270	N	50	FM,M,L	30	MM,3L,1T	Y	43,14,34	
Marantz SR-63	330	N	80	FM,M,L	30	MM,3L,1T	Y	43,14,34	
Marantz SR-73	550	Y	75	FM,M	30	MM,3L,3T	Y	43,15,38	Dolby Pro Logic
Marantz SR-82	850	Y	75	FM,M	30	MM,3L,2T	Y	43,17,43	Dolby Pro Logic, multi-room
NAD 701	259	N	25	FM,M	24	MM,2L,1T	Y	-	
NAD 705	329	N	40	FM,M	39	MM,2L,2T	Y	-	
Philips FR940	450	Y	100	FM,M,L	30	MM,4L,4T	Y	44,14,30	Dolby Pro Logic
Pioneer SX-102	220	N	55	FM,M	30	MM,2L,2T	N	42,14,29	
Pioneer SX-202R	240	N	45	FM,M	30	MM,2L,2T	Y	42,14,29	
Pioneer SX-302	300	N	45	FM,M	30	MM,2L,2T	Y	42,13,34	
Sansui RZ790	250	N	30	FM,M	30	MM,2L,2T	Y	-	
Sansui RZ-3500 II	370	N	30	FM,M	30	MM,2L,2T	Y	-	
Sherwood RX1010	120	N	30	FM,M	-	MM,2L,1T	N	-	
Sherwood RX2010	140	N	50	FM,M	-	MM,3L,1T	N	-	
Sherwood RX4010R	180	N	60	FM,M	-	MM,3L,1T	N	-	
Sherwood RV5030R	330	Y	80	FM,M,L	-	MM,4L,4T	Y	-	Dolby Pro Logic
Sherwood RV6010R	350	Y	100	FM,M,L	-	MM,4L,4T	Y	-	Dolby Pro Logic
Sherwood RV6030R	400	Y	100	FM,M,L	-	MM,4L,4T	Y	-	Dolby Pro Logic
Sony STRD311	230	Y	60	FM,M,L	30	MM,2L,2T	Y	43,14,30	System remote
Sony STRD511	280	Y	50	FM,M,L	30	MM,3L,2T	Y	43,14,30	Dolby Pro Logic
Sony STRD611	330	Y	60	FM,M,L	30	MM,3L,2T	Y	43,14,30	Dolby Pro Logic
Teac AG-V3020	450	Y	95	FM,M	30	MM,4L,3T	Y	44,16,38	Dolby Pro Logic
Technics SA-GX130DL	230	N	60	FM,M,L	30	MM,2L,2T	Y	43,13,31	
Technics SA-GX230DL	270	Y	80	FM,M,L	30	MM,2L,2T	Y	43,13,31	Non-Dolby

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.

Allison AL110	220	N/A	90	4	150	24,40,23	Floor standing, free space
---------------	-----	-----	----	---	-----	----------	----------------------------



Key to systems

Price - typical retail, to nearest pound.
 Sources - CD - compact disc, R - radio tuner, Tu - turntable, T - cassette tape,
 Y - video signal routing (composite and/or S-Video).
 Power - output power in watts, per channel, RMS.

Size - main unit dimensions - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	A/V	Power	Wavebands	Presets	In/outputs	Remote	Size	Special
RECEIVERS									
Technics SA-GX350L	330	Y	80	FM,M,L	30	MM,4L,1T	Y	43,14,36	Dolby Pro Logic
Technics SA-GX550L	450	Y	100	FM,M,L	30	MM,3L,1T	Y	43,16,36	Dolby Pro-Logic
Yamaha RX-360	240	N	40	FM,M	-	MM,3L,1T	Y	-	
Yamaha RX-V470	400	Y	50	FM,M	-	MM,6L,2T	Y	-	Dolby Pro Logic

Model	Price	Source	Power	Size	Special
SYSTEMS					
Aiwa NSX-270	280	CD,R,2T	20	-	Mini, remote
Aiwa NSX-400	300	CD,R	25	-	Mini, single box
Aiwa NSX-340	300	CD,R,2T	25	-	Mini, 3-CD player
Aiwa LCX-7	300	CD,R,T	15	14,24,26	Micro
Aiwa NSX-430	330	CD,R,2T	40	-	Mini, inc front surround spkrs
Aiwa NSX-520	350	CD,R,2T	40	-	Mini, 3-CD player
Aiwa NSX-450G	350	CD,R,T	25	-	Mini, CD Graphics
Aiwa LCX-9	350	CD,R,T	10	14,24,26	Micro, with powered subwoofer
Aiwa Z-650	370	CD,R,Tu,2T	20	-	Midi
Aiwa NSX-540	400	CD,R,2T	55	-	Mini, front surround spkrs
Aiwa Z-720	400	CD,R,Tu,2T	30	36,48,35	Midi, equaliser
Aiwa LCX-10	400	CD,R,T	8	14,24,26	Micro, as LCX-10 with surround
Aiwa NSX-550G	430	CD,R,2T	40	-	Mini, CD Graphics
Aiwa NSX-510G	440	CD,R,2T	30	26,31,34	Mini, karaoke, CD-G compatible
Aiwa NSX-D737	500	CD,R,2T	50	-	Mini, 4-mode DSP
Aiwa Z-D300M	600	CD,R,Tu,2T	40	36,54,35	Midi, three CD, equaliser
Aiwa Z-D5000M	670	CD,R,Tu,2T	40	36,54,35	Midi, three CD, DSP, equaliser
Aiwa NSX-D939	750	CD,R,2T	50	-	Dolby Pro Logic, incl speakers
Aiwa Z-D7000M	800	CD,R,Tu,2T	65	36,63,35	Midi, DSP, Dolby Surround
Akai MX115	399	CD,R,2T	35	27,39,26	Graphic equaliser
Akai RX590	449	CD,R,2T,P	38	27,31,33	3x CD player, Dolby B
Akai MX115T	449	CD,R,P,2T	35	27,48,31	As MX115, with mini turntable
Akai RX590T	499	CD,R,2T,P	38	27,40,33	As RX590, with mini turntable
Akai RX690	549	CD,R,2T	50	27,40,33	3x CD player, Dolby B&C
Akai RX690T	599	CD,R,2T,P	50	27,49,33	As RX690 with mini turntable
Akai RX890	799	CD,R,2T	60	27,42,33	Virtual Room Simulator, RDS
Akai RX890T	849	CD,R,2T,P	60	27,51,33	As RX690, with mini turntable
Akai RX890 Compo	999	CD,R,2T,P	60	64,78,35	RX890 with stand & AP A950
Amstrad Micro 1000	170	CD,R,T	-	15,20,13	10 presets, FM, MW, LW
Amstrad Mini 2000	200	CD,R,T	-	28,21,57	Five band equaliser
Amstrad CD3-500	230	CD,R,2T	5	-	Three disc CD player, FM, MW
Amstrad Micro 2000	250	CD,R,T	-	17,28,23	10 presets, FM, MW, LW
Amstrad Mini 3000	280	CD,R,2T	-	26,32,49	RDS tuner, mic mixing
Amstrad Mini 5000	300	CD,R,2T	-	26,32,25	Three disc CD, mic mixing
Arcam Alpha 5	1200	CD,R	40	43,23,30	Based on Arcam separates
Arcam Alpha 6	1300	CD,R	50	43,23,30	Including Alpha 6 RVC amp
Arcam Delta	2810	CD,R,T,D	75	43,37,34	Fully remote controllable
B&O Beosystem 7000	245	CD,R,Tu,T	100	42,8,33	Components, speakers extra
B&O BeoSound Century	995	CD,R,T	-	75,37,17	Wall mounted active speakers
B&O Beocenter	1400	CD,R,T	80	76,11,34	Audio master for extended syst
B&O Beosystem 2500	2150	CD,R,T	-	83,36,16	Active speakers, lifestyle sys
B&O Beosystem 2300	2150	CD,R	-	83,36,16	As 2500, without cassette
Denon D-65/S	640	CD,R,2T	30	27 wide	Includes optional UK speakers
Denon D-90/S	740	CD,R,Tu,T	30	27 wide	RDS, inc optional UK speakers
Denon D-110/S	870	CD,R,Tu,2T	40	27 wide	RDS, inc optional UK speakers
Denon D-250/S	1000</				

HI-FI CHOICE BUYER'S GUIDE

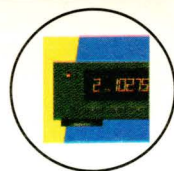


Key to systems
Price - typical retail, to nearest pound.
Sources - CD - compact disc, R - radio tuner, Tu - turntable, T - cassette tape.
V - video signal routing (composite and/or S-Video).
Power - output power in watts, per channel, RMS.

Size - main unit dimensions - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Source	Power	Size	Special
SYSTEMS					
Kenwood UD-551	650	CD,R,2T	32	27,41,31	Multi CD
Kenwood UD-701	750	CD,R,V,2T	32	27,41,31	Dolby Surround
Kenwood M-47G	750	CD,R,Tu,2T	45	36,62,38	Graphic equaliser
Kenwood UD-751M	800	CD,R,V,2T	32	27,41,31	Multi CD
Kenwood M-57MG	850	CD,R,Tu,2T	45	36,62,38	Multi-CD, graphic equaliser
Kenwood M-76AG	950	CD,R,V,Tu,2T	60	36,62,38	Dolby Surround
Kenwood UD-901	1000	CD,R,V,2T	42	27,41,31	Dolby Pro Logic
Kenwood M-77MG	1000	CD,R,V,Tu,2T	60	36,62,38	Multi-CD
Kenwood HD-1000	1000	CD,R,T	40	27,40,35	MD & equaliser options
Kenwood M-97G	1250	CD,R,V,Tu,2T	85	36,64,38	Dolby Pro Logic
Kenwood M-97MG	1300	CD,R,V,Tu,2T	85	36,64,38	Multi-CD
Marantz 1010	900	CD,R,2T	45	42,77,31	System Link Operation
Marantz 1020	1000	CD,R,2T	45	42,77,31	Motorised Front Panel
Nakamichi S-space 7	1495	CD,R	40	-	Multi-CD, aux & tape input
Onkyo L-909	1200	MM,3L,2T	70	-	Component system, 4ohm rated
Panasonic SC-DH30	250	CD,R,2T	5	-	
Panasonic SC-CH11	300	CD,R,2T	20	-	
Panasonic SC-CH33Z	370	CD,R,2T	30	-	
Panasonic SC-CH150	430	CD,R,T	20	18,25,28	51cm wide, including speakers
Philips FW21	300	CD,R,2T	12	26,30,22	
Philips AS44CD	329	CD,R,2T	20	36,38,29	
Philips AS540CD	379	CD,R,2T	40	36,398,29	
Philips FW41	400	CD,R,2T	30	26,30,25	
Philips AS640CD	429	CD,R,2T	30	36,38,29	Five disc CD
Philips FW370	900	CD,R,DCC	75	36,60,35	DCC mini
Philips FW91	999	CD,R,DCC	60	26,35,26	DCC mini
Philips FD920	999	CD,R,DCC	43	44,50,30	Full size separates
Philips FS380	1000	CD,R,DCC	100	44,50,30	DCC midi
Pioneer N-25	299	CD,R,2T	20	-	Double cassette, three-disc CD
Pioneer N-50W	349	CD,R,2T	50	-	One touch Karaoke, smart timer
Pioneer J-200	399	CD,R,2T	11	-	Mic mixing, five band equalise
Pioneer N-70W	399	CD,R,2T	70	-	Double auto-reverse cassette,
Pioneer N-70W/M	449	CD,R,2T	70	-	Multi-play version of N-70W
Pioneer N-100W	499	CD,R,2T	100	-	Double auto-reverse cassette,
Pioneer J-300	549	CD,R,2T	40	-	Single play CD with Smart tune
Pioneer N-100W/M	549	CD,R,2T	100	-	Multi-play version of N-100W
Pioneer J-400M	649	CD,R,2T	50	-	Six-disc multipay, Dolby Surr
Pioneer Impresso-3	749	CD,R,T	35	-	Separate components, CD with S
Pioneer J-500	779	CD,R,2T	65	-	Dolby Surround, seven band equ
Pioneer J-500M	829	CD,R,2T	65	-	Six-disc multipay version of
Pioneer J-V600	879	CD,R,2T	65	-	Dolby Pro Logic A/V system, Mo
Pioneer Impresso-7	899	CD,R,T	45	-	As Impresso 3, with RDS tuner
Pioneer J-700	999	CD,R,2T	115	-	CD with Stable Platter mechani
Pioneer J-V600LD	1199	CD,R,2T	65	-	Includes PAL/NTSC LaserDisc pl
Samsung SCM6550	230	CD,R,Tu,2T	5	35,33,29	Midi, remote control
Samsung MAX335	230	CD,R,2T	10	25,32,26	Midi, remote control
Samsung SCM8100	300	CD,R,Tu,2T	20	36,37,29	Midi, remote control
Samsung MAX370	300	CD,R,2T	20	25,32,24	Midi, remote control
Samsung SCM8300	350	CD,R,Tu,2T	20	36,37,29	Midi, equaliser, 5 CD carousel
Samsung SCM9100	430	CD,R,Tu,2T	30	36,47,29	Midi, remote control
Sansui MS6901	420	CD,R,2T	50	18,26,34	
Sanyo SYS 220	300	CD,R,2T	15	36,36,37	
Sanyo MS1	300	CD,R,T	25	22,21,22	
Sanyo DC-D10	300	CD,R,2T	15	27,36,32	
Sanyo DC-D15	350	CD,R,2T	15	27,36,32	10 disc CD player
Sanyo DC-D40	400	CD,R,2T	30	27,36,32	10 disc CD player
Sanyo SYS915	430	CD,R,2T	30	36,43,36	Four-disc CD player
Sharp System-S360E	230	CD,R,2T	10	27,32,33	Remote control
Sharp System-CD150E	260	CD,R,Tu,2T	10	36,48,36	30 tuner presets
Sharp System-S370E	270	CD,R,2T	25	27,32,33	Five band equaliser
Sharp System-CD170E	280	CD,R,Tu,2T	10	36,40,36	Remote control, auto-reverse
Sharp CMS-R400CDX	300	CD,R,2T	10	27,32,39	Five-disc multi CD
Sharp System-Q8E	330	CD,R,T	12	15,19,26	Ultra compact
Sharp System-CD450E	370	CD,R,2T	80	27,32,25	Dolby NR
Sharp System-C5300E	450	CD,R,2T	30	26,32,25	Six-disc multi CD
Sony MMC450	300	CD,T,Tu,2T	20	22,29,27	
Sony Compact 190	330	CD,R,Tu,2T	9	35,48,34	
Sony MHC 650	380	CD,T,Tu,3T	35	22,28,26	Full remote
Sony Compact 195	389	CD,R,Tu,2T	9	35,49,41	
Sony Compact 290	400	CD,R,Tu,2T	30	35,48,35	
Sony Compact 295	450	CD,R,Tu,2T	30	35,49,41	Full remote
Sony MHC C50CD	500	CD,T,Tu,3T	30	22,33,32	Five-disc CD
Sony MHC Z900	500	CD,T,Tu,3T	40	22,28,26	Electronic EQ
Sony Compact 490	500	CD,R,Tu,2T	40	35,59,36	Five-disc CD
Sony MHC C70CD	600	CD,T,Tu,3T	40	22,39,31	Five-disc CD
Sony Compact Plus 590	600	CD,R,Tu,2T	60	43,48,39	Five-disc CD, electronic EQ



Key to tuners
Price - typical retail, to nearest pound.
Bands - FM - VHF, stereo and hi-fi capable, M - Medium wave, low quality, mono, L - Long Wave, low quality, mono, N - Nicam digital TV stereo sound.
Presets - total number of presets on all bands.

RDS - Radio Data System, which provides station IDs and sometimes other data on the FM waveband.
Size - width x height x depth in cm.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Source	Power	Size	Special
SYSTEMS					
Sony MHC4900	800	CD,T,Tu,3T	60	22,41,28	
Sony MHC 5900AV	1000	CD,T,Tu,3T	60	22,41,28	UK sound
Sony Compact Plus 745AV	1000	CD,R,Tu,2T	60	43,48,39	Full size, separate components
Sony Compact Plus 995AV	1500	CD,R,Tu,2T	60	43,47,42	Dolby Pro Logic, LaserDisc
Technics SC-CH404	500	CD,R,Tu,2T	35	27,42,34	Mini, including speakers
Technics SC-CH505	600	CD,R,2T	50	27,42,34	Mini Karaoke, including speake
Technics SC-CH575	650	CD,R,2T	50	27,42,34	Mini, multi-changer
Technics CD-X120	700	CD,R,2T	40	36,41,32	Midi, including speakers
Technics SC-CH750	800	CD,R,2T	50	27,42,34	Mini, DSP, including speakers
Technics CD-X320	800	CD,R,Tu,2T	50	36,41,32	Midi, including speakers
Technics CD-X520	900	CD,R,Tu,2T	60	36,41,32	Midi, including speakers, basi
Technics SC-CH9090	1000	DCC,CD,R	60	27,42,34	DCC equipped mini system
Technics SC-CH950	1000	CD,R,2T	60	27,42,34	Pro Logic, soundfield speakers
Yamaha CC70	600	CD,R,2T	50	28,33,34	YST active bass

Model	Price	Bands	Presets	RDS	Size	Special
TUNERS						
Aiwa XT-003	120	FM,M,L	30	N	-	
Aiwa XT-950	150	FM,M	24	N	-	
Arcam Alpha 5	220	FM	16	N	43,8,27	
Arcam Delta 150	230	Nicam	8	-	43,7,27	Stereo TV tuner
Arcam Delta 280	350	FM	20	N	43,7,28	
Audiolab 8000T	700	FM,M,L	39	N	45,8,36	Switchable IF, muting, mono
Aura TU50	300	FM	16	N	43,6,27	Chrome finish + £50
Day Sequerra FM Ref	5457	FM	-	-	-	
Day-Seq S B'dcast Mon	14640	FM	-	-	-	
Denon TU-260L	120	FM,M,L	20	N	44,8,24	Low impedance output
Denon TU-580RD	220	FM,M	30	Y	44,8,29	Variable IF bandwidth
Goodmans GST650	90	FM,M,L	36	Y	-	
Goodmans Delta 700	100	FM,M,L	36	N	-	
Grundig T310	130	FM,M,L	59	Y	36,8,30	RDS, Radiotext, PTY, clock
Grundig T1	130	FM,M,L	59	N	44,9,30	Namable inputs, gain switch, r
Grundig T2	170	FM,M,L	59	Y	44,9,30	RDS Radiotext, clock, remote
Grundig T4	210	FM,M	59	Y	44,9,30	Radiotext, PTY, remote
Harman-Kardon TU92000	219	FM,M	70	-	45,8,38	
Harman-Kardon TU94000	299	FM,M	24	-	45,8,33	
Harman-Kardon TU96000	499	FM,M	24	-	45,8,33	
JVC FX362BX	140	FM,M,L	40	N	44,8,30	
JVC FX1010TN	300	FM,M,L	40	N	44,10,30	
Kenwood KT-1050L	110	FM,M,L	30	N	44,8,26	
Kenwood KT-2050L	140	FM,M,L	30	N	44,8,26	Built-in timer
Kenwood KT-3050L	170	FM,M,L	39	Y	44,10,28	IF selector
Kenwood KT-6050	300	FM,M	39	Y	44,10,33	IF switch, two antennae
Linn Kremlin	1995	FM	80	N	32,8,33	Dual aerial capability
Magnum Dynalab FT11	550	-	-	-	-	
Magnum Dynalab FT101	825	-	-	-	-	
Magnum FT101 Etude	1250	-	-	-	-	
Marantz ST-53	170	FM,M,L	59	N	42,9,30	D-bus
Marantz ST-63	200	FM,M,L	59	Y	42,9,30	D-bus
Marantz ST-72L	300	FM,M,L	59	Y	42,10,34	D-bus, IF switch, local switch
McIntosh MR7083	1995	FM,M	16	N	-	Interface to McIntosh remote c
Meridian 504	595	FM	30	N	33,9,34	System handset
Meridian 604	1350	FM	30	N	-	
Michi RHT-10	895	FM	16	N	47,8,34	Remote control
Mission Cyrus FM7	400	FM	29	N	22,8,36	Rmote control bus
Mus-Fid T1 MK II	299	FM	8	N	44,8,32	Autoseek, mono switching
Musical Fidelity FT	899	FM	20	N	49,12,33	Remote control, bandwidth limi
Naim NATO3	499	FM	-	N	21,16,30	
Naim NATO2	910	FM	-	N	21,16,30	
Naim NATO1	1453	FM	-	N	21,16,30	
Onix BWD1	420	FM	-	N	75,23,37	In-house front end
Onkyo T-401	160	FM,MW	40	N	46,8,31	
Onkyo T-409	230	FM,MW	30	N	-	Mini component
Onkyo T-450RDS	260	FM,MW	30	Y	46,9,31	
Onkyo T-411RDS	280	FM,MW	30	Y	-	Mini component
Onkyo R-811RDS	420	FM,MW	30	Y	-	Mini component, incl timer
Philips FT930	160	FM,M,L	40	Y	44,11,30	
Pioneer F-202L	130	FM,M,L	36	N	42,8,29	
Pioneer F401L	180	FM,M,L	36	N	42,9,32	
Pioneer F-301RDS	200	FM,M	36	Y	42,8,25	
Pioneer F-502RDS	250	FM,M	40	Y	42,9,34	
Pioneer F-502RDS-G	260	FM,M	40	Y	42,9,34	
Pioneer F93	650	FM,M	40	N	46,11,36	
Quad FM4	434	FM	7	N	33,7,21	
Quad FM66	532	FM	19	N	33,8,26	For use with Quad 66 system
Rotel RT930AX	175	FM,M,L	20	N	44,8,26	
Rotel RT950BX	200	FM,M,L	20	N	44,8,24	
Rotel RT990BX	510	FM	16	N	44,8,29	Remote control
Sansui TU-X317	170	FM,M	20	-	-	
Sansui TU-X519	220	FM,M	30	-	-	
Sherwood TD1120	90	FM,M	24	N	-	
Sherwood TX1010C	100	FM,M	30	N	-	

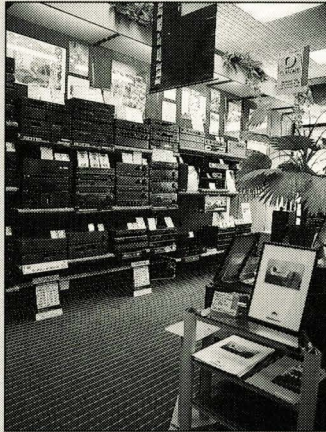
Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.

Denon DL110S 870 CD,R,Tu,2T 40 27,41,31 RDS, inc. optional UK capsule

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.

Linn Kremlin 1995 FM 80 N 32,8,33 Dual aerial capability

SEVENOAKS SUPERFI



DISPLAY & DEMONSTRATIONS

The moment you step through the door of a Sevenoaks Hi Fi or Superfi branch you're going to be better looked after. With over 21 years experience in Hi Fi, Video and TV retail we're here to make sure you get the equipment that best suits your needs and your budget.

You'll find a wide range of products with the emphasis on quality rather than country of origin. And not only is everything we sell on display, but it's also available for demonstration. Each of our branches has dedicated demonstration facilities to help you enjoy choosing your equipment.

AFTER SALES CARE

Each of our Sevenoaks Superfi branches is served by a dedicated Central Service Department. Approved by all the leading manufacturers, our team of six fully trained engineers is capable of repairing 99% of all repairs - in our own workshops. Once the repair is complete we give you a 3 month Warranty. The kind of back up you'd expect from one of the leading independent Hi Fi retailers in country.



ADDED VALUE



Full selection of Hi Fi Press Award Winners



Free CDs on selected CD Players



CD Vouchers available on selected purchases



Free TDK Tapes on selected Cassette Deck purchases



Free 007 stands and cable on selected speaker purchases



Free Headphones worth £ 40 on selected Hi Fi Separates over £500



0% Finance available on selected Hi Fi Separates (not suggested systems)



Dedicated listening rooms in all our branches

hi fi products



And if you thought this level of service might be expensive - you'd be wrong. Our prices are the most competitive around, and our added value offers famous throughout the industry.

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 CHOICES list below for further details.

Amplifiers	NAD 302 Kenwood KA3020		Harman HK6150 Technics SUA600K		NAD 304 Pioneer A300X	Technics SUA700K
	Technics SUVZ220K	Technics SUVZ320K	Marantz PM445E			
JPW Sonata V Celestion i JPW Minim	226.95	273.95	296.95	319.95	335.95	
Celestion 3 Mkii JPW Sonata W Mission 760i	265.95	312.95	335.95	358.95	374.95	
Tannoy 603 Mkii Mission 760i SE NAD 800	280.95	327.95	351.95	374.95	390.95	
Tannoy 605 Mkii Celestion 5 Mkii B&W DM600 Mission 761i Mon Audio 1	304.95	351.95	374.95	397.95	413.95	
Tannoy 607 MkII Celestion 7 MkII NAD 802	335.95	382.95	405.95	429.95	444.95	

CHOICES

The following Compact Disc Player or Turntable may be ordered instead of the NAD 5120 in the above systems:-

CD PLAYERS

Aiwa XC300 Add £ 29
Denon DCD695 Add £ 99
Goodmans GCD360 Add £ 0
Goodmans GCD650III Add £ 9
Marantz CD52II Add £ 79
Marantz CD52IISE Add £ 169

Marantz CD53 Add £ 79
Marantz CD63 Add £ 139
NAD 501 Add £ 79
NAD 502 Add £ 99
TEAC CDP3500 Add £ 99
Technics SLPG440AK Add £ 59

TURNTABLES

Dual CS503.2 Add £ 69
Dual CS505.4 Add £ 99
NAD 533 Add £ 99
Project 0.5 Add £ 49
Technics SLBD22K Add £ 49
Thorens TD280 IV Add £ 99

PRICE PROMISE

We always try to ensure our prices are competitive. In the unlikely event of an identical product being available from an authorised dealer at a lower price, we will beat that price by up to £ 20. To qualify it must be a verifiable offer on product that is in stock, brand new and in a sealed box.

No Added Value Offers apply on price beat sales

PRICE BEAT VALUES:

£ 110 - £ 500	= £ 10
£ 501 - £ 1,000	= £ 15
£ 1,001+	= £ 20

0% FINANCE

We offer 0% finance on a wide range of Hi Fi separates. **Package 1:** 10% deposit followed by 6 equal monthly payments. Example: Cost £ 600. Deposit £ 60 plus 6 payments of £ 90. **Package 2:** 25% Deposit followed by 9 equal monthly payments. Example: Cost £ 600. Deposit £ 150 plus 9 payments of £ 50. **Package 3:** 50% deposit followed by 12 equal monthly payments. Example: Cost £ 840. Deposit £ 420 plus 12 payments of £ 35. All Options: Minimum balance £ 400. Subject to status. 0% APR. Personal shoppers only. Written details on request.

26 BRANCHES NATIONWIDE SEE

THE SPECIALIST

HI FI PRODUCT SELECTION

AMPLIFIERS

Alchemist Kraken (Slate)	£ 399.95
Arcam Alpha 5	£ 229.95
Arcam Alpha 6	£ 329.95
Arcam Delta 290	£ 449.95
Aura VA80	£ 279.95
Aura VA100 Black	£ 329.95
Audiolab 8000A/II	£ 449.95
Audiolab 8000C/II	£ 449.95
Audiolab 8000M (each)	£ 699.95
Audiolab 8000P/II	£ 649.95
Cyrus (S/oaks branch only)	£ 499.95
Denon PMA250III	£ 159.95
Denon PMA350 II	£ 219.95
Denon PMA480R	£ 219.95
Denon PMA450	£ 249.95
Denon PMA880R	£ 299.95
Exposure EXP20	£ 624.95
Exposure EXP15 MM	£ 724.95
Exposure EXP17 MM	£ 774.95
Exposure EXP18	£ 749.95
Harman Kardon HK1400	£ 399.95
Harman Kardon HK6150	£ 199.95
John Shearne Phase II	£ 549.95

Kenwood KA3020 £ 149.00

Kenwood KA3020SE	£ 199.95
Marantz PM32	£ 139.95
Marantz PM44SE	£ 199.95
Marantz PM54SE	£ 299.95
Musical Fridge A1 Mk III	£ 329.95
Musical Fridge F15	£ 1899.95
Musical Fridge F22	£ 999.95
Nad 302	£ 179.95
Nad 304	£ 239.95
Nad 306	£ 349.95

Nad 3020i £ 78.00

Pioneer A300X	£ 229.95
Pioneer A400X	£ 299.95
Quad 66 inc RI	£ 862.95
Quad 34	£ 398.95
Quad 306	£ 349.95
Quad 606	£ 689.95
Rotel RA930AX	£ 174.95
Rotel RA935BX	£ 224.95
Rotel RB970BX	£ 224.95
Rotel RC970BX	£ 149.95
Technics SUA600K	£ 199.95
Technics SUA700K	£ 249.95
Technics SUA900K	£ 399.95

MINI/MICRO SYSTEMS

Aiwa, Denon, JVC, Sony & Technics
Refer to our Mini/Micro Ad P.O.A.

TUNER AMPS

Denon DRA365RD	£ 249.95
Denon DRA545RD	£ 319.95
Marantz SR53	£ 269.95
Nad 701	£ 259.95
Nad 705	£ 329.95

CASSETTE / DCC DECKS

Aiwa ADF410 £ 74.00

Aiwa ADF450	£ 119.95
Aiwa ADF810	£ 159.00
Aiwa ADF850	£ 229.95
Aiwa ADWX727	£ 169.95
Aiwa ADWX828	£ 199.95
Aiwa ADWX929	£ 249.95
Denon DRMS40	£ 159.95
Denon DRS610	£ 199.95
Denon DRS810	£ 299.95
Denon DRW760	£ 249.95
JVC TDW308	£ 199.95
Marantz SD53	£ 199.95
Marantz SD63	£ 249.95
Nad 602	£ 199.95

Nakamichi DR1 £849.95

Nakamichi DR2 £599.95

Nakamichi DR3 £359.95

Philips DCC300 inc C/B £178.00

Philips DCC500 inc C/B £228.00

Pioneer P.O.A.

Sony TCK411 £ 149.00

Sony TCK511S £ 189.00

Sony TCK611S £ 249.00

Technics RSTR373K	£ 179.95
Technics RSTR474K	£ 199.95

AUDIO VISUAL

B & W, Canon, Celestion, Denon, JBL, Kef, Kenwood, Marantz, Mon Audio, Mordaunt Short, Pioneer, Technics & Yamaha. Refer to our AV Ad.

SPEAKERS

Aura SP50	£ 399.95
B & W DM600i	£ 189.95
B & W DM610i	£ 249.95
B & W DM620i	£ 429.95
B & W 805	£ 895.95
B & W 804	£ 1495.95
Castle Chester	£ 649.95
Castle Howard	£ 999.95
Castle Durham II	£ 249.95
Castle Durham 900	£ 279.95
Castle Trent II	£ 199.95
Castle York	£ 349.95
Celestion 1	£ 109.95
Celestion 3 Mk II	£ 129.95
Celestion 5 Mk II	£ 169.95
Celestion 7 Mk II	£ 219.95
Heybrook HB1/3	£ 259.95
Heybrook Prima	£ 129.95
Heybrook Quartets	£ 555.95
JPVW Sonata Veneer	£ 119.95
JPVW Sonata Vinyl	£ 99.95

JPW Minim £ 59.00

Kef R101.3	£ 549.95
Kef R102.2	£ 749.95
Kef R103.4	£ 1199.95
Kef R104.2	£ 1595.95
Kef R105.3	£ 2295.95
Kef R107.2	£ 3695.95
Kef Q10	£ 199.95
Kef Q30	£ 349.95
Kef Q50	£ 499.95
Mission 751	£ 299.95
Mission 752	£ 499.95
Mission 753	£ 699.95
Mission 760i	£ 129.95
Mission 760ISE	£ 149.95
Mission 761i	£ 179.95
Mission 780SE	£ 239.95
Mon Audio 201	£ 249.95
Mon Audio 202	£ 399.95
Mon Audio 1 Gold	£ 189.95
Mon Audio 7 Gold	£ 249.95
Mon Audio 14 Gold	£ 469.95
Mordaunt Short MS10	£ 129.95
Mordaunt Short MS20	£ 179.95
Nad 800	£ 149.95
Nad 801	£ 99.95
Nad 802	£ 229.95
Nad 804	£ 329.95
Quad ESL 63	£ 2859.95
Quad Gradient SW63	£ 1699.95
Rogers LS2A-2	£ 249.95
Rogers LS4A-2	£ 329.95
Rogers Studio 3	£ 499.95
Ruark Crusader II	£ 1495.95
Ruark Equinox	£ 1749.95
Ruark Swordsman Plus	£ 299.95
Ruark Sabre	£ 384.95
Ruark Talisman II	£ 699.95
Ruark Templar	£ 479.95
Systm 931	£ 299.95
Systm 935	£ 399.95
Systm 939	£ 699.95
Tannoy 603 Mk II	£ 139.95
Tannoy 605 Mk II	£ 169.95
Tannoy 607 Mk II	£ 219.95
Tannoy 609 Mk II	£ 294.95
Tannoy 611 Mk II	£ 429.95
Tannoy 613 Mk II	£ 599.95
TDL RTL1	£ 199.95
TDL RTL2	£ 299.95
TDL RTL3	£ 399.95
TDL NFM	£ 119.95
Wharfedale Modus	P.O.A.

TURNTABLES

Dual CS503-2 inc. cart	£ 169.95
Dual CS435 inc. cart	£ 219.95

Dual CS505-4 inc. cart	£ 199.95
Goodmans GSP650 inc. cart	£ 59.95

Nad 5120 inc. cart £ 99.00

Nad 533	£ 199.95
Project 0.5 inc cart	£ 144.95
Project 1 inc cart	£ 184.95
Project 6 inc cart	£ 435.95
Systemdek IIX 900 (ex)	£ 229.95
Technics SLB22K	£ 159.95
Technics SL1210 II	£ 429.95
Thorens TD280 Mk IV inc. cart	£ 199.95
Thorens TD166/RB250	£ 299.95

TUNERS

Arcam Alpha 5	£ 219.95
Arcam Delta 280	£ 349.95
Audiolab 8000T	£ 699.95
Cyrus (S/oaks branch only)	£ 399.95
Denon TU260L	£ 119.95
Denon TU380RDS	£ 189.95
Denon TU580RD	£ 219.95
Marantz ST40L	£ 139.95
Marantz ST53L	£ 169.95
Musical Fidelity T1 II	£ 299.95
Nad 402	£ 169.95
Pioneer F502RDS	£ 299.95
Quad 66FM	£ 532.95
Rotel RT930AX	£ 174.95
Rotel RT950BX	£ 224.95

Sony STS311RDS £ 169.00

Teac TX4030	£ 119.95
-------------	----------

COMPACT DISC PLAYERS

Aiwa XC300 £ 119.00

Aiwa XC750 £ 139.00

Audio Alchemy DAC inc box	£ 199.95
Audiolab 8000 CDM	£ 1249.95
Audiolab 8000 DAC	£ 749.95
Aura CD50	£ 399.95
Arcam Alpha 5	£ 449.95
Arcam Black Box 50	£ 449.95
Arcam Delta 270	£ 799.95
Arcam Delta 250 Trans	£ 749.95
Cyrus (Sevenoaks branch only)	P.O.A.

Denon DCD595 £ 149.00

Denon DCD615	£ 179.95
Denon DCD695	£ 199.95
Denon DCD1290	£ 329.95
Goodmans GCD360	£ 99.95
Goodmans GCD650 MKII	£ 109.95
Kenwood DP7050	£ 349.95
Marantz CD10	£ 1199.95

Marantz CD52 II £ 179.00

Marantz CD52 II SE	£ 299.95
Marantz CD53	£ 199.95
Marantz CD63	£ 249.95
Marantz CD72SE	£ 599.95
Musical Fidelity CDT	£ 519.95
Musical Fidelity FCD	£ 1499.95
Nad 501	£ 179.95
Nad 502	£ 229.95
Nakamichi MB45	£ 299.95
Philips	P.O.A.
Pink Ordinal	£ 789.95
Pink Triangle Da Capo	£ 1449.95
Quad 67	£ 824.95
Roksan Transport/DAC	P.O.A.
Rotel RCD945AX	£ 229.95
Rotel RCD965BX	£ 299.95
Rotel RCD965BX Discrete	£ 374.95
Rotel RCD965BXLE Discrete	£ 424.95
Sony	P.O.A.
Teac CDP3500	£ 199.95
Teac VRD57	£ 599.95
Teac VRD510	£ 769.95
Teac VRD520	£ 1299.95
Teac P700/D700	£ 1499.95
Technics SLPD667 Multi	£ 179.95
Technics SLPD867 Multi	£ 199.95
Technics SLPG440AK	£ 169.95

Yamaha CDX870 £ 199.00

All prices are valid until at least July 31st, 1994

SEVENOAKS HI FI BRANCHES AT:

SEVENOAKS 0732 459555
109-113 London Road
BRIGHTON 0273 733338
55 Preston Street
CANTERBURY 0227 462787
20a Lower Bridge Street
CHATHAM 0634 846859
4 Railway Street

new CHELSEA 071 352 9466
403 Kings Road, SW10

CHELTHENHAM 0242 241171
24 Pittville Street

CROYDON 081 665 1203
373 London Road

ENFIELD 081 342 1973
7 Genotin Road

ESSEX 0376 501733
1 The Grove Centre
Witham

GUILDFORD 0483 36666
73b North Street

LEICESTER 0533 557518
94 Granby Street

OXFORD 0865 241773
41 St Clements

TUNBRIDGE WELLS
0892 531543

28-30 St Johns Rd

WATFORD 0923 213533
478 St Albans Road

WOOLWICH 081 855 8016
162 Powis Street

MAIL ORDER 0732 458985

SUPERFI BRANCHES AT:

BIRMINGHAM 021 631 2675
67 Smallbrook, Queensway

new COVENTRY 0203 223254
16 Spon Street

DERBY 0332 360303
56 London Road

HULL 0482 24051
4 Dock Street

LEEDS 0532 449075
7 King Edward Street

LINCOLN 0522 520265
271a High Street

LONDON 071 388 1300
2-4 Camden High Street

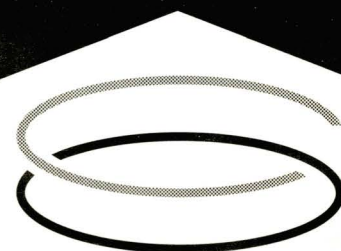
NOTTINGHAM 0602 412137
15 Market Street

SHEFFIELD 0742 723768
1 Rockingham Gate

The Moor

STOKE ON TRENT
0782 265010

51 Picadilly, Hanley

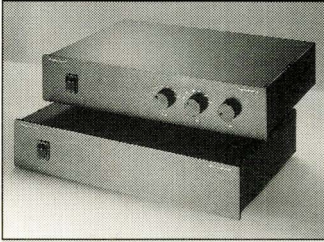


SEVENOAKS SUPERFI

OVER FOR FULL DETAILS

MUSICAL EXPRESSION

exposure



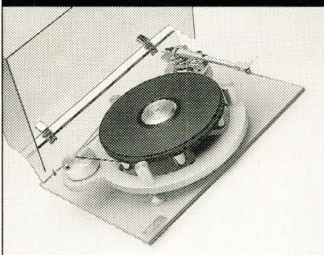
17 & 18

Exposure

Exposure has for the past fifteen years been one of the small group of companies which made its presence felt more by reputation than promotion. Many of John Farlowes designs like the 17/18, - 15 - 20 have been acclaimed both in the UK and abroad for striking musical performance, and excellent build quality.

But that's not all. We also have Audiolab, Cyrus, Musical Fidelity, John Shearne and Quad for you to consider.

michell

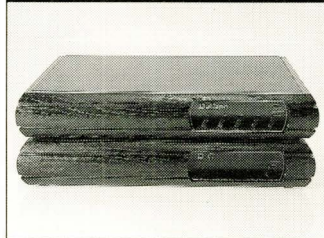


gyro dec

Michell

The **Gyro Dec** has always been a class act. Beautifully styled. it looks like no other turntable, and has the performance to match. After twenty years of success John Michell now compliments it is with products that are impossible not to recommend. At Sevenoaks-Superfi you can audition the range including - **Argo (Preamp), Iso (Head amp) - Alecto (Power amps).** The new **HR (High Resolution)** products are also available. Other turntables include Pink Triangle, **Export GTI** and **Anniversary.**

pink triangle



da capo/batt psu

Pink Triangle

The **Da Capo** with it's optional DC power supply. represents one of the very best Digital to Analogue converters in the world. A highly acclaimed product renowned for superb imagery, detail and choice of filters (18, 20, 22 Bit, 1307). We also stock the **Ordinal (DAC).**

Our other Audiophile CD players, Transports and DAC's include Teac, Roksan, Musical Fidelity, Quad, Arcam, Audiolab, Audio Alchemy and Cyrus.

Ruark

When a speaker company belongs to the Guild of Master Craftsman and offers a selection of real wood veneers (imported from all over the World), models like **Templar, Talisman II, Crusader II** (see picture) and **Equinox** can combine innovative design outstanding performance and superb finishes that set new standards.

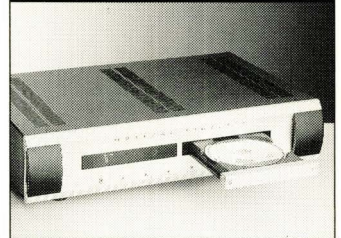
ruark



crusader II

And there's many other quality loudspeakers from Castle, TDL, Heybrook, Kef Reference, Mission and Monitor Audio.

musical fidelity



fcd

Musical Fidelity

Visual impact that is only matched by sound quality is the hallmark of Musical Fidelity's 'F Series' components. For over 10 years, this remarkable and highly individualistic company has been delighting its customers with beautiful music, beautifully reproduced.

At Sevenoaks Superfi you'll also find top quality tuners from names like Audiolab, Musical Fidelity and Cyrus, plus cassette decks from Nakamichi, Sony and many, many more.

Van den Hul

New "Metal-Less" Carbon interconnect cables (the **First**, the **Second**) now available - **A Revelation!**

26 BRANCHES THROUGHOUT

London Road
SEVENOAKS
 109-113 London Road
 0732 459555
 Sevenoaks Hi Fi

sea
BRIGHTON
 55 Preston Street
 0273 733338
 Sevenoaks Hi Fi

City Wall
CANTERBURY
 20a Lower Bridge Street
 0227 462787
 Sevenoaks Hi Fi

Railway Street
CHATHAM
 4 Railway Street
 0634 846859
 Sevenoaks Hi Fi

Worlds End
CHELSEA
 403 Kings Road, SW10
 071 352 9466
 Sevenoaks Hi Fi

Albion St
CHELTEMHAM
 24 Pittville Street
 0242 241171
 Sevenoaks Hi Fi

H. W. Croydon
CROYDON
 373 London Road
 081 665 1203
 Sevenoaks Hi Fi

Genotin Rd
ENFIELD
 7 Genotin Road
 081 342 1973
 Sevenoaks Hi Fi

Tesco
ESSEX
 1 The Grove Centre, Witham
 0376 501733
 Sevenoaks Hi Fi

North St
GUILDFORD
 73b North Street
 0483 36666
 Sevenoaks Hi Fi

Police
LEICESTER
 94 Granby Street
 0533 557518
 Sevenoaks Hi Fi

River Cherwell
OXFORD
 41 St Clements
 0865 241773
 Sevenoaks Hi Fi

Bus Depot
TUNBRIDGE WELLS
 28-30 St Johns Road
 0892 531543
 Sevenoaks Hi Fi

A412
WATFORD
 478 St Albans Road
 0923 213533
 Sevenoaks Hi Fi

Powis St
WOOLWICH
 162 Powis Street
 081 855 8016
 Sevenoaks Hi Fi

Car Park
BIRMINGHAM
 67 Smallbrook, Queensway
 021 631 2675
 Superfi

high end hi fi

MINIS & MICROS

OPTIONS

Once you've chosen the system you want, choose the mini /micro price option that suits you best. We've developed a four tier system that is geared to the level of service you require.

OPTION 1

Full RRP less 10% discount for cash and carry customers. Standard manufacturers warranty

OPTION 2

Full RRP, to include delivery, installation, 1 year parts and labour warranty and home call out.

OPTION 3

Full RRP, to include a 3 year parts and labour warranty on cash and carry basis.

OPTION 4

Full RRP plus £ 100, to include delivery, installation, 5 year parts and labour warranty and home call out.

INSTALLATION / CALL OUT CONDITIONS

Install must be adjacent to mains/aerial point. Customers must live within 7 miles of local branch

TECHNICS



SCCH 950

The compact size and tidy appearance of the latest mini and micro systems hide the fact that these miracles of modern miniaturisation provide a big sound. Systems now boast more powerful amps, powered subwoofers, and many other features that enable the best of them to produce a sound big enough to fill a room.

So whether you're looking for a first class secondary system, or you want a big sound in a small package, you'll find what you're looking for at Sevenoaks Superfi.

JVC



UXT 1

We stock top name systems including Sony, JVC, Aiwa, Technics, Kenwood and Pioneer.

AIWA



LCX 9

PRICE PROMISE

We always try to ensure our prices are competitive. In the unlikely event of an identical product being available from an authorised dealer at a lower price, we will beat that price by up to £ 20. To qualify it must be a verifiable offer on product that is in stock, brand new and in a sealed box. No added value Offers apply on price beat sales.

PRICE BEAT VALUES:

£110 - £500 = £10
 £501 - £1,000 = £15
 £1,001+ = £20

GUARANTEES

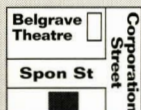
All the products we sell are brand new, fully guaranteed and maintained by our own Central Service Department .

**SUPERFI
 CENTRAL
 SERVICE
 DEPARTMENT
 0602 420414**

**SEVENOAKS
 CENTRAL
 SERVICE
 DEPARTMENT
 0732 459105**

**MAIL ORDER
 HOTLINE
 0732 458985**

THE COUNTRY...



COVENTRY
 16 Spon Street
 0203 223254

Superfi



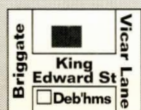
DERBY
 56 London Road
 0332 360303

Superfi



HULL
 4 Dock Street
 0482 24051

Superfi



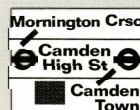
LEEDS
 7 King Edward Street
 0532 449075

Superfi



LINCOLN
 271a High Street
 0522 520265

Superfi



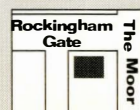
LONDON
 2-4 Camden High Street
 071 388 1300

Superfi



NOTTINGHAM
 15 Market Street
 0602 412137

Superfi



SHEFFIELD
 1 Rockingham Gate,
 The Moor
 0742 723768

Superfi



STOKE ON TRENT
 51 Picadilly, Hanley
 0782 265010

Superfi



WORCESTER
 2 Reindeer Court

Sevenoaks Hi Fi

NEW BRANCH OPENING SOON

Prices include Vat and were correct at time of going to press, but are subject to change without prior notice. E&OE. Most, but not all, of the offers displayed are also available from our associates Superfi. Sevenoaks Hi Fi and Superfi are not legally related and are separate commercial undertakings. All prices are valid until at least July 31st, 1994



**SEVENOAKS
 SUPERFI**

Listen inn

LESS HI-FI . . . MORE MUSIC

Arcam, Audiolab, Creek, Cyrus, Denon, Epos, Heybrook, Linn, Marantz, Mission, NAD, Naim, Nakamichi, Rega, Rotel . . . plus other selected brands.

Not all brands stocked at both shops.

6 HOTEL STREET,
LEICESTER
TEL: 0533 623754

32 GOLD STREET,
NORTHAMPTON
TEL: 0604 37871

Mail Order Madness Phone For A Catalogue



Boxcalc cabinet design software now available
design your own Band pass, Reflex and IB systems
Only£69.00 inc p&p



Unit 9 Waterside Mill
Waterside Macclesfield
Cheshire SK11 7HG
Tel No 0625-500507
Fax No 0625-500508



WOLLATON A·U·D·I·O

THE MONARCHY

DIP

Digital Interface Process

The DIP will improve your CD transport
by banishing jitter

Guaranteed improvement in sound our
your money back

See the review of the DIP and the other
Monarchy products in this issue

£245 + P&P

Available exclusively from

Wollaton Audio

Tel/fax: (0602) 284147

V'AUDIO

36 Druid Hill, Stoke Bishop, Bristol BS9 1EJ
Telephone: 0272 686005

FUTURE ATTRACTIONS

By the time this advert appears we should have
the following exciting items on demo.

A) Electrocompaniet **NEW** super fidelity units; initially
this will consist of the EC-4 line-stage pre-amp (£1460),
it's matching ECP-1 MM/MC Phono Amp (£625), and
the Ampliwire 100SF Dual Mono Balanced 2 x 100w
Power Amp. (£2140). Class A performance during
most operating conditions contribute to musical ease
of the Power Amps. The units will be in the 'Larvikit'
stone front finish as used on the Limited Edition
Signature Units, but can also be obtained with black
acrylic faceplate and gold handles. Gold plated
RCA jacks and speaker terminals, as well as XLR's
are standard. We are the first UK dealer to have
these units - see also esoteric audio imports advert in
this issue.

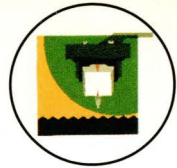
B) Trichord Research 'Pulsar' Dac Outboard Power
Supply improving even further the sound of this very
popular unit.

C) The Triangle TE60, which has impressed from the
moment we heard it - near class 'A' sound, it does get
hot - but sounds great on **ALL** our speakers. Now run in
the complete E speakers are well worth a listen,
especially for acoustic/OA22 fans. The TE60 is also an
excellent Pre-Amp and is superb driving the Toca 22
watt pure class A power amp into the Quad 63's.



Key to turntables.
Price - typical retail, to nearest pound.
Speeds - 33, 45 and/or 78 revolutions per minute.
Type - A - Auto, that is, automatic play initiation, and arm return at end of side.
S - Semi, arm lift or arm return at end of side. M - Manual.

Size - width x height x depth in cm.
Special - Cartridge and/or arm included etc.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.



Key to cartridges.
Price - typical retail, to nearest pound.
Type - MM - moving magnet (output typically 1mV/cm/sec), MC - moving coil (output typically 0.1mV/cm/sec).
Output - in mV/cm/sec
Int. stylus - Y for removable/replaceable styli and N for fixed styli.

Fit - N for normal half inch mountings, T for T4P plug in types.
Weight - in grams.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Brands	Presets	RDS	Size	Special
TUNERS						
Sherwood TX3010C	120	FM,M	30	N	-	
Sony STS211LB	130	FM,M,L	30	N	43,9,30	Station naming
Sony STS311LB	200	FM,M,L	30	Y	43,9,30	RDS EON, 'Autobetel' select
Sony STS505ES	250	FM,M,L	30	Y	43,9,35	UK optimised sound
Teac T-X4030	120	FM,M	20	N	44,9,28	
Technics ST-6T350L	140	FM,M,L	30	N	43,7,30	
Technics ST-GT550L	190	FM,M,L	39	N	43,7,31	Remote control capable
Technics ST-GT650L	230	FM,M,L	39	Y	43,10,31	Class AA, remote control ready
Yamaha TX-350L	130	FM,M,L	40	N	-	
Yamaha TX-470	160	FM,M	40	N	N	

Model	Price	Type	Speeds	Size	Special
TURNABLES					
SME Model 20A	3763	M	33/45/78	42,15,32	With SME Series V arm
SME Model 30	10166	M	33/45/78	45,22,35	Flagship turntable
SME Model 30A	11399	M	33/45/78	45,22,35	With SME Series V arm
Sony PSLX1504H	90	S	33/45	43,10,36	Player, with MM cartridge
Sony PSLX431B	150	A	33/45	43,11,36	Player, auto rec size select
Systemdek I/920	136	M	33/45	-	Semi-suspended deck
Systemdek IIX/900	230	M	33/45	-	Fully suspended design
Systemdek I/920/Moth	235	M	33/45	-	As above with RB250 arm
Systemdek IIXE/900	330	M	33/45	-	As above with separate PSU
Technics SL-BD20	140	S	33/45	43,10,38	Belt drive, includes T4P cartr
Technics SL-BD22	160	S	33/45	43,10,38	Belt drive, includes T4P cartr
Technics SL-1210MkII	430	M	33/45	46,17,36	Quartz DD, no cartridge
Technics SL-1200MkII	430	M	33/45	43,10,38	Quartz DD, includes T4P cartri
Thorens TD-180/AT91	180	S	33/45/78	-	Elekt drive, inc Stanton 500 c
Thorens TD-280 IV/UK	200	S	33/45/78	-	Electronic belt drive, AT95E
Thorens TD-166 VI/UK	200	M	33/45	-	Blank armboard, cut to shape,
Thorens TD-166 VII/UK	270	M	33/45	-	Inc TP50 manual arm, AT95E
Thorens TD-166 VII/UK	300	M	33/45	-	With Rega RB250 arm, no cart
Thorens TD-3001BC	630	M	33/45	-	No arm, various armboards avai
Thorens TD-2001	700	S	33/45	-	Includes Thorens TP90 arm, no
Thorens TD-3001/UK	770	M	33/45	-	Suspended, Rega arm no cart
Thorens TD-520	900	S	33/45/78	-	Thorens TP90, pitch control, n
Townshend MkIII Rock	799	M	33/45	-	Headshell end arm damping
Triangle 6/Sumiko	699	M	33/45	17,46,3	with Sumiko arm
Voyd The	1570	M	33/45	51,16,42	Original three-motor model
Voyd 0.5	3368	M	33/45	51,16,42	Upgraded standard Voyd
Voyd Reference	6500	M	33/45	51,16,48	Turntable, polycarbonate platt
VPI HW-19Mk3/PLC	2150	M	33/45	-	External PSU, belt driven
VPI HW-19Mk4/PLC	2950	M	33/45	-	As above, TNT platter/bearing
VPI TNT Junior	3500	M	33/45	-	Poor mans TNT Series 3
VPI TNT Series 3	6000	M	33/45	-	Unique platter and drive
Wilson Benesch	1550	M	33/45	-	High-tech turntable

Model	Price	Type	Speeds	Size	Special
TURNABLES					
Akal AP A950	179	M	33/45	44,12,35	inc cartridge
Alphason Sonata	835	M	33	-	Motor unit, suspended
Alphason Sonata/Atlas	1235	M	33/45	-	Motor unit inc PSU
Alphason Symphony	1860	M	33/45	-	Motor unit & PSU
Ariston Pro-1200	160	M	33/45	-	Semi-pro disco deck
Audiomeca Romance	1675	M	33/45	-	With Romeo unipivot arm
Audiomeca J1	2500	M	33/45	50,40,2	Top of the range model
Audiomeca J1/SL5	4250	M	33/45	50,40,2	With parallel tracking arm
B&O 7000	505	Auto	33/45	42,8,33	Inc MMC2 cartridge, RIAA pream
Basis Ovation	4950	M	33/45	58,42,14	Lead/brass, record clamped
Basis Debut Gold Std	7250	M	33/45	58,42,19	Belt drive, high mass, four po
Basis Debut Suction	8550	M	33/45	58,42,19	Includes suction platter
DNM Rota 1	2850	M	33/45	59,14,37	Includes arm and cartridge
DNM Rota 2	4000	M	33/45	59,14,37	Includes arm and cartridge
Dual CS3700	85	S	33/45	36,36,9	Mid-sized turntable
Dual CS435	130	F	33/45	44,36,1	Turntable includes cartridge
Dual CS503-2	170	S	33/45	44,13,3	Turntable includes cartridge
Dual 505-4 UK	200	S	33/45	44,15,3	Turntable inc cartridge
Dual CS750-1	350	S	33/45/78	44,14,3	Turntable includes cartridge
Dual Golden One	500	S	33/45/78	44,14,3	Piano finish CS750-1
Genexia Lab-710	60	M	33/45	-	Includes MM cartridge
Genexia Lab-810	70	S	33/45	-	Includes MM cartridge
Goodmans Delta 700	55	S	33/45	-	Part of Delta system
Kenwood KD-491F	100	A	33/45	44,10,39	Includes cartridge
Kuzma Stabi/PS	1200	M	33/45	51,18,4	Belt driven, external PSU
Kuzma Stabi Ref/PS	3000	M	33/45	-	Two motor, belt driven
Linn Basik	349	M	33/45	45,14,36	Complete with Akito arm
Linn LP12 Basik	745	M	33	45,14,36	Non-crystal motor drive
Linn LP12 Valhalla	894	M	33/45	45,14,36	Electronic PSU, upgradable
Linn LP12 Lingo	1345	M	33/45	45,14,36	Outdoor high grade PSU
Manticore Madrigal	570	M	33/45	46,36,12	Turntable
Manticore Mantra	780	M	33/45	46,36,12	Turntable
Manticore Magister	3800	M	33/45	57,46,18	Special order only
Michell Mycro	397	M	33/45	46,14,34	
Michell Mycro/arm	539	M	33/45	46,14,34	Includes Rega RB300 arm
Michell Gyrodek	697	M	33/45	53,19,41	Optional outboard PSU
Michell Gyrodek/arm	839	M	33/45	53,19,41	Includes Rega RB300 arm
Moth Alamo	175	M	33/45	-	Comes with RB250 arm
Moth Turntable	199	M	33/45	-	Split-plinth design
NAD 5120	110	S	33/45	-	includes arm
N'ham Spacedeck	600	M	33,45	-	
N'ham Illusion	600	M	33/45	-	
N'ham HyperSpacedeck	1200	M	33/45	-	
N'ham Graphic	1200	M	33/45	-	
N'ham Mentor	2200	M	33/45	-	75lb alloy or graphite platter
N'ham Mentor Ref	4800	M	33/45	-	150lb platter, graphite top
Origin Live Oasis-S	899	M	33	-	Suspended turntable
Pink Triangle Export GTI	890	M	33/45	46,15,37	Suspended turntable, acrylic p
Pink Triangle Anniv	1695	M	33/45	45,15,37	Two box reference deck
Pink Triangle Anniv/PSU	2050	M	33/45	45,15,37	Battery PSU version of above
Pioneer PL-225	120	S	33/45	42,10,36	Belt drive, fitted cartridge
Pioneer PL-335	150	A	33/45	42,10,36	Belt drive, fitted cartridge
Pro-ject 0.5	145	S	33/45	42,11,3	With Ortofon OMS cartridge
Pro-ject 1	185	M	33/45	42,11,3	With Ortofon 510 cartridge
Pro-ject 1 (E)	209	S	33,45	42,11,32	Semi-auto version of Pro-ject
Pro-ject 2	249	M	33/45	46,12,3	Metal/glass platter, clamp
Pro-ject 2/Ortofon	275	M	33/45	46,12,3	With Ortofon MC1 cartridge
Pro-ject 6	379	M	33/45	46,17,3	Suspended turntable
Pro-ject 6/Ortofon	435	M	33/45	46,17,3	As above, with Ortofon MC15
Pro-ject 6/Sumiko	699	M	33/45	46,17,3	With Sumiko arm
Rega Planar 78	198	M	78	45,13,37	As Rega Planar 2, 78 only
Rega Planar 2	198	M	33/45	45,13,37	Includes RB250 arm
Rega Planar 3	260	M	33/45	45,13,37	Includes RB300 arm
Rivelin Audio Eclipse	1595	M	33/45	45,13,38	Motor unit
Roksan Radius	495	M	33/45	46,12,35	Motor unit
Roksan Radius/Tabriz	695	M	33/45	45,13,36	As above, with Roksan arm
Roksan TMS	2500	M	33/45	46,12,35	Reference motor unit
Sherwood PS1870	70	S	33/45	-	Budget turntable with arm
SME Model 20	2683	M	33/45/78	42,16,32	Precision turntable

Model	Price	Type	Output	Int. stylus	Fit	Weight	Special
CARTRIDGES							
Arcam C77	30	MM	4mV	Y	N	-	Conical stylus
Arcam C77MG	40	MM	4mV	Y	N	-	As C77 with metal body
Arcam E77	50	MM	4mV	Y	N	-	Elliptical stylus
Arcam E77MG	60	MM	4mV	Y	N	-	As E77, with metal body
Arcam P77	63	MM	4mV	Y	N	-	'Profile' stylus
Arcam P77MG	73	MM	4mV	Y	N	-	As P77, with metal body
Audio Note Io IIV	1395	MC	-	N	N	-	Silver wired
Audio Note Io Ltd V	2950	MC	-	N	N	-	Needs PSU
Audio Technica AT-91	13	MM	-	Y	N	-	
Audio Technica AT-95E	19	MM	-	Y	N	-	
Audio Technica AT-101EF	20	MM	-	Y	N	-	
Audio Technica AT-110E	24	MM	-	Y	N	-	
Audio Technica AT-420E	40	MM	-	Y	N	-	
Audio Technica AT-450E	62	MM	-	Y	N	-	
Audio Technica AT-OC3	104	MC	-	N	N	-	
Audio Technica AT-OC5	146	MC	-	N	N	-	
Audio Technica AT-OC30	619	MC	-	N	N	-	Nude micro linear stylus
Audio Technica ART-1	944	MC	-	N	N	-	
Audioquest MC5	250	MC	1.4mV	N	N	-	High output MC, line contact
Audioquest 404ii	500	MC	0.5mV	N	N	-	Boron cantilever
Audioquest B200L	800	MC	0.5mV	N	N	-	Boron tube cantilever
Audioquest 7000NSX	1295	MC	0.3mV	N	N	-	Boron tube cantilever
Benz-Micro The Glider	600	MC	1mV	N	N	-	
Benz-Micro H200	700	MC	2mV	N	N	-	
Benz-Micro M090	700	MC	0.9mV	N	N	-	
Benz-Micro L040	700	MC	0.4mV	N	N	-	
Benz-Micro MC-3i	850	MC	0.3mV	N	N	-	
Benz-Micro Wood Ref	1100	MC	0.3mV	N	N	-	Bruyere housing
Benz-Micro Ruby Ref	1400	MC	0.3mV	N	N	-	Bruyere housing
Denon DL110	70	MC	-	N	N	-	Elliptical stylus
Denon DL160	90	MC	-	N	N	-	
Denon DL103	100	MC	-	N	N	-	
Denon DL304	200	MC	-	N	N	-	Elliptical stylus
Dynavector 50X MkII	159	MC	-	N	N	-	High output elliptical MC
Dynavector 10X4 MkII	189	MC	-	N	N	-	High output elliptical MC
Dynavector 23RS MkII	375	MC	-	N	N	-	Micro ridge stylus
Dynavector 17D2 MkII	449	MC	-	N	N	-	Micro ridge stylus
Dynavector XX-1L	998	MC	-	N	N	-	Micro ridge stylus
Dynavector XX-1	998	MC	-	N	N	-	High output, line contact MC
Glanz GMC-10LX	69	MC	0.3	Y	N	5	
Glanz GMC 20E	99	MC	0.5	Y	N	6	
Goldingr Elan P	17	MM	5.0mV	Y	T	6	T4P version of Elan
Goldingr Elan	17	MM	5.0mV	Y	N	4	Rigid body
Goldingr Elektra	25	MM	5.0mV	Y	N	4	Elliptical stylus
Goldingr 1006	50	MM	6.5mV	Y	N	6	Elliptical stylus
Gyger 1012GX	65	MM	6.5mV	Y	N	6	Gyger II stylus
Gyger 1022GX	85	MM	6.5mV	Y	N	6	Gyger I stylus

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.
Voyd 0.5 3368 33/45 M 51,16,42 Upgraded standard Voyd

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.
Kiseki Lapis Lazuli 5000 - - - MC, gemstone body

Bartletts HI-FI

NORTH LONDON
175 Holloway Road
Islington
London, N7
Tel: 071 607 2148

WOKING
11 The Broadway
Woking, Surrey,
GU21 5AP
Tel: 0483 771175

Open 9.30am-6pm Monday-Saturday

Demonstrations are available at both Bartletts stores: just call to book your appointment

For Mail Order please call either 071 607 2296 or 071 607 2148 or Fax 071 609 0536

**MISSION
CYRUS PSX**

WAS £299.90

NOW ONLY £149.90

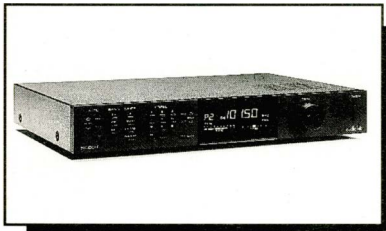
**MISSION
DAC 5**

WAS £299.90

NOW ONLY £149.90

**BRING YOUR FILMS TO LIFE
HOME
CINEMA**

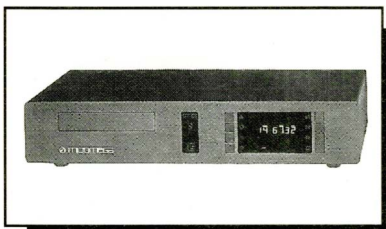
Call Bartletts for a demonstration



AUDIOLAB



CYRUS



MICROMEGA

Bartletts Suggested Systems

The Bartletts Suggested Systems listed below are supplied with the Marantz CD 53, an alternative CD player or Turntable is available, see below for price details. All systems are supplied with 8 metres of 79 strand loudspeaker cable. QED 4mm plugs are available at a cost

of £1.00 each. Carriage charge for delivery to an address on the UK mainland is £12.00 per order. All items are sent fully insured. Prices were correct at time of printing but are subject to change without notice. All systems come with a 2 year parts & labour guarantee. E&OE.

	Celestion 1	Mission 760i Celestion 3 II Mordaunt Short MS 10	Tannoy 603 II Mission 760ise	Mission 761i B&W DM 600i Celestion 5 II Tannoy 605 II Mordaunt Short MS 20	Tannoy 607 II Celestion 7 II Nad 802	Rogers LS 2a2 B&W DM 610i Mission 780	Mission 762i Cerwin- Vega VS 8 Mission 780 SE	Rogers LS 4a2 Tannoy 609 II
Marantz PM 44 SE	378.95	417.96	433.95	456.95	487.95	503.95	518.95	550.95
Nad 302	355.95	394.95	409.95	433.95	464.95	479.95	495.95	526.95
Nad 304	401.95	440.95	456.95	479.95	511.95	526.95	542.95	573.95
Harman Kardon 6150	378.95	417.95	433.95	456.95	487.95	503.95	518.95	550.95
Harman Kardon 1200	480.95	524.95	542.95	568.95	604.95	617.95	630.95	674.95
Technics SUA 600	378.95	417.95	433.95	456.95	487.95	503.95	518.95	550.95
Pioneer A 300X	401.95	440.95	456.95	479.95	511.95	526.95	542.95	573.95

Options

The following CD players or turntables can be ordered instead of the Marantz CD 53 in the above systems:

CD Players

Denon DCD 595	Deduct	£20.00	Denon DCD 695	Add	Nil	Denon DCD 890	Add	£70.00
Marantz CD 52 II SE	Add	£100.00	Marantz CD 63	Add	£50.00	Nad 501	Deduct	£20.00
Nad 502	Add	£20.00	Sony CDP 711	Add	£50.00	Sony CDP 911	Add	£100.00
Yamaha CDX 470	Add	Nil	Yamaha CDX 570	Add	£45.00	Yamaha CDX 670	Add	£90.00

Turntables

Dual CS 503-2	Deduct	£20.00	Dual CS 505-4	Add	£30.00	Technics SLBD 22	Deduct	£50.00
Thorens TD 280	Add	Nil						

Bartletts
are stockists for:

Aiwa, Arcam, Audiolab, Audio Source, Audio Technica, Aura, B&W, Beyer, Bose, Boston, Cable Talk, Canon, Celestion, Cerwin-Vega, Copland, Creek, Cyrus, Denon, Dual, Epos, Exposure, Harmon Kardon, Marantz, Michell, Micromega, Mission, Moth, NAD, Nakamichi, Panasonic, Pioneer, Polk, ProAc, Quad, Rel, Roberts, Rogers, Rotel, Royd, Ruark, Sennheiser, Sony, Systemdek, Tannoy, Target, TDL, Technics, Thorens, Yamaha

music made live ... music made live ...

PLAY TO WIN

with

Bartletts

OPTIONS

OPTION 1

Get back 15% of your purchase price, which can be used to claim free accessories or loudspeakers of your choice

OPTION 2

Interest free credit on your purchase (minimum balance after deposit £200)

OPTION 3

? (For personal callers only!)

And that's not all! In all these options every item costing £200 or more is covered by Bartletts full 3 year parts and labour guarantee.

[Certain restrictions apply to Bartletts Options: Suggested Systems are excluded. Credit is subject to status (written details upon request) Bartletts are licenced credit brokers. E&OE.]

So don't play the fool

Play to win at

Bartletts

music made live ... music made live ...



Key to cartridges.
Price - typical retail, to nearest pound.
Type - MM - moving magnet (output typically 1mV/cm/sec), MC - moving coil (output typically 0.1mV/cm/sec).
Output - in mV/cm/sec.
Int. stylus - Y for removable/replaceable styli and N for fixed styli.

Fit - N for normal half inch mountings, T for T4P plug in types.
Weight - in grams.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Output	Int. stylus	Fit	Weight	Special
CARTRIDGES							
Goldring Eroica LX	100	MC	0.5mV	N	N	6	As Eroica, low output
Goldring Eroica	100	MC	2.5	N	N	6	Gyger II stylus
Goldring 1042	105	MM	6.5mV	Y	N	6	Gyger S stylus
Goldring Elite	200	MC	0.5mV	N	N	6	van den Hul, silver wire
Goldring Excel	549	MC	0.5mV	N	N	8	van den Hul I stylus
Goldring Excel GS	599	MC	0.5mV	N	N	8	Gyger S, hand built
Grado ZTE+1	27	MM	-	Y	N	-	Moving flux, high output
Grado ZCE+1	37	MM	-	Y	N	-	Moving flux
Grado Z3E+1	47	MM	-	Y	N	-	Moving flux
Grado ZF1+	82	MM	-	Y	N	-	Moving flux
Grado Signature 8MZ	250	MM	-	Y	N	-	Moving flux
Grado Signature MCZ	375	MM	-	Y	N	-	Moving flux
Grado Signature TLZ	650	MM	-	Y	N	-	Moving flux
Grado Signature XTZ	975	MM	-	Y	N	-	Moving flux
Kiseki Blue GS	499	MC	0.4mV	N	N	8	
Kiseki Purpleheart	749	MC	0.4mV	N	N	11	
Kiseki PHS	899	MC	0.4mV	N	N	8	
Kiseki Blackheart	1995	MC	0.3mV	N	N	11	
Kiseki Lapis Lazuli	5000	MC	0.4mV	N	N	8	Gemstone body
Koetsu Red T	1550	MC	-	N	N	-	High-output MC
Koetsu Red K Sig	1998	MC	-	N	N	-	Selected, re-tuned Red T
Koetsu Urushi	2200	MC	-	N	N	-	Metal alloy body
Koetsu Signature	3218	MC	-	N	N	-	Rosewood body
Linn K5	54	MM	4.5mm	Y	N	-	
Linn K9	109	MM	4.5mm	Y	N	-	
Linn K18/II	197	MM	4.5mm	Y	N	-	Metal body
Linn Klyde	449	MC	150uV	N	N	-	Alloy body
Linn Arkiv	998	MC	150uV	N	N	-	Three point mt, machined body
London Decca Maroon	199	MM	5.0mV	N	N	8	Original mounting
London Decca Gold	239	MM	5.0mV	N	N	8	Elliptical stylus
London Decca Maroon Dp	259	MM	5.0mV	N	N	10	Deccapod mounting
London Decca Gold Dpd	299	MM	5.0mV	N	N	5	Elliptical stylus, Deccapod
London Decca S Gold	339	MM	5.0mV	N	N	7	Original mounting
London Decca S Gold Dp	399	MM	5.0mV	N	N	10	Deccapod mounting
London Decca Jubilee	999	MM	5.0mV	N	N	5	0.5 inch mounting
Lyra Lydian	649	MC	-	Y	N	-	
Lyra Clavis	1298	MC	-	Y	N	-	
Lyra Parnassus	1995	MC	-	Y	N	-	
Milltek Aurora	299	MC	2.0mV	N	N	9.5	High output MC
Milltek Olympia	399	MC	2.0mV	N	N	9.5	As Aurora, sapphire cantilever
Nagaoka MP-11	24	MM	-	Y	N	-	Elliptical stylus
Nagaoka TS11	70	MM	-	Y	N	-	Line contact stylus
Nagaoka TS12 Boron	80	MM	-	Y	N	-	As MP-11, with boron cantileve
N'ham Tracer I	98	MM	-	-	-	-	
N'ham Tracer II	175	MM	-	-	-	-	
N'ham Tracer III	350	MM	-	-	-	-	
N'ham Tracer IV	550	MM	-	-	N	-	
Ortofon OMP-5E	16	MC	-	Y	T	-	
Ortofon OM-5E	16	MM	-	Y	N	-	
Ortofon OM3E/U	20	MM	-	Y	-	-	With headshell
Ortofon OM3E/U	20	MM	-	Y	N	-	
Ortofon OM3E/S	20	MM	-	Y	-	-	With headshell
Ortofon OM Pro S	21	MM	-	Y	N	-	Budget disco cartridge
Ortofon OM10 Super	25	MM	-	Y	N	-	Elliptical stylus
Ortofon Night Club	32	MM	-	Y	N	-	Spherical stylus
Ortofon 510	32	MM	-	Y	N	-	
Ortofon Night Club	37	MM	-	Y	N	-	Elliptical stylus
Ortofon Concord Pro	40	MM	-	Y	N	-	For professional use
Ortofon Concord NC	55	MM	-	Y	N	-	Professional, spherical stylus
Ortofon 520P	55	MM	-	Y	N	-	
Ortofon 520	55	MM	-	Y	N	-	Elliptical stylus
Ortofon OM20 Super	60	MM	-	Y	N	-	
Ortofon MC1 Turbo	60	MC	-	Y	N	-	
Ortofon Concord NC	60	MM	-	Y	N	-	Spherical version of Concord
Ortofon OM30 Super	80	MM	-	Y	N	-	Fine line stylus
Ortofon MC10 Super	85	MC	-	N	N	-	
Ortofon 530P	85	MM	-	Y	T	-	
Ortofon 530	85	MM	-	Y	N	-	Elliptical stylus
Ortofon Quartz	110	MC	-	N	N	-	High output MC cartridge
Ortofon MC3 Turbo	110	MC	-	N	N	-	
Ortofon MC15 Super II	110	MC	-	N	N	-	
Ortofon 540	110	MM	-	Y	N	-	
Ortofon Quasar	350	MC	-	N	N	-	High-output elliptical MC

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.
Kiseki Lapis Lazuli 5000 - - - MC, gemstone body



Key to cartridges.
Price - typical retail, to nearest pound.
Type - MM - moving magnet (output typically 1mV/cm/sec), MC - moving coil (output typically 0.1mV/cm/sec).
Output - in mV/cm/sec.
Int. stylus - Y for removable/replaceable styli and N for fixed styli.

Fit - N for normal half inch mountings, T for T4P plug in types.
Weight - in grams.

Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Output	Int. stylus	Fit	Weight	Special
CARTRIDGES							
Ortofon MC2000II	650	MC	-	N	N	-	
Ortofon MC3000II	950	MC	-	N	N	-	'Replicant' stylus
Ortofon MC5000	1500	MC	-	N	N	-	Sapphire cantilever
Ortofon MC7500	2000	MC	-	N	N	-	75th Anniversary model
Pickering TE-15	20	MM	-	Y	N	-	Tracks 1.5gm
Pickering VE-15	25	MM	-	Y	N	-	Tracks 1 - 3gms
Pickering T-E	25	MM	-	Y	T	-	Elliptical
Pickering V15-DJ	28	MM	-	Y	N	-	Disco model
Pickering TL-E	35	MM	-	Y	T	-	
Pickering XV15-350C	40	MM	-	Y	N	-	Conical stylus
Pickering TL-2E	45	MM	-	Y	T	-	
Pickering XV15-625E	50	MM	-	Y	N	-	
Pickering XV15-150-DJ	50	MM	-	Y	N	-	Professional cartridge
Pickering TL-2-S	55	MM	-	Y	N	-	Line contact stylus
Pickering XV15-757S	60	MM	-	Y	N	-	Line contact stylus
Pickering XV15-625DJ	60	MM	-	Y	N	-	Broadcast cartridge
Pickering XV15-1800S	70	MM	-	Y	N	-	Line contact stylus
Pickering TL3S	80	MM	-	Y	T	-	
Pickering XEV-3001E	95	MM	-	Y	N	-	Elliptical stylus
Pickering XLZ-3500	100	MM	-	Y	N	-	
Pickering TL-4-S	100	MM	-	Y	T	-	
Pickering TL-3003	145	MM	-	Y	T	-	
Pickering XLZ-4500	150	MM	-	Y	N	-	Line contact
Pickering TL-4004	175	MM	-	Y	T	-	
Pickering XSV-5000U	200	MM	-	Y	N	-	High output
Pickering XLZ-7500	200	MM	-	Y	N	-	Hybrid, low impedance
Pickering TLZ-7500-S	200	MM	-	Y	T	-	
Rega Bias	34	MM	-	-	N	-	
Rega 78	34	MM	-	-	N	-	for 78rpm records
Rega Super Bias	52	MM	-	-	N	-	
Rega Elys	74	MM	-	-	N	-	
Roksan Corus Black	130	MM	-	Y	N	-	
Roksan Shiraz	800	MM	-	N	N	-	
Shure ME70B	18	MM	6mV	Y	N	-	Conical stylus
Shure M92E	22	MM	5mV	Y	-	-	Dual T4P & normal fit
Shure SC35C	28	MM	5mV	Y	N	-	For broadcast use
Shure M44C	33	MM	9mV	Y	N	-	Professional, spherical stylus
Shure M44-7	33	MM	9mV	Y	N	-	Professional, spherical stylus
Shure M44G	35	MM	6mV	Y	N	-	Professional, spherical stylus
Shure ME95ED	38	MM	5mV	Y	N	-	Elliptical stylus
Shure M55E	42	MM	6mV	Y	N	-	Professional, spherical stylus
Shure M104E	44	MM	5mV	Y	-	-	Dual T4P & normal fit
Shure ME97HE	60	MM	4mV	Y	N	-	Hyper elliptical stylus
Shure M110HE	74	MM	4mV	Y	-	-	Dual T4P & normal fit
Shure V15V-MR	265	MM	3mV	Y	N	-	Micro ridge stylus
Stanton 500EL	34	MM	-	Y	N	-	Elliptical stylus
Stanton 500AL II	34	MM	-	Y	N	-	Spherical stylus
Stanton 680AL/X	50	MM	-	Y	N	-	Spherical stylus
Stanton 680EL/X	56	MM	-	Y	N	-	Elliptical stylus
Stanton 890AL/X	82	MM	-	Y	N	-	Professional cartridge
Sumiko Oyster	30	MM	-	Y	N	-	
Sumiko Black Pearl	50	MM	-	Y	N	-	
Sumiko Pearl	70	MM	-	Y	N	-	
Sumiko Blue Point	100	MC	-	N	N	-	High output MC
Sumiko BPS	250	MC	-	N	N	-	Nude stylus
Transfiguration AF-1 Mk II	1595	MC	230uV	N	N	-	MC, transformer & preamp
Transfiguration Supreme	1995	MC	200uV	N	N	-	Yokeless ring magnet system
van den Hul MM-1	275	MM	-	-	N	-	
van den Hul MM-2	325	MM	-	-	N	-	
van den Hul DDT-II	675	MC	-	N	N	-	Silver coils
van den Hul MC-10	775	MC	-	N	N	-	Silver coils
van den Hul MC-One	975	MC	-	N	N	-	Selected version of MC-10
van den Hul MC-One/Hi	1100	MC	-	N	N	-	High output version of MC-10
van den Hul MC-Two	1300	MC	-	N	N	-	As MC-One/Hi, higher output
vdH Grasshopper III	2300	MC	-	N	N	-	
vdH Grasshopper III	2300	MC	-	N	N	-	
vdH Grasshopper III	2950	MC	-	N	N	-	
vdH Grasshopper III	3200	MC	-	N	N	-	
vdH Grasshopper III	3200	-	-	N	N	-	
vdH Grasshopper III	3500	MC	-	N	N	-	
Virtual Reality Aciore	199	MC	-	N	N	-	
Virtual Reality Etile	299	MC	-	N	N	-	
Virtual Reality Lexe	899	MC	-	N	N	-	

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see page 123.
Kiseki Lapis Lazuli 5000 - - - MC, gemstone body



Key to tonearms
Price - typical retail to the nearest pound
Type - F - fixed armtube/headshell, A - interchangeable armtube, H - interchangeable headshell.
Base type - S - SME fit, L - Linn/Alphason fit, P - proprietary fit.
Effective length - from pivot point to headshell in millimetres.

Weight range - the range of cartridge masses that the arm can accept in grams.
Special - characteristics of the arm.
Products highlighted in red have been tested in *Hi-Fi Choice*. Please refer to The Directory on page 123 for full test results.

Model	Price	Type	Base type	Effective len	Wt. range	Special
ARMS						
Air Tangent Tangent 10B	8000	-	-	-	-	Air-bearing
Air Tan Tangent Ref. Sig.	10000	-	-	-	-	Remote version of above
Alphason Xenon	286	F	L	229	3-20	1-piece titanium armtube
Alphason Xenon MCS	370	F	L	229	3-20	vdH silver wiring
Alphason HR100S	490	F	L	229	3-20	Superior quality bearing
Alphason HR100S MCS	550	F	L	229	3-20	vdH silver, top bearings
Audiomeca SL5	1999	-	-	-	-	Parallel tracking
Decca LJ Arm	49	H	L	212	5-12	Damped
Decca LJR Arm	99	H	L	212	5-12	Rewired version of LJ
Dynavector 507	1400	-	-	-	-	Biaxial design
Graham 1.5T	2550	-	S	-	-	SME base, unipivot
Helius Orion 3 S1 Copper	395	P	P	254	-	
Helius Orion 3 S1 Silver	515	P	P	254	-	
Helius Orion 3 S2 Copper	575	P	P	254	-	Bi-metal tube
Helius Orion 3 S2 Silver	695	P	P	254	-	Bi-metal tube
Helius Cyalene 2	1395	P	P	254	-	Silver wired, pivoted
Kuzma Stogi	600	-	-	-	-	Effective mass 13gm
Kuzma Stogi Ref	1000	-	-	-	-	Effective mass 12.5gm
Linn Akito	209	F	L	229	-	Statically balanced
Linn Ekos	1297	F	L	229	-	Dynamically balanced
Manticore Musician	320	F	L	230	-	
Manticore Magician	650	F	L	230	-	Polished armtube finish
Manticore Magician	720	F	L	305	-	Polished armtube finish
Moth Arm	95	-	-	-	-	Rebadged Rega RB250
Moth Mk III	146	-	-	-	-	Rebadged Rega RB300
Naim ARO	794	-	-	-	-	Unipivot
N'ham Space	350	-	-	-	-	Optional silver wiring, unipiv
N'ham Mentor	750	-	-	-	-	Silver wiring, unipiv
N'ham Alien	1200	-	-	-	-	Graphite tube, unipivot
Rega RB250	95	F	R	237	-	Scaled down RB300
Rega RB300	139	F	R	237	-	Pivoted arm
Roksan Tabriz ZI	330	-	-	-	-	'Intelligent' counterweight
Roksan Artemiz	690	F	-	-	-	Flagship arm
SME Series IIIS	230	A	S	233	0-12	Economy version of Series III
SME 3009 Ser II Imp	255	F	S	231	3-7	Fixed headshell, low mass
SME 3009 S2 Ser II Imp	278	H	S	231	3-8	Detachable headshell, medium m
SME Series III	320	A	S	233	0-13	Ultra-low mass for hi-complan
SME Series II 3009-R	424	H	S	233	0-28	Heavier version of Ser II S2 I
SME Series II 3010-R	434	H	S	239	0-25	Detachable headshell, 10 inch
SME Series II 3012-R	466	H	S	308	0-25	Detachable headshell, 12 inch
SME Series 300-309	568	H	S	232	6-17	Ser V derivative with detach h
SME Series 300-310	581	H	S	238	6-17	10 inch (nom) version of 300-3
SME Series 300-312	661	H	S	308	5-14	12 inch (nom) version of 300-3
SME Series IV	827	F	S	233	5-16	Economy version of Series V
SME Series V	1232	F	S	233	0-14	Flagship model
Townshend Excalbur	799	F	P	220	3-14	Outrigger headshell damping
Wheaton Tri-Planar 4	2750	-	-	-	-	With terminal box
Wheaton Tri-Planar 4C	3000	-	-	-	-	As above with Cardas cable
Wilson Benesch ACT1	975	-	-	-	-	Carbon-fibre armtube, unipivot
Zeta	469	-	-	-	-	Pivoted
Zeta	555	-	-	-	-	Pivoted, vdH wired

The information contained in the Hi-Fi Choice Buyer's Guide is supplied either by manufacturers or by distributors. Each month we contact all companies to ensure that the data is as accurate and up-to-date as possible. However, prices and specifications are subject to change due to circumstances beyond our control.

Please let us know if you spot any omissions or errors in the Buyer's Guide.

Listings marked in red (as shown below) are covered in the *Hi-Fi Choice* Directory, see p123.

SME Series V	1232	F	S	233	0-14	Flagship model
--------------	------	---	---	-----	------	----------------

Quality equipment at sensible prices

- Roksan M1 monoblocksmint s/h£1995
- Aragon 2004 pwr ampmint s/h£695
- Audio Inn 2nd (2A3, 82)mint s/h£1595
- Audio Research D240 MkIImint s/h£1795
- Audion 300B (Silver Knights)mint s/h£1595
- Albany 40B monoblocksmint s/h£495
- Manley 350 monoblocksmint s/h£2995
- Musical Fidelity F15/F22mint s/h£1995
- Roksan L2/S1 pre pwrmint s/h£995
- Conrad Johnson Prem 10/11as new£5500
- Musical Fidelity P370 MkIImint s/h£1195
- Threshold S150 pwr ampmint s/h£995
- Krell KMA 100 MkIImint s/h£1995
- Naim 52/135/CDS/SBL'spoa
- Krell KSA 80mint s/h£1695
- Audio Research LS5as new£3500
- Audio Research SP15 Mk IImint s/h£3500
- Pink Triangle P.P II + bat psumint s/h£1495
- Copeland 301 preas new£850
- Audio Innovations L2 premint s/h£495
- Audio Innovations P2 phonomint s/h£495
- NRG PA1 pre ampmint s/h£3500
- Sony TA-E 88 pre ampvgc£300
- Tesseract TALA pre ampx-demo£995
- Tesseract TAADA phono mm/mcx-demo£995
- Triology 902 pre ampas new£895
- Audio Research SP9mint s/h£895
- Linn Kairnmint s/h£895
- Mark Levinson No 26Smint s/h£4500
- Gryphon Limited Editionmint s/h£3500
- Jadis Defy 30mint s/h£1895
- Counterpoint SA 11mint s/h£3500
- Meridian D600 Bas new£1995
- Inifinity IRS Betamint s/h£4995
- Sonus Faber Electra + stndsmint s/h£1195
- Apogee Diva & Daxmint s/h£3900
- Martin Logan Questmint s/h£2800
- Wilson Watts 3 Puppie 2as new£7500
- Magneplanar 1.4as new£795
- Quad ESL 63 + Gradient s/wmint s/h£2850
- Kef 107.2 + Kubeas new£1795
- Apogee Duettamint s/h£895
- Monitor Audio ST10mint s/h£650
- M.T.D. Tug + stndsx-demo£1800
- Snell E's + Pirate stndsmint s/h£850
- B & W 802as new£1995
- Linn Keilhs + stndsas new£550
- Counterpoint DA10/11E u/aas new£2995
- Wadia 7 + 9 tran/dacmint s/h£15,995
- Wadia 2000 tran/dacmint s/h£4995
- Micromega Triomint s/h£2500
- EAD T7000 Mk II tran/dacmint s/h£3000
- Mark Levinson No 30/31mint s/h£15,500
- Micromega CD3 + duo bsmint s/h£995
- Krell MDI, SPB64 tran/dacmint s/h£5995
- Roksan ROK DPImint s/h£695
- Roksan Atessamint s/h£795
- Micromega Solomint s/h£895
- Wadia X64 dacmint s/h£2495
- Meridian 500 tranas new£695
- Roksan TMS/Artemis/DS4as new£2750
- Voyd Valdi/LVIImint s/h£550
- Rega RB 300as new£80
- Koetsu Black (new cant + tip)mint s/h£350
- Van den Hul MCImint s/h£550
- Ortofon MC3000/T3000as new£795
- LFD phono stagemint s/h£595
- Koetsu Redmint s/h£495
- Audio Note I/Oas new£995

Are you buying or selling Quality Hi-Fi? Then call now and ask about "The Hi-Fi Exchange"

- mint s/h - secondhand, as good an example as we've seen anywhere
- as new - typically less than 4 months old, in new condition
- x-demo - typically 'as new', but may be older in perfect working condition, but may be marked
- v.g.c/g.c.

Hi CHOICE

081 568 8808

Equipment bought or part exchanged. Full demonstration facility by appointment. Major credit cards are accepted. 9.30am to 8.00pm, 7 days

MUSICAL IMAGES

45 HIGH STREET
HOUNSLOW
MIDDLESEX TW3 1RH

TEL: (081) 569 5802

FAX: (081) 569 6353

10 MIN FROM
HEATHROW



MUSICAL IMAGES

173 STATION ROAD
EDGWARE
MIDDLESEX HA8 7JX

TEL: (081) 952 5535

FAX: (081) 951 5864

NTH/NW
LONDON

MAIN AUTHORISED DEALERS FOR:

- ACOUSTIC ENERGY
- ADCOM
- AIWA
- AKAI
- AKG
- ALCHEMIST (KRAKEN)
- ALPHASON
- ARCAM
- AUDIO ALCHEMY
- AUDIO INNOVATIONS
- AUDIOQUEST
- AUDIO TECHNICA
- AURA
- B & W
- BANBRIDGE ACCESSORIES
- BANG & OLUFSEN
- BEYER DYNAMIC
- BOSE
- BOSTON
- CABLE TALK
- CANON
- CASTLE
- CDi SOFTWARE
- CELESTION
- CERWIN VEGA
- CHORD
- CREK
- DPA
- DENON
- DUAL
- FOSGATE
- GEMINI/KAM
- GOLDRING
- HARMAN KARDON
- HECO
- HEYBROOK
- INFINITY
- IXOS
- JAMO
- JBL
- JPW
- JVC
- KEF
- KENWOOD
- LASER DISCS
- MACINTOSH
- MARANTZ
- MAXELL
- MICHELL

**PART
EXCHANGE**

DEMO ROOMS

**CLAIM
FREE
GOODS WORTH
£40
WHEN YOU
SPEND £300
NOT WITH ANY OTHER OFFER**



APR
**INTEREST
FREE CREDIT**
☎ (081) 569 5802

**WHY WAIT, BUY NOW WITH
MUSICAL IMAGES SPECIAL**

1. Decide what you want to buy
2. Decide what you want to pay per month
3. Ask if it can be done on

0% APR INTEREST FREE CREDIT

ANYWHERE IN UK ASK FOR DETAILS

**MAIL ORDER
WORLDWIDE**

**WE ARE OPEN
SUNDAYS**

**HOME
CINEMA
SPECIALISTS**

**INSTALLATION
SERVICE AVAILAIBLE**

MAIN AUTHORISED DEALERS

- FOR: MICROMEGA •
MISSION •
MITSUBISHI •
MONITOR AUDIO •
MONSTER •
MORDAUNT-SHORT •
NAD •
NAKAMICHI •
NINTENDO •
ORELLE •
ORTOFON •
PANASONIC •
PHILIPS •
PINK TRIANGLE •
PIONEER •
POLK •
PROJECT TURNTABLE •
QED •
QUAD •
REL •
ROGERS •
ROKSAN •
ROTEL •
ROYD •
RUARK •
SCOTCH/3M •
SEGA •
SENNHEISER •
SHURE •
SME •
SONY •
SOUNDSTYLE •
SPENDOR •
STAX •
SYSTEMDEK •
TANNOY PRESTIGE •
TARGET •
TEAC •
TECHNICS •
TDK •
THORENS •
TOSHIBA •
VAN DEN HUL •
WHARFEDAILE •
YAMAHA •
AND MANY MORE
E. & O.E.

**PAY AS
LITTLE AS**

**£30 PER
MONTH**

**FOR A £500
SYSTEM**

SUBJECT TO STATUS

FROM ANYWHERE IN UK

**Audio/Visual
Systems
from £300 to**

**£1200
PAY ONLY**

**£40 PER
MONTH**

**Home Cinema
System
worth**

**£2000
PAY ONLY**

**£75 PER
MONTH**

**Audio/Visual
System
worth**

**£4000
PAY ONLY**

**£125 PER
MONTH**

INTEREST FREE CREDIT

ASK FOR
DETAILS, SUBJECT
TO STATUS

The DIRECTORY



The original and best review based hi-fi guide

This is the legendary Directory, the second part of the new look Hi-Fi Choice Buyer's Guide, based entirely on comprehensive technical and subjective reviews. Each entry carries the weight of our exhaustive test procedures and should be read in conjunction with the prices and specifications given in our index starting on page 87.

The *Hi-Fi Choice Directory* was conceived as a reference guide to all the audio products reviewed by *Choice* that are currently available. The products are split into categories, each with its own introduction containing information about the product type and its applications. They are particularly relevant to the uninitiated first time buyer and help sort out the order of priorities when buying a piece of equipment.

Each product along with its current retail price is placed in its respective category in alphabetical order. The prices of the products are updated on a

regular basis, although it should be noted that our value ratings are based on the product's price at the time of review.

Sound quality

This column contains the ratings for the standard achieved in our listening tests. The sound quality ratings range from Poor to Excellent. Their meaning and order are as follows:

P	POOR
A-	AVERAGE-
A	AVERAGE
A+	AVERAGE+
G-	GOOD-
G	GOOD
G+	GOOD+
VG	VERY GOOD
E	EXCELLENT

With P being the worst and E the best rating within a section.

One important point to remember is that these cannot be used to compare products from different categories. For example, a cassette deck rated Excellent in sound quality will not usually offer the same

Finding that component

Before you shop, follow our top eight tips for better buying:

1. Check out the components' recommended retail prices in the *Directory*.
2. Find out as much as you can about the products you want by reading *Hi-Fi Choice's* reviews and lab tests.
3. Visit local dealers that stock some of the brands you want to hear and try to find one that seems sympathetic to your needs.
4. Don't discount a dealer's suggestions just because the products don't have rave reviews.
5. Take your own software (records, CDs, tapes) along for a demonstration of the equipment that the dealer recommends.
6. Listen at the sort of volume you would normally use at home — systems often sound more impressive when played loud.
7. If you are unsure about something or want to hear an alternative, just ask.
8. Audition a system for a reasonable amount of time, say three quarters of an hour or so, before making a decision.

standard of fidelity as a similarly rated turntable or CD player.

Unless you have first generation masters of course.

Comments

The Comments column contains a potted summary based on the original review, emphasising the salient points of a product's character and sonic performance. The space available doesn't allow for great detail but we have attempted to put across the essence of the review. Obviously, important information on compatibility or auxiliary equipment used in the test cannot be included, and we would advise you to refer to the original review for this.

Please note that these comments are those of our own reviewers and not, as is the case with some magazines, those of the manufacturer.

Features

Product features are shown with a combination of figures and blob charts, with headings at the top of each column indicating the appropriate category, a blob

indicating the existence of a particular feature.

There are different headings for each section and the more complicated categories are explained in the individual introductions. Where figures are used the unit of measurement is shown in the heading.

Back issues

The final column refers to the issue of *Hi-Fi Choice* which featured the complete review.

How to use this guide

Perhaps the most influential symbols in the *Directory* are the little red triangles ▲ found in the value column at the beginning of each entry where appropriate.

Products that make the grade are awarded the Best Buy or Recommended accolade.

▲▲ A product carrying the Best Buy swingtag is of excellent quality and good value for money in its price category.

▲ Recommended products are runners up, but still definitely worth considering within their price bands.

Please note however, that an expensive Recommended product will nearly always sound better than an inexpensive Best Buy.

An ideal situation would be to choose suitably priced ▲▲ Best Buy or ▲ Recommended products from relevant categories and create a Best Buy system. However, due to the variety in tonal balance that exists in many audio products, and differences in taste, system building is unfortunately not that simple. These ratings make a useful guideline for shortlisting components, but only experiencing the actual combination will tell you whether it works for you.

Index

Amplifiers	123
AV amplifiers	126
Cables	127
Cassette decks	132
CD players	133
CD transports	135
DACs	135
DAT players	137
Headphones	137
Loudspeakers	139
Stack systems	147
Tuners	147
Turntables - Cartridges	149
Turntables - Integrated	151
Motor units	151
Tonearms	151

The new Audiolab 8000CDM Compact Disc Transport



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



AUDIOLAB



Amplifiers

The amplifier sits at the heart of the system, processing the outputs from all the various music sources as necessary and then driving the loudspeakers. These two (quite separate) functions are integrated into a single box at the low-to-middle price points; separated pre- and power amplifiers, even separate power supplies, become increasingly common as one moves upmarket. At the upper end of the specialist market, valve amplifiers provide a popular alternative to the transistor types amongst enthusiasts.

There is a substantial difference between specialist (sound quality oriented) amplifiers and the consumer electronics style models. The former

are bleakly simple, avoiding all unnecessary features to provide the most direct signal path in the interests of best sound quality. The latter range from models with just basic tone controls and tape recorder switching, to those with elaborate facilities such as graphic equalisers, remote control (including volume), surround sound options etc. etc.

We include our measured power output (RMS, 8ohm load, 1 channel driven) – but again, paradoxically, this doesn't necessarily correspond to the loudness capability of the amplifier, which has as much to do with the elegance of the overload characteristics within a given system

(valve amplifiers invariably sound more powerful than their rating would suggest).

Apart from output the facilities listing shows how many line (that is inputs besides those for phono cartridges) inputs a product has and includes tape inputs. The MM and MC blobs indicate which types of cartridge can be accommodated. Integrated, preamp and power amp indicate the type of amplifier reviewed, and in some instances that a pre/power combination has been tested. In such instances the price given is for both components. The remote control and headphone socket blobs indicate the existence of these facilities.

Amplifiers

Product	£Price	Comments	Output W/8Ω	Line inputs	Integrated	MM	MC	Preamp	Power amp	Remote control	Headphone socket	Issue No.
Adcom GFP-555I/GFA-535II	850	A+ Technically proficient pre/power saddled with a slightly hard and unsympathetic sound.	94	6	•			•	•	•		124
▲ Albarry AP4/S508	850	A- A disappointing sound from a pre/power amp that's hamstrung by a variety of technical oversights. Albarry has done better.	46	4	•					•		116
▲ Albarry PP1	430	G+ Available with or without various MM/MC options, the 'basic' PP1 has an attractively warm, earthy sound.	48	4				•				104
Alchemist Kraken	310	A Class-A objet d'art that's far too sensitive to RF interference. Can sound cold and fierce as a result.	54	5	•	•	•					116
▲ Alchemist Kraken APD7/APD8	775	G A quirky Class A number with an equally warm and colourful sound. Hardly accurate but entertaining nonetheless.	49	4	•				•	•		124
AMC CVT3030	529	A A well meaning and affordable attempt to mix transistors with valves, albeit one that only really shines with simple musical styles.	35	5	•			•				116
▲ Arcam Alpha 6	300	VG A new MOSFET design with a subtle and melodic sound that takes a conservative view of powerful dynamics	68	6	•	•	•					129
▲ Arcam Delta 110S/120.2	1070	VG Now in mkII guise this established combination has matured into a very articulate, powerful if dry-sounding amplifier.	109	4	•	•			•	•	•	124
▲ Arcam Delta 290	450	VG Combines the dryness and restraint of Arcam's older models with a refreshing sense of detail, dynamics and musical colour.	99	5	•	•	•				•	116
▲ Art Audio Quintet	1156	VG Switchable triode/ultralinear output stage. In triode mode these are 15 of the sweetest watts around. Surprisingly gutsy	15/25								•	109
Audio Innovations Series 200	850	G Turns in a fuller and more substantial performance via MM rather than CD. Otherwise its sound can seem slightly bleached.	10	5	•				•	•		109
▲ Audio Innovations Series 300II	500	G+ Under-powered and over-distorted yet capable of realising an open and captivatingly expressive sound. Sensitive speakers are a must	9	4	•			•				97
▲ Audio Innovations Classic 25	699	G+ Warm, cuddly and immensely musical kit amp that almost transcends 'hi-fi' with its sheer listenability	24	5				•				126
▲ Audio Innovations Series 700	999	G+ Valve amp that can turn the roughest of digital sounds into music, both understated and graceful. Sensitive speakers are a must	24	5				•				116
▲ Audio Note Oto SE	1500	VG Transparent, very dynamic, excellent clarity and subtlety with limited power make for a very clean sounding amp	9.5	3	•			•				126
▲ Audio Note Ongaku	43125	E A single ended, zero negative feedback, triode, line level integrated amp and a half. Probably the best amplifier in the world!	27	6				•				Col
▲ Audiogram MB1	500	G+ It'll successfully tackle the most difficult of speakers and still provide a very warm, rich and euphonic sound.	46		•			•			•	116
▲ Audiolab 8000A	450	VG Recent updates have maintained its competitiveness with a thoroughly refined, consistent and very disciplined sound.	80	5	•	•	•					129
Audiolab 8000C/8000P	1100	G Very distinctive, almost stark neutrality that will not appeal to all listeners. Good value engineering, nevertheless	157	7	•	•	•		•	•		97
▲ Aura VA-100 Evolution	300	G+ Might overheat when driving insensitive, low-impedance speakers but was applauded for its sense of scale and drama via CD	81	5	•			•				109
▲ Aura VA-50	250	VG Superficially similar to the cheaper VA-40 but with much more of the old MA-80's magic! Great sound from a slimline package	65	5	•			•				97
▲ Beard Audio CA35/P35mkl	2390	VG Good build quality and finish and a characteristic valve sound make a first class amplifier capable of great musical enjoyment	35	4	•	•	•	•	•	•		63
Beard CA506	1695	G+ A versatile valve preamp, the bass sounded lively if a touch softened, while the treble was detailed but lacked a little sparkle	4		•	•	•	•				50
▲ Conrad-Johnson PV-10A	1250	E Fabulous preamplifier. Beautiful imaging, superb detail, plenty of gain on the phono stage; classy build quality too.	4		•			•				78
▲ Conrad-Johnson Premier 7	11000	E The 'Seven is designed without compromise, and is clearly one of the finest (valve) preamplifiers money can buy.	4		•	•	•	•				Col
▲ Denon PMA-250III	160	A- Pretty high resolution for the price, occasionally loses its grip but is generally engaging and enjoyable	55	3	•			•				121
▲▲ Denon PMA-450	250	G+ Denon's latest integrated amp swept the board with its big, brassy if somewhat extravagant sound.	99	5	•			•				116
▲ DPA Digital DSP-200S/DPA-200S	1245	E The very dramatic but exceptionally detailed and transparent sound of this combination belies its modest power rating.	48	5					•	•		124
▲ EAR 802/509mkl	4200	VG Extremely well made and combining the sonic strengths of both transistors and valves this EAR combo warrants attention	100	6	•				•	•		63
EMF Audio Sequel	349	G+ A fresh start for Mike Creek has resulted in the Sequel, a minimalist amp with a very refined but mildly restrained sound	47	4	•			•				109
Exposure XX	625	A Line only integrated with good sense of timing but limited hf extension. Likely to be very system dependent.	43	4				•				121
▲ Harman Kardon HK1400	400	G+ HK's first line-only amplifier exudes a relaxed but confident sound that is only troubled by the most dense of recordings.	52	7				•				129
▲ Harman Kardon HK6250	280	G+ Heavily based on the cheaper HK6150, this version offers slightly more power with a similarly gutsy and expressive sound	51	5	•			•				116
Harman Kardon HK6550	430	A- Follow up to 6500 is disappointing with grainy hf and limited depth. Quite powerful but ultimately not up to the mark	69	6	•	•	•					121
Harman Kardon HK6850	900	G This monster is derived from the HK6800 with a similarly deep and powerful sound but a rather steep price tag	101	6	•	•	•					109
▲ Heybrook Signature	2297	G+ A stunningly powerful and vivid-sounding combination which is equally impressive via vinyl or CD	148	4	•	•	•	•	•	•		109
▲ Jadis JP30/JA30	12204	E French tubes. Beautiful build, nostalgic styling and delightful sounding midrange transcend limitations at frequency extremes	30	4	•				•	•		60
JVC AX-A342	170	A A value-conscious budget amp offering plenty of power but a slightly untidy and inconsistent sound	77	5	•			•				109
JVC AX-R562	250	A- More fuss and bluster than detail and dynamics was how one listener concisely described this less than wonderful model	90	5	•			•			•	121
▲ JVC AX-Z1010	650	G+ One of the best behemoths: a big amp with a big, boppy and unaddled sound and a couple of ancient 16-bit DACs for good measure!	124	6	•	•	•					109
▲ Kenwood KA-3020	170	G+ An unassuming little amplifier that turns in a remarkably balanced and entertaining sound. Lively, detailed and engaging	66	5	•			•				97
Kenwood KA-4050R	280	A- Respectable but ultimately uninspiring model whose remote control is its main asset.	85	5	•	•	•				•	121
Kenwood KA-5050R	350	A A listenable but neither particularly communicative or captivating amplifier that puts features ahead of sound.	103	6	•	•	•				•	129
▲ Lecson Quattra	420	G Underpowered but with the flexibility of four independent power amps. Very deep, captivating sound with 3D soundstaging.	40	5	•	•	•					92
Linn Majik-I	593	A The cornerstone of Linn's modular hi-fi system has many innovations to its credit but its sound is vague and confused.	33	6	•			•			•	129
▲ Magnum Class A	599	G+ Lashings of rich and compelling music, trading a hint of lushness for stark accuracy. An unexpected find. Phono stage option	55	7				•				116
Magnum Quartet	329	A- An integrated model that incorporates four monoblocks optimised for bi-wiring, but sound is sandy in the treble.	72	5				•				121

Amplifiers continued

Product	£Price	Comments	Output W/8Ω	Line inputs	MM	MC	Integrated	Preamp	Power amp	Headphone socket	Remote control	Issue No.
▲ Marantz PM-52SE	300	G+ The SE premium pays for a degree of fluency that draws you into the music and keeps you there. Rather nice	95	6	•	•	•	•	•	•	•	121
Marantz PM-80mkII	480	G- Less the revision and more an entirely new amp, this model sounds at its sweetest and most agreeable in the 31W Class A setting.	130	5	•	•	•	•	•	•	•	129
▲ Moth Series 30	587	G+ A modular system capable of cracking results. The passive preamp and power amp combination warrant a Best Buy in their own right.	35	4	•	•	•	•	•	•	•	109
▲ Musical Fidelity Preamp/Typhoon	568	G+ A combination that plays everything close to its chest but bridge the power amp and you'll witness an explosion of detail.	62	6	•	•	•	•	•	•	•	116
▲▲ NAD 302	170	G+ A spritely and uplifting performance. Sounds loud but never intrusive or fatiguing.	39	5	•	•	•	•	•	•	•	116
▲▲ NAD 304	230	G+ Equally effective with CD and vinyl this is another successful and entertaining NAD amplifier for your shortlist	50	6	•	•	•	•	•	•	•	121
NAD 1000S/208	1120	A+ One of the beefiest amplifiers we've ever tested. Unfortunately it sounds too restrained and lightweight.	314	5	•	•	•	•	•	•	•	124
▲ Nakamichi IA-3	350	G A minimalist outing for the cassette heroes that's very confident if a tad restrained.	62	3	•	•	•	•	•	•	•	121
▲ NVA AP-20	340	G+ Utilitarian amplifier sounds gentle and restrained but is euphonic and utterly engaging. Optional phono stage	35	4	•	•	•	•	•	•	•	109
Onix OA-21S/SOAP	730	G- Via MM disc this amp comes alive with a fresh and vibrant sound though its CD input sounds utterly dead by comparison.	60	4	•	•	•	•	•	•	•	97
▲ Philips FA-930	200	A+ Radical styling hides a digital switching facility plus full remote control over what is Philips' best effort to date	99	5	•	•	•	•	•	•	•	109
Pioneer A-300X	230	A+ This revamped version of the A-300 was also more confident sounding via CD than MM, yet our panel were still left unmoved.	55	5	•	•	•	•	•	•	•	116
▲ Pioneer A-400	280	VG Pioneer's design concept snaps into focus with an amp that seems to bubble with musical detail. A budget bench-mark	71	5	•	•	•	•	•	•	•	92
▲ Pioneer A-400X	300	VG This looks like the established A-400 but uses new circuitry to encourage a gentler if no less enthralling sound.	68	5	•	•	•	•	•	•	•	129
▲ QED A270CD/PA	370	G+ Recent updates have bolstered the output of the A270 without adding to its colorations. The PA phono option is a touch expensive	61	5	•	•	•	•	•	•	•	97
▲ QED C300/P300	630	G A cost-effective combo, limited in its resolution but less beguiling as a result. Disc stage is sweeter but samey	58	3	•	•	•	•	•	•	•	85
Quad 34	398	A Well-built durable preamp, filtering and above average tone controls but was found lacking in sound quality (viz: detail/dynamics)	4	•	•	•	•	•	•	•	•	44
Quad 66/606	1553	G Amplifiers with a classic lineage but compromised by an equally dated, soft and undynamic sound.	138	6	•	•	•	•	•	•	•	124
Rational Audio	175	A+ Wacky Czechoslovakian amp offers a very open and fluid sound via CD but its MM performance depends on cartridge load impedance.	129	3	•	•	•	•	•	•	•	92
Rega Elex	359	A Minimalist amplifier that sounds too forward, hard and unforgiving for its own good. Shows plenty of promise, however.	51	4	•	•	•	•	•	•	•	116
▲ Rose RV-23	450	G+ Beautifully built British 'hybrid'. You can spend more to get a more transparent sound but it's hard to criticise at the price	3	•	•	•	•	•	•	•	•	77
▲▲ Rotel RA-930AX	175	G+ This budget wonder captivated our listeners with its clean, vibrant and thoroughly involving sound	53	3	•	•	•	•	•	•	•	104
▲ Rotel RA-935BX	225	G A line only winner that lets a lot of music through and never lets things get out of hand. Could be a touch more enthusiastic	58	5	•	•	•	•	•	•	•	121
Rotel RC-980BX/RB-980BX	800	A Plenty of watts per pound, sound is expansive but lacks a sense of poise, of control and fine detail - a disappointment	143	5	•	•	•	•	•	•	•	109
▲ Sansui AUX-417R	280	G+ Unusually clean and precise with more subtlety than is usually attributed to remote control amps.	53	5	•	•	•	•	•	•	•	121
▲ Sansui AU-X911DG	900	G+ At its best when used with the on-board MASH/PWM DAC where it sounds technically neutral but still emotionally charged	112	7	•	•	•	•	•	•	•	85
Sherwood AI-2210	80	P Lightweight in all respects this is better than you'd find on a midi and at least its reasonably painless.	47	4	•	•	•	•	•	•	•	121
Sonic Frontiers SFC-1	1500	G+ Smooth, sophisticated Canadian valve amp with a decent direct input and more features than average	54	6	•	•	•	•	•	•	•	126
Sugden A21a	469	G The modern-day relative of Sugden's original Class A amp and one that offers a smooth, easy-going sound.	25	•	•	•	•	•	•	•	•	92
Technics SU-VZ220	130	A- Cheap, cheerful and pretty flexible to boot the SU-VZ220 quickly sounds thin, splashy and relentless when the going gets tough	50	4	•	•	•	•	•	•	•	109
Woodside ISA230	900	A Smooth and inoffensive valve amplifier if one that lacks the sparkle and euphony required for a truly entertaining sound.	27	5	•	•	•	•	•	•	•	116
Woodside SC26/STA35	3254	G+ Synergistic pairing with a cool, controlled sound, good focus and transparency. More about poise than grunt	35	5	•	•	•	•	•	•	•	100
YBA Integre	1199	G+ Audiophile spec French integrated with good resolution and nice phono stage.	57	4	•	•	•	•	•	•	•	121
▲ YBA 1 pre/power amp	8000	E Well finished pre/power amp offers front rank stereo staging and transparency, and is capable of driving the most difficult loads	85	5	•	•	•	•	•	•	•	62
▲ YBA 2 pre/power amp	3849	G+ Superbly finished with very good space and transparency, slightly softened bass. Needs transformer for MC cartridges	70	5	•	•	•	•	•	•	•	56
YBA 3 pre/power amp	2449	G This duo produced see-through, ethereal stereo images that were more convincing towards the centre of the soundstage	56	4	•	•	•	•	•	•	•	72



AV amplifiers

In practice an A/V amplifier provides all the standard CD, tuner, tape, aux and phono inputs offered by a standard stereo amplifier. In addition many also incorporate an AM/FM tuner section which, strictly speaking, makes them A/V receivers. More importantly a modern A/V amplifier includes a Dolby Pro Logic decoding chip along with extra circuitry to effect the rear channel delay. Naturally there's at least four channel's worth of amplification under the bonnet to feed the five loudspeaker outputs (Front L and R, Centre and Rear mono L+R).

Most also include a line-level subwoofer output to enhance the rib-shaking impact of 'action' movies for example. Some A/V amps offer other surround modes like simulated stereo, Hall surround (L+R is fed to the rear) and Matrix surround (L-R is fed to the rear). Others use an element of Digital Signal Processing (DSP) to steer the Dolby Pro-Logic or permit a variable rear channel delay. Some also include DSP options like Jazz, Church, Hall and Stadium Surround modes which use different delay and steering levels to generate different 'sound fields'.

From left to right the headings below indicate how many watts per channel each amp has for its front, centre and surround outputs. Surround modes indicates how many different surround effects are available and includes DSP. The audio inputs are for both hi-fi and AV components. S-type and phono video inputs are for VCRs, Laserdisc players and CTVs, S-type being the better of the two. Subwoofer outputs are of the phono socket variety for active subs, and AM/FM tuner denotes if the unit is effectively a receiver.

AV amplifiers

Product	£Price	Comments	Front output W/8Ω	Surround output W/8Ω	Surround output W/8Ω	Video outputs S-type	Video inputs phono	Audio inputs	Subwoofer output	AM/FM tuner	Issue No.
Denon AVC-3530	999	VG A true heavyweight with a richly detailed sound and flexible features to match	142	141	46	10	9	5	5	•	125
Harman Kardon AVR30	999	G+ Limited surround options are offset by a very secure sound with excellent control over effects.	74	75	30	7	10	6	0	•	125
Kenwood KA-V8500	699	G- Can sound a tad forced and immediate but is remarkably well-equipped with digital soundfield options.	62	63	37	10	11	6	5	•	125
Marantz PM-700AV	450	A+ Sounds just great through front and centre channels but surround is very weak.	69	52	51	3	7	6	3	•	125
Philips FR940	450	A- Perhaps as a result of the mismatch between front/centre channels, the FR940 proved a great disappointment on dem.	180	24	24	6	8	4	0	•	125
Pioneer VSA-D802S	600	A- The disappointingly grey sound lacks attack and confidence, undermining the tension of movie soundtracks.	53	55	32	9	9	5	3	•	125
Technics SA-GX550	450	VG A surprisingly gutsy and involving performance from a modestly-priced package.	48	48	49	2	5	2	0	•	125
Yamaha DSP-A2070	1100	G+ The ultimate in A/V flexibility with full manual control over ever conceivable soundfield.	101	99	35	24	10	6	6	•	125



Cables

Cables are not accessories but an integral part of your system. You can make do without accessories but no conventional system will function without cables. Inevitably some cables are greater than others. The best cable for your system will only be found through trial and error, but hopefully by combining our recommendations with those of a dealer you will end up with something that suits both your pocket and your system. Generally speaking budget to spend about ten per cent of the total system cost on cables.

Analogue interconnects are the leads that

connect source components to amplifiers and pre to power amps. The cables in this section are priced for a one metre terminated pair. Symmetrical indicates where a twisted pair of conductors are used.

Coaxial means that there is a central 'hot' conductor and a shield that carries the negative signal. Stranded cables have multiple strands and solid core use individually insulated strand(s). Copper and silver indicates whether these metals are used as conductors.

Digital interconnects connect CD transports to

DACs, and are traditionally coaxial with a 75ohm impedance. They come in optical and electrical varieties, the former being made of plastic or glass and the latter in coaxial or alternative configurations. The prices shown are for a terminated linear metre

Speaker cables are used between the amplifier and speaker. Our prices are for a terminated 5metre pair. Resistance and capacitance are indicated as low (L), medium (M) or high (H). Neither high resistance nor high capacitance cables are suitable for long runs.

Analogue interconnects

Product	£Price	Comments	Symmetrical	Coaxial	Stranded	Solid core	Copper	Silver	Issue No.
Audio Note AN-A	29.50	A- A well-rounded and cuddly sound from a high-ish resistance interconnect. Lacks a sense of scale and dynamics	•						108
Audioquest Ruby Hyperlitz	70	A+ A crisp, fast and articulate-sounding cable if one that's a little too pointed for our listeners	•				•	•	108
▲ Audioquest Lapis Hyperlitz	329	E An expensive cable that justifies its tag with a beautifully poised sound - natural, relaxed and very compatible.	•				•	•	108
Audio Technica AT620	28	A Plenty of cable for the money but its performance is distinctly lightweight, lacking depth and subtlety			•	•		•	108
Chord Chameleon	59	A+ An unpredictable cable with an 'anomalous treble' that can sound harsh one moment and oddly recessed the next!			•	•		•	108
▲ Chord Solid	115	VG What looks like a military RF cable actually provides a slightly forward but incisive and intimately detailed performance			•		•	•	108
▲ Cogan-Hall Intermezzo Ref	185	E A user-hostile cable with a tight, convincing bass allied to a very relaxed and involving mid/treble.	•				•	•	108
Cogan Hall Intermezzo E-M	320	G+ This bigger, thicker and thoroughly unwieldy 3-core version of the Intermezzo Reference actually sounds a little coarser	•				•	•	108
▲▲ DNM Interconnect	40	VG Fresh, transparent and packed full of detail, this slither of a cable scored a direct hit with our listeners	•				•	•	108
Goldring 'Studio Quality'	20	A- A bog-standard OFC coaxial cable that might otherwise be given away with a new amp or CD player. Cheap but nothing special.			•	•		•	108
▲ Isoda Electric HA-08-PSR	199	G+ This odd-ball cables utilises a mix of copper, brass and aluminium strands to achieve a very distinct sound	•			•		•	108
▲ Madrigal HPC	215	VG A very unusual cable design with a business-like approach to music-making that barely conceals its underlying 'fizz'.	•					•	108
Magnan Type Vi	595	A+ With a series resistance some 500-1000 times higher than average, the furry sound of the Type Vi will alter from system to system.			•	•		•	108
▲ Monster Interlink 500	60	G+ Plenty of hype to keep the marketing bandwagon rolling plus a lively and lucid balance to cheer up the enthusiast	•			•		•	108
▲ Moth Ley Line Black	100	G+ The cheapest of Moth's Ley Line series uses just two twisted conductors to achieve a very solid and confident sound.	•				•	•	108
Moth Ley Line Grey	200	G+ The four twisted conductors of this cable actually mark a downturn in audio quality	•				•	•	108
▲ Panasonic RP-CA910	50	G This conventional coax employs plenty of hi-tech materials which encourage an even-handed balance. A good upgrade.			•	•		•	108
▲ Silver Sounds 12/2 and 12/3	99/150	VG Both these cables share a similarly open, transparent and dynamic sound though the latter is arguably the better integrated	•			•		•	108
Sonic Link Yellow	60	A An interesting non-copper cable with an up-front sounded described as 'heavy-handed and pushy'.			•		•		108
▲ Sonic Link Violet	99	G+ Another nickel-based cable but with a very much better-balanced sound than Sonic Link Yellow	•			•			108
Straight Wire Laser Link	50	A+ Thanks to its high parallel capacitance this interconnect helps remove ultrasonic noise. Unfortunately it still sounds very odd!	•			•		•	108
Straight Wire LSI-Encore	90	A+ A solid-sounding cable with a strong mid and bass but a disappointingly sat-upon treble	•			•		•	108
▲ Tara Labs Prism	36	G 6N-purity copper, aero-grade insulation and spaced solid-core conductors all add-up to a slightly bright but frisky sound	•				•	•	108
▲▲ Tara Labs Quantum CD	63	G+ Praised by our panel for its lack of obvious vices, Quantum CD encourages a sweet and positive sound.	•				•	•	108
Tara Labs Quantum II	99	G Bass power and extension is the key to the sound of this unusual and hi-tech cable	•				•	•	108
▲ van den Hul The Source	70	G+ Accurately reflects the life of the music without detail forcibly from the speakers			•	•		•	108
van den Hul MC D-102mkIII S	80	A+ A rather coloured sound thanks to its full and resonant bass but spoiled overall by a dirty treble	•			•		•	108

Connections



Tel: 081 348 5676 (2.00-7.00 pm)
Fax: 081 341 9368

Esoteric High Fidelity CABLES

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

... the **RIGHT** cables

... in **YOUR** system

... for **YOUR** ears

... in **YOUR** home

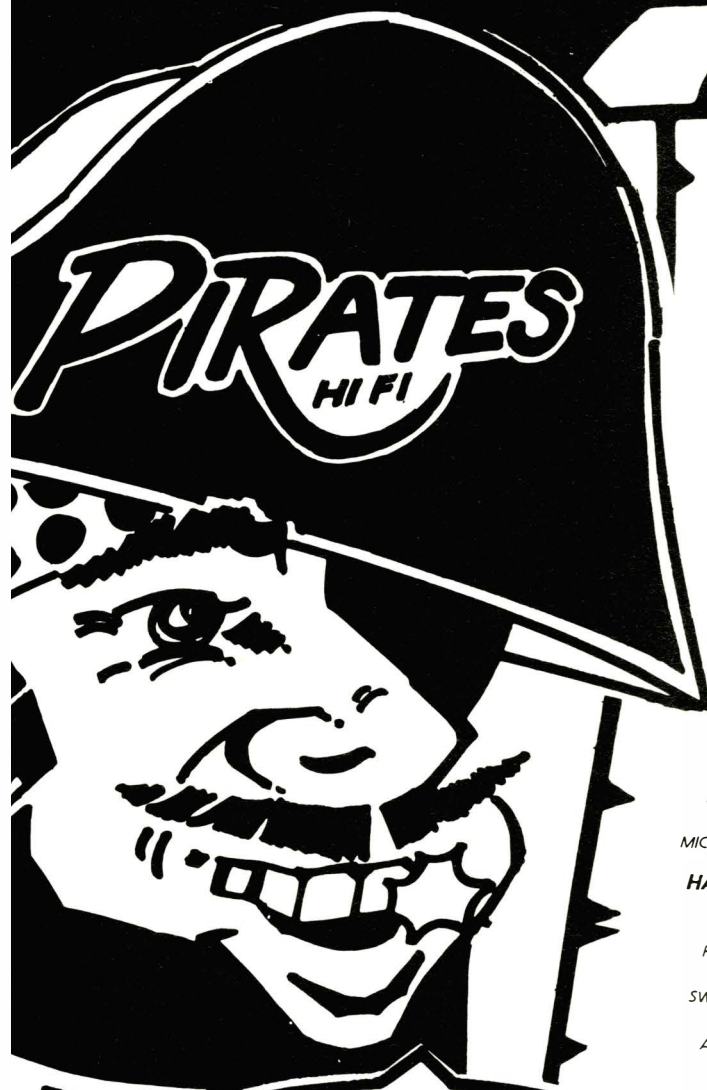
Contact us by phone, fax, or letter and we'll do our best to help you achieve your goal.

(Auditions may be subject to a handling charge)

CONNECTIONS

13 John Princes Street, London W1M 9HB (A division of Connection 90' Travel Ltd.)

PIRATES HI FI



TREASURE TRAIL

GET MORE CHIPS OFF THE OLD BLOCK. ME 'EARTIES WITH MIGHTY LUMPS HAMMERED OFF THE PRICES. SO CUDGEL YOUR WAY TO ANOTHER STUNNING DEAL AT PIRATES. THOUGH THIS LOT BE EX-DISPLAY, IT ALL BE IN PRISTINE CONDITION WITH MAKERS CARTONS, INSTRUCTIONS, ACCESSORIES AND FULLY GUARANTEED. NUMBERS BE 'IGHLY LIMITED SO PLEASE PHONE BEFORE YOU TRAVEL.

ARCAM
ALPHA 3 Amp £ 99.95
DELTA 60 Amp £ 149.95
DELTA 70.3 CD £ 349.95

AUDIO ALCHEMY
DDS11 Trans £ 479.00

AIWA
XC750 CD £ 119.95

ALBARRY
AP4 Pre Amp £ 199.95

B&O
BC8000 Centre £ 659.95
RL1000 SB £ 129.95

B&W
804 Speakers £ 899.95
Solid Speakers £ 149.95

DENON
DRM710 Cassette £ 159.95
DCD595 CD £ 109.95
DCD 890 CD £ 169.95
DRA345 Receiver £ 149.95
DCD695 CD £ 119.95
DR5610 Cassette £ 149.95
PMA450 Amp £ 149.95

SYSTEMDEK
IIX 900 Turntable £ 139.95
IIXE 900 Turntable £ 199.95

GOODMANS
MICRO1250 Mini+CD £ 139.95
M100 Speakers £ 49.95

HARMAN KARDON
HD7300 CD £ 139.95

HECO
Reflex 10 Speakers £ 89.95

JAMO
SW150 Subwoofer £ 119.95

JVC
ADAGIO S2 Midi £ 229.95

KENWOOD
DP7050 CD £ 209.95

LYNX
NEBULA Amp £ 129.95
PULSAR Amp £ 209.95
THETA Tuner £ 149.95

MARANTZ
PM53 Amp £ 149.95
PM63 Amp £ 179.95
PM700 Amp £ 269.95
SD53 Cassette £ 119.95
SD63 Cassette £ 149.95
CD72SE CD £ 359.95
SYS1010 System £ 539.95
STS3 Tuner £ 99.95

MISSION
780 Speakers £ 139.95

MONITOR AUDIO
MA700 Gold SE £ 299.95
Monitor 9 Speakers £ 179.95
SV200 Subwoofer £ 179.95

MUSICAL FIDELITY
PRE8 Amp £ 209.95
CDT CD £ 319.95
CDTC CD £ 329.95
TUBALOG DAC £ 299.95
MA65 Mono Blocs £ 569.95
TYPHOON Pwr/Amp £ 209.95
THE PRE AMP £ 139.95
T1 MKII Tuner £ 179.95

NAD
802 Speakers £ 139.95

PINK TRIANGLE
LPT-BLK Turntable £ 359.95

QLN
Signature Speakers £ 659.95

ROGERS
LS4A2 Speakers £ 199.95
Studio 3 Speakers £ 299.95

ROKSAN
ROK-DP1 CD Trans £ 719.95

ROTEL
RA9608X Amp £ 179.95
RA9358X Amp £ 139.95
RA9408X Amp £ 149.95
RA9808X Amp £ 239.95
RC9808X Amp £ 209.95
RD955AX Cassette £ 119.95
RD9658X Cassette £ 149.95

RUARK
Sabre Speakers £ 229.95
Rhapsody Speakers £ 479.95

SONY
TCX311B Cassette £ 89.95
TCWR635 Cassette £ 169.95
CDP411 CD £ 119.95
CDP711 CD £ 149.95
Comp 359 CD Midi+CD £ 359.95
MHC510 Mini £ 229.95

TANNOY
603MKII Speakers £ 89.95
609MKII Speakers £ 179.95
611MKII Speakers £ 259.95

TEAC
V1010 Cassette £ 149.95

TECHNICS
SUVZ220 Amp £ 99.95
SUVZ320 Amp £ 129.95
RSBX646K Cassette £ 139.95
SLPG340AK CD £ 89.95
SLPS740AK CD £ 149.95
SAGX350 Receiver £ 199.95

THORENS
TD166RB250 Turntable £ 179.95

YAMAHA
KX260 Cassette £ 99.95
KX360 Cassette £ 119.95
CC5 Mini System £ 389.95
TX350L Tuner £ 79.95
TX670 Tuner £ 149.95

NOTTINGHAM PIRATES ONLY

AIWA
XC750 CD £ 129.95
NSX340 Mini £ 249.95

CELESTION
DL4 II Speakers £ 99.95

DENON
DCD695 CD £ 149.95

GOODMANS
HT 175 Speakers £ 119.95

KENWOOD
KT1050L Tuner £ 79.95

NAD
6100 Cassette £ 179.95

PRICES VALID UNTIL 31TH JULY 1994

FEAST YOUR EYES ON ME 'B' STOCK BLASTERS SHIPMATES. THE PRICES WILL DELIGHT YOU!

GOODMANS 'B' STOCK BLASTERS

ALL WITH MANUFACTURERS FULL 12 MONTH WARRANTY - PRICES INC VAT

FULL SIZE CD MULTIPLAYER, 6 DISC + SINGLE DISC DRAW INC REMOTE GCD658 WAS £ 169.95 - **NOW ONLY £ 79.95**

FULL SIZE 20 TRACK PROG CD PLAYER WITH REMOTE GCD600R WAS £ 109.95 - **NOW ONLY £ 59.95**

50 X 50 WATT REMOTE CONTROLLED AMP GSA360 WAS £ 99.95 - **NOW ONLY £ 59.95**

BELT DRIVE TURNTABLE INC CARTRIDGE GSP360/600/650 WAS £ 59.95 - **NOW ONLY £ 29.95**

HERE BE THE PLACES WHERE YOU SWAPS YOUR DOUBLOONS FOR OUR TREASURE

* WE ACCEPTS ALL KINDS OF DOUBLOONS - GOLD, PAPER & PLASTIC - ALL FINE



CROYDON 369 LONDON ROAD 081 665 9342
LEICESTER 94 GRANBY STREET (0533) 557518
NOTTINGHAM 3 MANSFIELD ROAD (0602) 501003
OXFORD 41 ST CLEMENTS (0865) 241 773
WATFORD 478 ST ALBANS ROAD (0923) 212736
WIDDLICH 162 POWIS STREET (081) 855 8016



Digital interconnects

Product	£Price	Comments	Type	Plastic	Glass	Non-coaxial Coaxial	75 Ω	Issue No.
▲ Audioquest Video Z	50	E The very best available with an expressive sound but generous price to sweeten the pill	Electrical			•		108
Audioquest Digital PRO	90	A+ A silver cable with all the drive of Video Z but lacking its clean-cut transparency	Electrical			•		108
Audioquest OptiLink Z	100	A Good level of midband detail but frequency extremes lack depth and extension	Optical		•			108
Bandridge AL560	20	P The disappointingly heavy and muddled sound of this basic fibre thwarts any recommendation	Optical	•				108
Chord Codac	34	A A connection with a stranded inner core and a sound that lacks integration	Electrical			•		108
▲ DPA Digi-link	27.50	VG Can seem slightly impassive but there's no avoiding its exceptionally detailed sound	Electrical			•		108
DPA Opti-link	20	P Very similar to Bandridge AL560 with an equally naff sound	Optical	•				108
Kimber PSB DigiLink	24	A- An analogue interconnect inappropriately pressed into digital service. A visible deterioration in the digital signal results.	Electrical				•	108
Kimber KC-1 DigiLink	52	A This cable adopts a woven construction with the addition of a conductive screen. Music lacks detail and spirit.	Electrical				•	108
Kimber KC-AG DigiLink	222	A- An asymmetric cable using silver conductors that deviates from the 75ohm standard. Not ideal for digital applications.	Electrical				•	108
▲ Kimber Opti-Link	70	G Hardly cheap for what appears to be a bog-standard PMMA fibre, yet it sounds a little brighter and livelier than most.	Optical	•				108
▲ Monster Cable Datalink 100	45	G+ A colourful coaxial interconnect with an equally colourful and up-beat sound. Very compatible.	Electrical			•		108
▲ Monster Cable Interlink LS100	45	G Well constructed stepped-index fibre with polished ends and rugged connectors. Slightly lean, fuzzy but engaging performance	Optical	•				108
Moth Leyline Datalink	140	A- A thin, coaxial version of Leyline Black with a rather hard and unforgiving character. Too expensive.	Electrical			•		108
▲ QED DigiFlex	19	VG A top performance, low-loss 75ohm coax with a very open, almost liquid quality that allows its music to ease naturally across.	Electrical			•		108
Sonic Link Brown Digital	35	A- A solid-core, twisted-pair interconnect that deviates from the 75ohm standard and provides an equally unbalanced sound	Electrical				•	108
Straight Wire Silver link	60	G+ A genuine attempt to get things right with a silver-plated, multi-strand coax. Yet it still sounds too dry and mechanical	Electrical			•		108
▲ van den Hul MC Videolink 75	30	VG An AV-cum-digital cable that comes very close to besting QED's DigiFlex. Still some emphasis of vocal sibilants, however	Electrical			•		108

Speaker cables

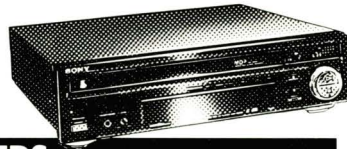
Product	£Price	Comments	Resistance	Capacitance	Stranded	Solid core	Copper	Silver	Issue No.
▲ Audio Note AN-B	165	G+ A very high capacitance Litz-style cable whose sound may well act as a taming influence in many systems	M	H		•	•		109
Audio Note AN-D	100	A Supplied in linear, non-polarised lengths that should be twisted into stereo pairs. Sounds rather gritty and forward	L	L	•			•	109
▲ Audio Note AN-SP	1270	VG Some 15 individually-insulated silver strands go to make up this very civilised but exceptionally detailed-sounding cable	H	L		•		•	109
▲ Audioquest F-14	44.50	A+ Ideal for laying flat under carpets, F-14 encourages a slightly warm and vibrant sound	M	L		•	•		109
Audioquest Type 4	75	A+ Four 18-gauge OFHC copper conductors wound in a Litz-fashion increases capacitance but restrain the cable's 'bite'	M	H		•	•		109
Audioquest Midnight Hyperlitz	260	G Very similar to Type 4 but with a delicate smoothness that contrasts with the brighter sound of cheap cables	L	H		•	•		109
▲ Bandridge LC7259 & LC7401	20/30	A Two very traditional figure-of-eight cables. The thinner version (LC7259) sounds lighter and coarser than LC7401	L	L	•			•	109
Bandridge LC8258 & LC8408	30/50	A- Two versions of the Silverflex series that, sadly, encourage very little sense of poise or decorum in their music	L	L	•			•	109
▲ Cogan-Hall Intermezzo Full-Range	465	VG Extra care must be taken to prevent shorting this user-hostile cable. Nevertheless it sounds superb!	L	L		•	•		109
▲ DPA IS19	275	G+ Shares the clear, neutral and transparent sound of the older 8S without the tremendous clarity of Gortex Black-16	L	L		•	•	•	109
DNM Rainbow	84	A+ The high impedance of this simple ribbon cable has an influence on the treble response of some speakers. Lacks 'oomph'	H	L		•	•		109
Heybrook Heywire	66	A This well-meaning facsimile of earlier ribbon-style cables ends up sounding lumpy and uneven	H	L		•	•		109
Isoda Electric HA-20	400	A+ This unorthodox cable employs a combination of copper, brass and aluminium strands. It sounds 'oddly impure'!	M	L	•		•		109
▲ Mission Stranded	20	G+ This Swedish-made cable proved a real hit with our listeners - a slick performer and Best Buy upgrade	L	M		•		•	109
Monitor PC KC27/KC34	40/60	A Two heavyweight multi-strand cables with a thick and chesty (10027) or light and wispy (10034) balance. Take your pick	L	L	•			•	109
Monster Powerline 3 Plus	75	A- The archetypal 'old-style Monster Cable' that labours under a soggy bass and untidy treble	L	M		•		•	109
Naim NAC A5	44	A- Described as a 'dinosaur of a cable' by our listening panel, this stiff rod of wire has little application outside of a Naim system	L	L		•		•	109
QED Bi-wire 79-Strand	35	A Reminiscent of curtain track, this bi-wire version of 79-strand is unfortunately saddled with a 'loud, hard and untidy' balance	L	L	•			•	109
▲ Silver Sounds 12/2	300	E Tonally accurate and exquisitely detailed, this cable opens a very transparent window on the music	L	H		•	•	•	109
▲ Silver Sounds 16/4	200	VG A prime choice for bi-wire systems even if this cable does lack the full finesse of its sister 12/2	M	H		•	•	•	109
Sonic Link Grey	80	G- A spaghetti-thin cable composed of silver-plated OF-copper and PTFE insulation. Lacks bass impact and treble 'air'.	H	M		•	•	•	109
▲ Straight Wire Waveguide 1.5	20	G A conventional multi-stranded cable with a refreshingly up-beat, crisp but slightly lean-sounding balance	M	M	•			•	109
▲ Straight Wire Flex-4	50	G+ Another very quick and dynamic-sounding cable from Straight Wire. A little short on subtlety but very engaging nonetheless.	L	H		•		•	109
Tara Labs Quantum III	238	G An imaginatively-named cable that encourages an equally colourful sound. Described as 'dark and fruity' by our panel!	L	H		•	•		109
van den Hul MC The Clearwater	50	A Despite its evocative title, the Clearwater turns out to be a disappointingly 'murky sounding' cable	M	L		•		•	109
van den Hul MC The Magnum	265	A Touted as vdH's most prestigious twinlead speaker cable, the Magnum sounds surprisingly soft and old-fashioned	L	L		•		•	109
▲ van den Hul MC The Wind	330	VG Blown-in from the continent, vdH's 'Wind' kicks up a storm with its lush midrange and bone-crunching bass!	L	M		•		•	109

TO GET THE FULL PICTURE, ORDER UP THE RELEVANT BACK ISSUE FROM THOSE NICE PEOPLE AT DENNIS DIRECT. CALL RUTH OR MARGARET ON (0789) 490215. PLEASE NOTE THAT DUE TO HIGH DEMAND NOT ALL ISSUES ARE AVAILABLE.



PRICE PROMISE!

We will refund the difference if you can find the same product, with the same offer, cheaper locally. Just come back to us within 7 days of purchase, with the details. The product must be new, complete and available for immediate delivery. This guarantee excludes mail order prices or offers.



RECORDERS/PLAYERS

SONY MPD 850 LASER DISC PLAYER

- MTSC/PAL dual system
- Auto reverse
- CD/CDV/LD multi disc player
- Jog/Shuttle remote control



NOW IN STOCK

£699.99

TOSHIBA V 813 - Video of the Year

- Nicam Stereo • Video Plus
- Twin SCART • P.D.C.
- Long play
- Index Search



WAS £529.99 NOW

£479.99



AMPLIFIERS

KENWOOD KAV 8500

- Dolby Pro Logic
- Adjustable DSP
- Learning remote control
- Dolby 3 channel stereo
- Five discrete amp channels



WAS £699.99 NOW

£499.99

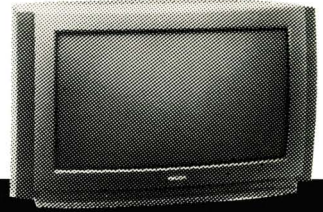
DENON AVC 3530 AMPLIFIER

- Digital Signal Processor
- Dolby Pro Logic
- 5 video inputs
- 8 video sockets
- DENON FLAGSHIP



ONLY

£999.99



TELEVISIONS

PHILIPS 67cm WIDESCREEN TV

- NICAM digital stereo
- Blackline picture tube in Widescreen (16:9) format
- High volume subwoofer
- 2 Euro Connectors (SCART)
- Colour transient improvement (CTI)



ONLY

£999.99

TOSHIBA 2527 25" NICAM STEREO TV

- Digital Sound processor with sound effects for hall, theatre, disco and stadium
- Dolby Surround
- Unified remote control
- Advanced on-screen display



WAS £799.99

NOW

£649.99

PHILIPS 46" SUPERSCREEN TV

- 100w output
- NICAM Digital Stereo
- 100Hz Digital Scan screen
- NTSC video playback (via SCART)
- Picture in picture • Spatial stereo



NOW IN STOCK

£2699.99



SPEAKERS

JAMO SURROUND SPEAKERS

- 2 way speaker
- Powerful 50 Watts output
- Dolby Pro Logic sound capability



ONLY

£39.99

JAMO CENTER 100 LOUDSPEAKER

- 3 Way dialogue speaker
- Dolby Pro Logic sound capability
- Weighs only 2Kg
- Magnetically shielded



WAS £139.99 NOW

£119.99



RECEIVERS

KENWOOD KR V7050 AV RECEIVER

- Dolby Pro Logic
- RDS also available
- Remote control
- DSP Logic



ONLY

£429.99

KENWOOD KR V6060 AV RECEIVER

- 5 channel amplifier
- Stereo output 100w
- Dolby Pro Logic with Time Link Delay • Full RDS
- Dolby 3 Channel stereo
- VIG stabilised amplifier



ONLY

£349.99

FANTASTIC Summer Savings!!

AMPLIFIERS	WAS	NOW	SAVE
Denon PMA 450	£249.99	£199.99	£50.00
Rotel RA 930 AX	£174.99	£139.99	£35.00
Technics SUV2 320	£169.99	£129.99	£40.00
Marantz PH44SE	£199.99	£179.99	£20.00

CASS DECKS	WAS	NOW	SAVE
Sony DTC 690 DAT Recorder	£599.99	£399.99	£200.00
Sony TCK511S	£279.99	£199.99	£80.00
Pioneer CTS 420	£249.99	£199.99	£50.00
Technics RSBX404	£179.99	£149.99	£30.00

MIDI SYSTEMS	WAS	NOW	SAVE
Kenwood M76G	£949.99	£699.99	£250.00
Sony Compact 209	£499.99	£369.99	£130.00

MINI SYSTEMS	WAS	NOW	SAVE
Aiwa NSX500	£369.99	£299.99	£70.00
Sony MHC3800	£749.99	£599.99	£150.00

CD PLAYERS	WAS	NOW	SAVE
Aiwa XC750	£199.99	£129.99	£70.00
Technics SLPG440	£169.99	£139.99	£30.00
Denon DCD 890	£269.99	£199.99	£70.00

SPEAKERS	WAS	NOW	SAVE
KEF Q90	£649.99	£499.99	£150.00
KEF Q80	£499.99	£399.99	£100.00
Heco Superio 250	£270.00	£170.00	£100.00
Canon S30	£179.99	£149.99	£30.00

1000'S OF OTHER BARGAINS IN STORE

All stock is subject to availability.

ACTION! cut the coupon now.

Mail order Service

Please mail me

I enclose cheque/P.O. for

£

made payable to Cleartone.

Name _____

Address _____

Post to:
 Cleartone, 235 Blackburn Road, Bolton BL1 8HB

HFC 8/94

*12 months Interest Free Credit subject to status APR 0%. Ask for full written details. Licenced credit brokers.

NUMBER CLEARSTONE FOR HOME ENTERTAINMENT

- BIRMINGHAM** 122/123 New Street. Tel 021 633 4944
- BIRMINGHAM** Horntons Electronics, 8-9 Lower Temple Street. Tel 021 643 0972
- BOLTON** 235 Blackburn Road. Tel 0204 31423 **BRADFORD** Rawson Square. Tel 0274 309266
- COVENTRY** 78 Lower Precinct. Tel 0203 632086
- GLOUCESTER** (formerly Robbs) 13/15 Worcester Street. Tel 0452 419777
- HALE** 162/164 Ashley Road. Tel 061 928 1610 **KEIGHLEY** 38 Cavendish Street. Tel 0535 602933
- MANCHESTER** 54 Bridge Street. Tel 061 835 1156 **MANCHESTER** 66-68 Bridge Street. Tel 061 832 2081
- ROCHDALE** 52 Drake Street. Tel 0706 524652 **WALSALL** Park Street. Tel 0922 644169
- WIGAN** 6 Crompton Street. Tel 0942 323897 **WOLVERHAMPTON** 39 Victoria Street. Tel 0902 772901
- WORCESTER** 27/27A The Cross. Tel 0905 726375
- WORCESTER** David Waring's, Marmion House, High Street. Tel 0905 27551

Cassette decks



The bad odour of copyright theft hangs around the compact cassette, but there is no doubt it is the world's most versatile and ubiquitous music storage medium. Buffs may wrinkle their noses, but are happy to use cassette decks to make up tapes for the car or personal.

There is no problem in connecting a cassette deck to any normal amplifier, but some care needs to be taken in choosing the best tapes for a specific machine. (Trial and error is one effective technique, but many decks have manual bias adjustment and some match up to the tape automatically.) Lab

performance and sound quality often go hand in hand, and are frequently somewhat dependent upon factory alignment. The mechanical integrity of the mechanism is another crucial factor, that is reflected in the price.

The columns on the right indicate when the facilities shown in the headings are available on a deck. Dolby B and C offer varying degrees of noise reduction and the HX Pro system gives significant treble improvements with ferric (Type I) tapes. Dolby S increases the level of noise reduction with less signal degradation than B or C. Three-head

recorders allow you to listen to a recording as it's being made, a useful quality control function. Bias adjustment allows you to fine tune the deck to suit different types of tape when recording. Auto calibration is an automatic system for setting bias and Dolby levels.

Twin deck offers the option to dub tapes or to play two cassettes simultaneously. Autoreverse is a useful convenience feature, but usually with some mechanical compromise. In the case of twin decks a blob is inserted in this column even if only one transport autoreverses.

Cassette decks

Product	£Price	Comments	Dolby B	Dolby C	Dolby HX Pro	Dolby S	3 Head	Bias adjust	Auto calibration	Twin deck	Autoreverse	Issue No.
▲▲ Aiwa AD-F410	120	A Comparable to AD-F500 but cheaper: Good all round performance, well adjusted, useful basic and not so basic features	•	•	•							99
▲▲ Aiwa AD-F810	230	G First class budget 3-head machine with a dual capstan transport that really works at reducing the 'fudge' factor	•	•	•							99
▲▲ Aiwa AD-WX828	200	G- Equipment levels strong, and sound is both vivid and presentable, but control system daunting.	•	•	•						•	123
▲▲ Aiwa AD-WX929	230	A Superbly equipped twin deck that works and works well - remote control	•	•	•	•					•	117
▲ Aiwa XK-S9000	700	G+ Fabulous build, clunky transport and sharp, refined sound quality with Dolby S or B and metal tapes	•	•	•	•	•	•	•			105
Akai DX-57	220	G Eschews fancy gadgets for a good transport and decent electronics. Sound quality is firm and tidy but avoid Dolby C.	•	•	•	•	•	•	•			105
▲ Akai GX-95II	440	G+ Sharp, clear and articulate sounding deck, with superb performance extending to frequency extremes	•	•	•	•	•	•	•			99
Akai GX-R35	220	A Middling sound quality at best with Dolby B; deteriorates with Dolby C	•	•	•	•	•	•	•			99
▲ Akai GX-W45	320	A Costly but musical high-spec dual deck, doesn't like modern high energy Type IIs and IVs. Good stability and clarity	•	•	•						•	111
▲ Arcam Delta 100	850	E Superb transport and a ripe, spacious sound. The Dolby S installation more successful than most. Some replay incompatibility	•	•	•	•	•	•	•			111
Denon DRM-710	260	A Although this is a fair performing model, the design has lost some of the competitive edge of its predecessor, the DRM-700.	•	•	•							105
▲ Denon DRS-610	200	G Unique loading mechanism provides stability, and the deck has a crisp, clean quality. Occasionally anaemic bass.	•	•	•							111
Denon DRS-810	300	G- Drawer loading deck, carefully designed, yet lacking in subtlety on audition.	•	•	•	•	•	•	•			127
Goodmans Delta 700W	100	P Compact and ultra-basic twin deck which is rough and bass shy, with less than stable tape path.	•	•	•						•	123
Harman/Kardon DC5500	600	A Workmanlike sound quality offset by high price and inexplicable shortcomings like 'forgetful' Dolby switching and no timer support.	•	•	•							117
▲ Harman/Kardon TD4400	350	G Simple features plus excellent engineering make this a model of integrity.	•	•	•							127
Harman/Kardon TD4600	700	A Original Dolby S deck has improved over the years and now sounds very acceptable. A strong, solid sounding deck - but expensive.	•	•	•	•						117
JVC TD-R452	180	A- Tidy, stable but ultimately rather soul-less experience. Auto-reverse is useful though.	•	•	•							117
JVC TD-X352	150	A- Disappointingly amorphous sound despite decent measured results.	•	•	•							117
▲ JVC TD-V562	200	G+ Ultra-sophisticated transport at a silly price; sound quality is stable but slightly opaque.	•	•	•	•	•	•	•			123
▲ Kenwood KX-3050	170	A Acceptable sound quality marred only by a loss of midband analysis and slightly edgy treble.	•	•	•							117
Kenwood KX-5530	220	A- Neat looking, well equipped deck, adequately engineered but somewhat lacking musically. Worth considering if auto-reverse is a must	•	•	•						•	105
▲▲ Kenwood KX-7050S	400	VG Very well equipped and fine sounding deck, includes well implemented Dolby S	•	•	•	•	•	•	•			127
NAD 602	200	G Minimalist deck for the audiophile market. Unfortunately engineering is minimalist too	•	•	•							127
▲ Nakamichi DR-3	400	VG Refined, exquisitely detailed and solid sounding 'budget' Nakamichi 2-header.	•	•	•							123
▲▲ Nakamichi DR-2	600	VG Accomplished design with simple features (manual tape select) but superb sound/serviceability.	•	•	•							127
▲ Nakamichi DR-1	850	VG Typically idiosyncratic Nakamichi with manual everything, Good azimuth adjustment and dynamic, authoritative sound.	•	•	•							117
Philips DCC600	500	A+ Simplified circuit and mechanism, but the Philips badly needs a D/A converter transplant	•	•	•							123
Pioneer CT-S420	250	A+ Poor replay compatibility, but otherwise satisfactory, if slightly uneven performer.	•	•	•	•	•	•	•			127
▲ Pioneer CT-S520	280	G Decent if slightly coloured middle ranker with FLEX to revitalise old or soggy sounding tapes.	•	•	•	•	•	•	•			123
Sansui D-790WR	170	P Modestly poor sounding but simple to use twin deck. Type II tapes show large response errors.	•	•	•							123
Sansui D-X117WR	220	P Bass is thin and coloured, and the sound lacks dynamics, pitch accuracy and overall stability - the sound is neither stable nor solid.	•	•	•							111
Sherwood DD-3010C	120	P Good range of features, let down by poor transport and iffy electronics.	•	•	•							117
▲▲ Sony (WMD6C) Pro Walkman	290	G+ One of the finest sounding cassette decks on the market today. A mandatory Best Buy, which also fits in your pocket	•	•	•							60
▲ Sony TC-K611S	300	G Cheapest Dolby S three header yet, yet slightly let down by lack of attention to detail	•	•	•	•	•	•	•			127
Teac R-9000	500	G Much better than average auto-reverse deck, well worth considering. Nicely engineered too.	•	•	•	•	•	•	•			105
▲ Teac V-8000S	700	G Superb stability and real subtlety, this must be the best TEAC yet. The only disappointment was the Dolby C	•	•	•	•	•	•	•			105
▲ Teac V-7010	800	G+ Heavyweight (in every sense) design, immaculately crafted, impeccable sound, but not for grannie.	•	•	•	•	•	•	•			127
▲▲ Technics RS-BX646	230	G+ Unusually well built and non-microphonic deck with sophisticated facilities and lucid midband.	•	•	•	•	•	•	•			127
▲ Yamaha KX-650	260	G Fine audio manners, especially in the midband and treble, mark this high class deck out from the crowd	•	•	•	•	•	•	•			99

DON'T RISK MISSING AN ISSUE OF THE WORLD'S MOST EXCELLENT HI-FI MAGAZINE. CALL THE HI-FI CHOICE SUBSCRIPTION HOTLINE ON 0858 468888, OR SEE PAGE 40 FOR DETAILS.



CD players

Now over a decade old, this all digital music source is well established despite high disc prices and the opposition of some hi-fi enthusiasts. Compact Disc's strengths over conventional vinyl are complete freedom from surface noise, ease of use, and more robust software.

However, many vinyl enthusiasts still find CDs sound less involving than top quality vinyl. But, with the dominance of CD in the high street, even vinyl die-hards need a CD player today.

The columns on the right indicate when the facilities shown in the headings are available on a CD player: DAC type indicates the type of converter chip used in each player, 16, 18 and 20-bit are multi-bit types, all the others are bitstream variants. In much the same way that an amp's output is not indicative of its sound quality, the chip used in a DAC isn't the only determining factor in a CD player's sound, but it is an important one. Remote control is not yet universal, and we have included a tick box, more to show which machines don't have

one than which do. The existence of electrical and/or optical digital outputs is important for future upgrading with an outboard DAC, as a rule electrical outputs are the most desirable. Phase inversion in the digital domain is rare on one box players but can make quite a big difference if you've got golden ears. Headphone sockets are useful but beware of those without volume controls. Track entry keypads are those with calculator style buttons which makes track access much quicker.

CD players

Product	£Price	Comments	DAC type	Electrical digital output	Optical digital output	Remote control	Headphone socket	Track entry keypad	Issue No.
▲ Aiwa XC-300	150	A+ Cheap, cheerful and gratifyingly free of digital 'nasties', well-equipped but safe rather than thrilling on the sonic front.	Toshiba BS	•	•	•	•	•	107
Aiwa XC-750	200	A A refined version of the XC-700, sadly it has lost the magic of the original	PDM Bitstrm	•	•	•	•	•	119
▲ AMC CD6	349	G+ Based on the same 1-Bit circuit as Rotel's RCD-965BX but with a raunchier, beefier but less transparent sound.	PDM Bitstrm	•	•	•	•	•	124
Arcam Delta 270	800	G+ The dry but tightly-focused and supremely detailed sound of this player will either beguile or aggravate, depending on taste!	Hybrid	•	•	•	•	•	124
Aura CD-50	400	G- Based on an older Philips board with new CDM9 transport, this is a slim player with an innocuous sound	SAA7321	•	•	•	•	•	119
AVI S2000MC	999	G+ A stylish, midi-width player with an exceptionally refined and comfortable sound. Lacks passion	20-bit	•	•	•	•	•	119
▲ Denon DCD-595	180	G Lacks the 695's pitch control but provides a smoother sound by way of recompense	18-bit	•	•	•	•	•	128
▲ Denon DCD-695	200	G A rough diamond with a raunchy sound to match. Pitch feature will be of interest to budding musicians.	18-bit	•	•	•	•	•	124
Denon DCD-890	270	G- Similar to the DCD-1290 in its execution, sounds lively and powerful but lacks subtlety.	18-bit	•	•	•	•	•	112
Denon DCD-1290	330	G- Looks the business but sound is a real five-minute wonder. Its compelling fizz lasts about as long as a firework.	18-bit	•	•	•	•	•	107
Dual CD1080RC	220	A- Strange-sounding player with a top-heavy treble that does little to redress its lack of vibrancy and emotion	MASH/PWM	•	•	•	•	•	107
▲ Genexxa CD-4900	129	A A little thin on detail, build quality and dynamics but thin on price too!	MASH/PWM	•	•	•	•	•	124
▲ Goodmans Delta 700	110	A+ A 16-bit alternative to the CD650II that furnishes a colourful and animated sound	16-bit	•	•	•	•	•	128
Grundig Fine Arts CD2	190	A- A stylish-looking player with a disappointingly vague approach to music-making	SAA7350	•	•	•	•	•	128
▲ Harman Kardon HK7725	800	VG This flagship implementation of RLS sounds impressively bold and dynamic - a genuine rock 'n roller!	18-bit RLS	•	•	•	•	•	124
▲ Harman Kardon TL8600	700	VG A refined and more flexible version of the TL8500 multiplayer with a significantly more expressive sound	MASH/PWM	•	•	•	•	•	132
JVC XL-Z1050	500	A Technically advanced and luxuriously equipped, this player remains rather bland and unsatisfying on audition	PEM Bitstrm	•	•	•	•	•	119
Kenwood DP-3050	200	A+ A slightly over-cooked version of the DP-3040 with a highly civilised but uninteresting sound.	NPC Bitstrm	•	•	•	•	•	124
Kenwood DP-7050	350	A Kenwood's first sowing of Philips' Bit Stream technology has fallen on stony ground judging by its dry and awkward sound	PDM Bitstrm	•	•	•	•	•	119
▲ Linn Karik	1497	VG Based on Linn's original CD transport, this player sounds dry but very positive, detailed and engrossing	Crystal BS	•	•	•	•	•	119
▲ Marantz CD-52II	230	G Launched to usurp the position of its own CD-52SE, the '52II is less colourful but equally appealing	PDM Bitstrm	•	•	•	•	•	119
▲ Marantz CD-52IISE	300	G A new mains transformer plus the full complement of internal mods has recaptured the frothy if startling sound of the original '52	PDM Bitstrm	•	•	•	•	•	119
Marantz CD-72SE	600	G+ A recommendation just eluded the grasp of this superbly built player thanks to its very polished but restrained sound.	bitstream	•	•	•	•	•	112
Mission DAD5	300	A+ Similar to Philips' 600-series: lively, plenty of space and full of 'bounce' but a little too eager to impress in the short term	bitstream	•	•	•	•	•	107
▲ Musical Fidelity CDT	5019	G+ Oddball player with a cheap top-loading transport and appalling digital gubbins yet saved by the euphony of its valves!	hybrid	•	•	•	•	•	112
▲ NAD 502	220	G This updated version of the 5425 has traded the spontaneity of its forebear for a more precise but mechanical style of music	MASH/PWM	•	•	•	•	•	119
Nakamichi CD-4	380	A- This looks new enough but sounds little better than the older CD Player 4 upon which it is firmly based.	18-bit	•	•	•	•	•	124
▲ Nakamichi MB-4s	300	G Entry-level MusicBank player that sounds like it's come from a studio control room: plenty of dynamics and detail but little stereo depth	16-bit	•	•	•	•	•	132
Onkyo DX-C110	350	G- A big and beefy 6-disc carousel that strides confidently through rock and pussyfoots around gentle ballads	Bitstream	•	•	•	•	•	132
▲ Philips CD732	140	A+ A cross between Philips CD690 and CD920 is no more technically accomplished but encourages a very lively and entertaining sound	SAA7341	•	•	•	•	•	128
▲ Philips CD920	160	A+ A new budget player with an appalling technical record but a surprisingly clean if understated sound	SAA7341	•	•	•	•	•	119
Philips CD930	200	G- Featuring digital circuitry similar to Marantz's players but a sound that's a little too ripe and soft.	PDM Bitstrm	•	•	•	•	•	112
▲ Philips CD950	350	G+ Philips' top 900-series player is the first to employ its advanced DAC7 chipset. Sounds very crisp, clear and confident.	DAC7	•	•	•	•	•	112
Pioneer PD-102	150	A Smooth and littered with plenty of underlying detail, this budget player remains distinctly unadventurous	PFM Bitstrm	•	•	•	•	•	128
Pioneer PD-S802	350	G Once again Pioneer's LLC topology only served to split and confuse the listening panel. It's good, but quirky!	PFM BS	•	•	•	•	•	124
▲ Pioneer PD-M701	330	G+ A 6-disc multichanger from the originators of the breed. A little untidy perhaps, but still sounds fresh, dynamic and exciting	PDM Bitstrm	•	•	•	•	•	117
Pioneer PD-M901	450	A Another 6-disc multichanger based on the PD-M701 but with the addition of various 'Sound Field' options. Listening is hard work	PDM Bitstrm	•	•	•	•	•	117
▲ Pioneer PD-S901	500	G+ The very refined but confident, crisp and powerful sound of the '901 snatches Pioneer's LLC concept from the jaws of defeat	PFM Bitstrm	•	•	•	•	•	119
▲▲ Quad 67	790	E Deceptively sleek in appearance but with a powerful, fluid and captivating sound reminiscent of Meridian's 206.	Crystal BS	•	•	•	•	•	124
▲ Rotel RCD-945AX	230	G Based on the same CD-player-on-a-chip as Philips CD690 but with Improved execution and build.	SAA7341	•	•	•	•	•	124
▲ Rotel RCD-965BX	300	E An exceptionally refined bitstreamer: transparent, exquisitely detailed and powerfully emotive. A landmark player	PDM Bitstrm	•	•	•	•	•	100
Sansui CD-X317	250	A Not in the same class as older CD-X311 mkII. Same technology but the sound is neither as responsive or engaging	MASH/PWM	•	•	•	•	•	107
Sansui CD-X617	350	A This 'double-DAC' version of the CD-X317 is more impressive, sounding light and tizzy with pop but dull with classical CD's	MASH/PWM	•	•	•	•	•	112
Sansui CD-Alpha 717DR	1560	G+ A beautifully constructed if rather dated flagship player with an equally sedate and unadventurous sound.	MASH/PWM	•	•	•	•	•	124
▲▲ Sherwood CD-3020R	130	G Although this budget wonder has little respect for musical convention, what emerges is still remarkably entertaining	NPC bitstrm	•	•	•	•	•	119
▲ Sherwood CD-5010R	160	G+ A warm, detailed and enjoyable performance from a solidly built but affordable package.	PDM Bitstrm	•	•	•	•	•	124
Sherwood CDC-5030R	200	A- The replacement for the successful 5-disc CDC-5010R sounds messy, disjointed and generally unpleasant. A great disappointment	Bitstream	•	•	•	•	•	132
Sony CDP-X303ES	550	A+ A disappointingly lean and inconsistent result from a player that puts the 'high' in technology if not fidelity	PLM Bitstrm	•	•	•	•	•	124

SOUTH LONDON



210 BRIXTON HILL · LONDON SW2 1HE
Tel: 081-674 4433/2033 · Fax: 081-674 1521

344 COLDHARBOUR LANE
LONDON SW9

Tel: 071-733 6893

161 CENTRAL ROAD
WORCESTER PARK, SURREY

Tel: 081-330 2018



KENWOOD KA5040R AMPLIFIER
2 x 80W RMS, R/C, Source Direct,
MM-MC, A/B Spk O-P
WAS £299.95 NOW £199.95



ROTEL RA-920AX AMPLIFIER
High quality, 2X 20W, 5 inputs, inc. MM Phono.
WAS £129.95 NOW £99.95



SONY TCK 611S CASSETTE DECK
'WHAT HI-FI AWARD WINNER'
3 Head + Motor, Dolby S noise reduction
Calibration system 'What Hi-Fi Award Winner'
WAS £329.95 NOW £289.95



MARANTZ CD52 Mk2 CD PLAYER
'WHAT HI-FI AWARD WINNER'
Bitstream Conversion, FTS, Random play,
Digital outputs, Synchro Recording etc.
WAS £229.90 NOW £179.95



MARANTZ PM44SE
Audiophile 2X 45W RMS, Bi-wire spk o/p
NOW IN STOCK!!

CLEARANCE ITEMS

Loudspeakers:

Boston A60, was £139.95 NOW £89.95
Bose 301, bk, was £329.95 NOW £289.95
Celestion 3rd Dimension, was £189.00
NOW £129.00
Jamo & Studio Power TO CLEAR
Infinity Ref. 20, was £249.95 NOW £149.95
Tannoy 615 mk1 (bk) was £749.99
NOW £599.95
Tannoy 613 mk1 (bk) was £599.99
NOW £469.95
Tannoy 603 Mk1, was £129.99
NOW £94.95
W'dale DIA. IV was £119.95
NOW £59.95
Mission 763i, 764i & 765i TO CLEAR

Amplifiers:

Kenwood KA3020, 3050R, 4040R TO CLEAR
Marantz PM80 (Ex-demo) £229.95
was £399.90 NOW
Marantz PM32 Amp, was £139.90
NOW £99.95
NAD 2400 Power-amp, was £419.95
NOW £359.95
NAD 2100 Power-amp, was £299.95
NOW £259.95
NAD 1000 Pre-amp, was £199.95
NOW £169.95
Pioneer A400 was £279.95
NOW £219.95
Rotel RA940BX, was £249.95
NOW £189.95
Rotel RA930AX Amplifier was £175.00
NOW £149.95
Rotel RA840BX4, was £249.95
NOW £149.95
Sony TAF170, was £109.95
NOW £84.95

CD Players:

Alwa XC750, was £199.95
NOW £159.95
Alwa XC950, was £249.95
NOW £199.95
Kenwood DPM6650 Multiplay was £269.95
NOW £209.95
Marantz CD72, was £399.95
NOW £299.95
Pioneer PDS801, was £329.95
NOW £269.95
Mission DAD5, was £299.95
NOW £249.95
Rotel RCD95SAX, was £279.95
NOW £215.00

** CALL FOR FURTHER INFORMATION ON
CLEARANCE ITEMS **

- * Authorised Agents of many leading brands
- * Please call for the best prices of single items and system packages.
- * MAIL-ORDER & EXPORT facilities avail. (Mainland deliveries 24hrs)
- * Listen before you buy!! (Demo avail)
- * 0% CREDIT & EXTENDED FINANCE to personal callers.
- * For high quality and friendly service CALL US NOW!!!
- * OPEN 9.00AM-6.00PM Mon to Sat (closed Weds).

MARANTZ DD.82 DIGITAL COMPACT CASSETTE
Highest standard 18 bit A/D converter Analogue cassette playback.
WHAT HI-FI? NOMINATED BEST CASSETTE DECK.
NOW IN STOCK £399.99.

AIWA, B&W, CELESTION, DENON, KENWOOD, MARANTZ,
MISSION, NAD, NAKAMICHI, PIONEER, ROTEL, TANNOY,
WHARFEDALE, YAMAHA and many others available from stock.



Alphason, Apollo, Pivottelli and Target
Racks & speaker stands...
all available at competitive prices.

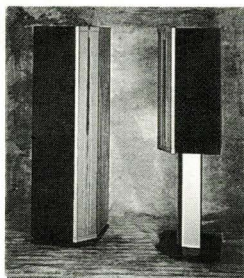
PLEASE CALL FOR THE BEST PRICES OF SINGLE ITEMS AND SYSTEM PACKAGES

Suggested Systems

The following suggested system package includes the NAD 5120 Turntable. Alternative items:
ie CD Player/Turntable/Cassette deck are available options.

SPEAKERS	JPW Sonata Wharfedale DIA 4 Celestion 1 Mission 760i	Tannoy 603 Celestion 3 Boston HD5	Mission 761i BW DM600i Tannoy 605 AR 152 Infinity Ref/20	Tannoy 607 Mission 780 Boston HD8	BW DM610i Mission 762i Rogers LS2A2 Infinity Ref/40	Rogers LS2A2 BW DM620i (add £100) Mission 763i Celestion 3/6000 (add £200)	T/T & C.D. PLAYER/OPTIONS Alwa XC750, £89.00 Denon DCD695, add £89.00 Denon DCD1290, add £99.00 Marantz CD42/2, add £99.00 Marantz CD52/2, add £120.00 Marantz CD72, add £195.00 NAD 502, add £99.00 Pioneer PD5801, add £189.00 Dual CS503-2, add £60.00 Dual CS505-4, add £99.00 Project 1, add £60.00 Thorens TD280IV, add £120.00 Systemdek 11X/900, add £329.00 Many others available on request
AMPS							
Kenwood KA3020	£295.95	£309.95	£345.95	£369.95	£409.95	£429.95	
Kenwood KA5040R	£349.95	£369.95	£419.95	£429.95	£459.95	£482.95	
Marantz PM40SE	£316.95	£335.95	£379.95	£399.95	£429.95	£460.95	
Pioneer A300X	£349.95	£369.95	£419.95	£429.95	£459.95	£489.95	
Pioneer A400	£409.95	£419.95	£459.95	£479.95	£509.95	£539.95	

**CELESTION
5000 WNT
HIGH QUALITY LOUDSPEAKER**
Acoustic Ribbon Technology
100w Bi-wired, real wood veneer
INC 'K' Stands
WAS £1,099.00, NOW £479.00



Amplifiers:

Aiwa XA950 £229.95
Denon PMA480R £219.99
Harman Kardon HK6250 £279.95
Marantz PM44SE NEW! £199.95
NAD 304 £239.95
Pioneer A400X £299.95
Rotel RA935BX £199.95
Technics STOCKED
Yamaha AX570 £289.95

CD Players:

Aiwa XC300 £149.99
Alwa XC750 £199.95
Denon DCD595 £179.99
Denon DCD1290 £329.99
Kenwood DP2050 £169.95
Kenwood DP7050 £349.95
Marantz CD53 £199.90
Marantz CD63 £249.90
Marantz CD525Emk2 REDUCED TO CLEAR
NAD 501 £179.95
NAD 502 £229.95
Pioneer PDM602 £269.95
Rotel RCD965BX £299.95
Rotel RCD965BX Discrete £375.00
Technics SLPS620A £199.95
Yamaha CDX570 £239.95

Cassette Decks:

NAD 6100, was £299.95 NOW £259.95
Kenwood KX5030, was £199.95
NOW £149.95
Alwa ADF450 £119.95
Alwa ADF810 3HD £229.99
Denon DRMS40 £159.99
Denon DR810 3HD £299.99
Denon DRW760 Twin £249.99
Kenwood KX-5050 £229.95
Marantz SD63 £229.90
Marantz SD63 £299.90
Marantz SD415 £209.90
Nakamichi DR3 £349.95
NAD 602 £199.95
Sony TCK-611S 3HD £289.95
Technics STOCKED
Yamaha KX-260 TO CLEAR

Tuners:

Denon TU260L £119.99
Denon TU580RD/RDS £219.99
Marantz ST53 £168.90
Marantz ST40/50L TO CLEAR
NAD 402 £169.95
Rotel RT930AX £175.95
Rotel RT950BX £199.95
Sony STS311LB £179.95

AV Amps/Receivers:

Denon AVC3020 £729.99
Denon DRA345R £249.95
Denon DRA645RD/RDS £319.95
Kenwood KRA4050 £229.95
Kenwood KRV6060 RDS £349.95
Kenwood KR7050 RDS £399.95
Marantz PH700AV £249.90
Marantz SR53 & 63 STOCKED
NAD 705 £329.95
NAD 701 £259.95
Yamaha RX V470 £399.95
Yamaha DSP E200 £369.95
Yamaha DSP A500 £449.95
Yamaha DSP A1000 £899.95

Turntables:

Dual CS435 T.B.A.
Dual CS503-2 £179.95
Dual CS505-4 £229.95
NAD 5120 £119.95
NAD 533-Rega 250 £199.95
Project .5 Orf. OM3 cart. £145.00
Project 1 Orf. 510 cart. £185.00
Project 2 Orf. MC1 cart. £249.95
Soundlab & KAM (DISCO) STOCKED
Systemdek 11X900 + RB250 £329.95
Systemdek 11XE900 exc T/A £329.95
Technics SL 1210 Mk2 STOCKED
Thorens TD180 - AT91 £179.95
Thorens TD166 V1 + Rega RB250 £269.95
Thorens TD280 IV + AT95E £269.95

Loudspeakers:

Bose AM3Mk2 STOCKED
Bose AM5 Mk2 STOCKED
B&W DM600i.610i.620i. STOCKED
Boston HD3.5.7.8.9/SW10 STOCKED
CELESTION STOCKED
Cerwin Vega AT/DC&VS STOCKED
Jamo Pro 200/300/400 STOCKED
Mission 760i £129.90
Mission 763SE £149.95
Rogers LS2A2 £229.95
Rogers LS8A £499.95
Tannoy SIXES Mk 2 STOCKED
And many others, call for further details!

WE ARE ALWAYS COMPETITIVE - TELL US IF YOU CAN BUY CHEAPER. FREE STANDS WITH SELECTED SPEAKERS,
DELIVERY CHARGED ON CERTAIN PURCHASES. MAIL-ORDER ENQUIRIES PHONE BRIXTON HILL BRANCH FOR DETAILS

SPECIAL OFFER - NEW!!!

MARANTZ SR-63 RECEIVER
MARANTZ SD-53 CASSETTE DECK
+
MISSION 761i LOUDSPEAKER
WAS £649.00 NOW £499.95



CASTLE WARWICK
High Quality 2 Way Speaker
10" - 75W, black finish
(LIMITED STOCK)
WAS £229.95 NOW ONLY £129.95

DENON MINI SYSTEMS
D65, 90, 110 & 250
NOW AVAILABLE



CD players continued

Product	£Price	Comments	DAC type	Electrical digital output	Optical digital output	Headphone socket	Track entry keypad	Issue No.
Sony CDP-C345	230	A+ Sony's Hybrid Pulse DAC sounds great in the CDP-311 but in this 5-disc carousel it provides a mere skeleton of a performance	PLM Bitstrm	•	•	•	•	132
Sugden SDT-1	850	A Bearing in mind Sugden's SDA-1 converter lies at the heart of this player, its unpredictable performance is disappointing	16-bit	•	•	•	•	119
Teac CD-P3500	200	A A well-meaning attempt to pare-down the CD-P4500 results in a similar looking player with a thoroughly uninspiring sound	PDM Bitstrm	•	•	•	•	112
▲ Teac CD-P4500	280	G TEAC's first genuine 1-bit player its sound described as having a certain 'organic warmth', very composed and easy-going.	PDM Bitstrm	•	•	•	•	107
Teac VRDS-10	770	A+ A basic analogue stage compromises the potential of TEAC's superb engineering and digital electronics. Lacks bass energy	DAC7	•	•	•	•	119
▲ Technics SL-PG340A	150	A+ No more or less impressive than the old SL-PG320A, this new version is attractive enough if slightly restrained	MASH/PWM	•	•	•	•	128
▲ Technics SL-PG440A	170	G This mix of the SL-PG520 and '420 fails to benefit from the strengths of either and only just achieves recommendation.	MASH/PWM	•	•	•	•	124
▲▲ Technics SL-PG520A	180	G+ A cracking player. Superb clarity and dynamics, thrilling but musically involving too	MASH/PWM	•	•	•	•	107
▲▲ Technics SL-PS620A	200	G+ A costlier, tarted-up version of the SL-PG520A that loses very little in the way of clarity, sparkle or in compelling dynamics	MASH/PWM	•	•	•	•	112
Woodside WS2	1095	G+ Responded well to our jazz and classical selection but sounding bright and grainy with the pop CD's	16-bit	•	•	•	•	95
Yamaha CDX-670	290	G- Yamaha has retained the CDX-660 casework but cut costs with a new multi-task IC that's not entirely de-bugged.	PDM Bitstrm	•	•	•	•	124



CD transports and DACs

A CD player can be split into two basic components; the disc drive or transport, and a device which turns the digital bitstream coming off the disc into an analogue audio signal. This is called a digital to analogue converter or DAC. Although most players are contained in a single box, expensive players are usually two box affairs.

Although many of these units will be purchased as matching pairs, a DAC can also be

used to upgrade an existing CD player. Thus an early machine with a satisfactory transport can be rejuvenated by adding an outboard DAC.

The columns on the right indicate the facilities available on a transport or DAC. Remote control is self explanatory. The existence of electrical and/or optical digital in and outputs is pretty fundamental to transports and DACs, as a rule electrical outputs are the most desirable. Class 1 transports are those with an output whose crystal clock accuracy that's

better than ± 50ppm (parts per million), certain DACs won't lock onto transports with a lower clock accuracy. DAC type shows the specific converter chip employed. In much the same way that an amp's output is not indicative of its sound quality, the chip used in a DAC isn't the only determining factor in a CD player's sound. Phase inversion in the digital domain can make quite a big difference if you've got a high resolution system and golden ears.

CD transports

Product	£Price	Comments	Remote control	Electrical digital output	Optical digital output	Class 1	Issue No.
▲ Arcam Delta 250	750	G+ Arcam's best effort yet is a new design based on the Philips CDM9 transport; specification includes Sync Lock facility.	•	•	•	•	130
▲ Counterpoint DA-11E	1495	VG By rights this transport should be highly incompatible yet it delivers a remarkably vivid and natural sound.	•	•	•	•	130
▲ Meridian 200	895	G+ Broadly compatible and offering a light, fresh and very bubbly sound that is both natural, engaging and unfatiguing	•	•	•	•	96
TEAC P-2	3500	G Beautifully styled and constructed but sound is bleached and generally less inspiring than that of the P-10	•	•	•	•	96
TEAC P-2s	4300	A+ The latest version of Teac's luxury P-2 transport sounds as over-engineered as it looks.	•	•	•	•	130
▲ Theta Data Basic	1990	G+ A mild-mannered transport capable of marvellous results with lively-sounding outboard converters.	•	•	•	•	130
Wadia 8	3195	G Includes a budget version of Teac's VRDS mechanism in a fancy case; just too expensive for the performance on offer.	•	•	•	•	130

DACs

Product	£Price	Comments	Remote control	Electrical dig output	Optical digital output	Class 1	Issue No.
▲▲ Arcam Black Box 50	450	VG A very measured and sophisticated sound from a DAC that leaves plenty in reserve to accommodate future upgrades.	•	•	•	•	127
▲ Audio Alchemy DAC-in-the-Box	200	G Despite its slightly veiled sound this giveaway DAC may still rescue the oldest of players from obsolescence.	•	•	•	•	127
▲▲ Audio Alchemy DDE v1.0	420	VG A very sweet and seductive sounding unit that gives good results with a wide range of CD players/transports	•	•	•	•	101
Audiolab 8000DACmkII	750	G Just as smooth and refined as its predecessor yet, sadly, still manages to obscure the passion or fire of music.	•	•	•	•	127
Audio Note DAC 1	600	G An oddball DAC with manual de-emphasis switching. Needs a high preamp input impedance if bass is not to suffer.	•	•	•	•	127
Audio Synthesis DSM-M	1234	G+ A weighty but neutral and highly calculated performer, best suited to transports like the P-10, despite Sync Lock facility.	•	•	•	•	113
Beard DAP-1	1250	A- Clad in a wooden case this marriage of digital technology and valves has hit the rocks, a disappointingly flat sound	•	•	•	•	113
DPA Digital Little Bit II	400	G A new on-board mains filter promotes a smoother and richer sound at the expense of some life and vitality.	•	•	•	•	127
▲ DPA Digital Bigger Bit	695	G With either P-10 or Meridian 200 transports it delivers a very taut and dynamic sound, bathed in an open acoustic	•	•	•	•	103
▲ Meridian 563	695	G+ Warmer but no less detailed than the earlier 200-series, the 563 really comes into its own with top-flight CD transports.	•	•	•	•	127
Meridian 606 DAC7	1350	G By refining the 203's sound further Meridian have also tempered its vibrancy and 'life'. Fickle with other transports	•	•	•	•	101
Micromega Duo BS2	600	G Has a tendency to sound light, airy and 'fast' but it can also become a little hard or - fatiguing with some digital outputs	•	•	•	•	101
Micromega Microdac	300	A+ Described as a modest but entertaining performer, achieving its sweetest balance with Arcam's D170.3 transport.	•	•	•	•	113
▲ Mission DAC5	300	G+ Another modest DAC but one capable of a lean but clean and detailed sound that's typical of the DAC7 breed.	•	•	•	•	113
▲ Musical Fidelity Tubalog	499	G+ The animated character of the Tubalog ensures it's a great upgrade on budget CD players.	•	•	•	•	127
▲▲ QED Digit	139	G+ Bearing in mind its expressive but very forgiving performance the Digit is almost embarrassingly cheap	•	•	•	•	113
Select Systems Dacula	400	G The overly warm and heavy bass of this DAC is quite atypical of the Crystal Bit Stream DAC.	•	•	•	•	127
▲ Sugden SDA-1	749	G+ A pleasant surprise from the fuddy-duddies of audio, judging by its 'masses of high resolution detail and tremendous dynamics'	•	•	•	•	113
Woodside DAC1	909	G Fine but slightly dated and costly package in performance terms - but flexible, musical and t well built	•	•	•	•	87
▲ Woodside DAC2	509	G+ Offering a sharp and dynamic sound, all the more captivating for its lack of graininess and 'lizz'. A reliable upgrade	•	•	•	•	101

NEW FROM DENON



D-F10 HI-FI MIDI COMPONENT SYSTEM

Including UPA-F10 Integrated Amplifier • UTU-F10 AM/FM Stereo Tuner • UCD-F10 Compact Disc Player • UDR-F10 Single Cassette Deck (Speakers not included)

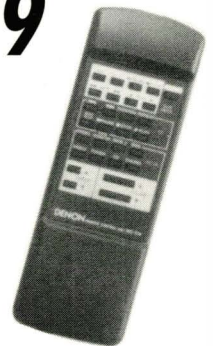
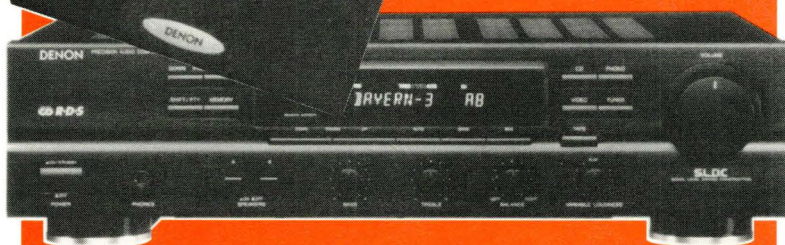
£999.99

NEW

RECEIVER DRA 365 RD

- RDS (Radio Data System)
- Signal Level Divided Construction
- Motor Driven Remote Volume Control
- AM/FM 40 Station Random Preset Memory

£249.99

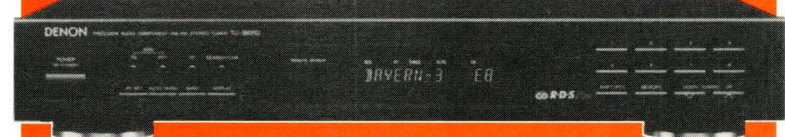


NEW

TUNER-TU 380 RD

- RDS (Radio Data System)
- Manual Character Input
- Remote Control Sensor
- AM/FM 40 Station Random Preset Memory

£189.99



NEW

CD PLAYER-DCD 615

- 20-bit 8 times Oversampling Digital Filter with Noise Shaper
- Real 18-bit LAMBDA Super Linea Converter
- Digital Attenuator
- Sync Record Function

£179.99



NEW

CD PLAYER DCD 825

- UK Specified Machine
- 100% UK Circuit Design
- High Performance Dual-Mono Multi-bit Design

£219.99



RADFORDS
Sound Advice • Perfect Vision

BRISTOL

52/54 Gloucester Rd.
Tel: 0272 428247

BATH

12 St James St West
Tel: 0225 446245

EXETER

28 Cowick St
St Thomas.
Tel: 0392 218895

TORQUAY

6 Fore St
St Marychurch.
Tel: 0803 326723

PLYMOUTH

107 Cornwall St.
Tel: 0752 226011

WINDSOR

43 King Edward Ct.
Tel: 0753 856931

Transport/DAC combos

Product	£Price	Comments	DAC type	Electrical digital output	Optical digital output	Variable output	Headphone socket	Track entry keypad	Issue No.
▲▲ Arcam Delta 250/Black Box 50	1200	VG A very sophisticated combination that sounds silky-smooth without appearing soft or sugar-coated. A bargain two-box player.	Hybrid	•	•	•	•	•	133
Audio Alchemy DDS/DTI/XDP/P52	2047	A+ A multi-box combination with a Bit Stream DAC that is fundamentally more inspiring than its partnering transport.	DAC7	•	•	•	•	•	120
▲ Cyrus Discmaster/Dacmaster	1900	G+ A powerful-sounding and perhaps slightly heavy-handed combination that cuts right to the heart of its music.	20-bit	•	•	•	•	•	133
DPA Digital T-1/PDM2mkII	3245	G An ingenious combination that includes a clock-feed from the DAC to CD transport. Capable of astonishing results	DAC7	•	•	•	•	•	120
DPA Digital T1/PDM 256	3890	G A highly advanced duet with adjustable dither facility. Sadly its different settings only usher-in different compromises.	Bit Stream	•	•	•	•	•	133
▲ EAD T-1000/DSP-1000	2195	VG A two-box player based on Pioneer's Stable Platter CD transport. Its music always sounds fast, furious and fascinating.	20-bit	•	•	•	•	•	120
Linn Karik/Numerik	2495	G+ Partnering Linn's Numerik DAC with its Karik CD player (as transport) provides a dry, dynamic but also slightly dirty sound.	20-bit	•	•	•	•	•	120
Meridian 200/263	1390	G Now updated with Crystal Bit Stream technology, this popular duet has unfortunately lost much of the charm and poise of the original.	Bit Stream	•	•	•	•	•	120
Meridian 500/563	1670	A+ Combined with its own 500 transport, the recommended 563 sounds disappointingly thin, brash and uncomfortable.	Crystal	•	•	•	•	•	133
▲ Meridian 602/606	3100	VG Meridian's top-of-the-range two-box player looks and sounds both distinctive and elegant, the perfect partner for a cultured system!	DAC7	•	•	•	•	•	120
▲ Monarchy Audio DT-40A/M-33	3090	VG An intriguing combination that provides a beefy and enthusiastic performance via its balanced AES/EBU connection.	20-bit	•	•	•	•	•	133
Proceed PDT3/PDP3	5214	G+ The third in a series of unusual transport/DAC combinations and a pairing that retains a powerful, confident and rugged sound	20-bit	•	•	•	•	•	120
▲ PS Audio Lambda/Ultralink Two	4900	VG In direct contrast with its appearance, this duet positively sparkles with colour and resonant detail.	20-bit	•	•	•	•	•	133
▲▲ Teac P-700/D-700	1500	VG They may lack the resolution of high-end colleagues but still sound warm, bubbly and perpetually entertaining.	20-bit	•	•	•	•	•	120
Teac P-2s/D-2	6000	A- Teac's VRDS statement looks a million dollars but sounds rather thin and uninvolving. A great disappointment.	18-bit	•	•	•	•	•	133
Theta Data Basic/Cobalt 307	2696	G+ A cautious and slightly over-refined combination that fails to make the best of either component.	Hybrid	•	•	•	•	•	133



DAT players

DAT, or digital audio tape, has been on the market for quite some time now but has never really 'made it' as a consumer medium, probably due to the fact that very little prerecorded software has been made available. In the last year or so it has begun to carve itself a niche at the top end of the market replacing reel

to reel tape recorders as the audiophile's tape based medium.

The DAT standard specifies a 48kHz sampling rate, which is higher than CD, so direct copying in the digital domain is only possible on those machines with dual sampling frequencies, ie 48kHz and 44.1kHz. Some machines also record at 32kHz

to give a longer recording time for a given length of tape, this is shown in the LP mode column.

The optical and electrical in/outputs in the column headings are for digital signals, analogue in/outputs are universal. The AES/EBU and S/PDIF socketry is for connection to professional components and typically DAT machines with this

DAT players

Product	£Price	Comments	Remote control	Optical in/out	Electrical in/out	AES/EBU in/out	S/PDIF in/out	LP mode	Issue No.
JVC XD-Z1010TN	900	A+ Ambitious but ultimately disappointing deck with an opaque musical delivery and more features than you can shake a stick at	•	•	•	•	•	•	111
Panasonic SV-3700	1111	A Slick, powerfully equipped, this pro DAT has a clear, quick and colourful sound somewhat lacking in weight and substance	•	•	•	•	•	•	111
Tascam DA-30	1199	A+ Interesting pro DAT deck with solid, tangible sound quality which is nevertheless lacking in analysis	•	•	•	•	•	•	111



Headphones

There are a variety of different approaches to headphone design. Amongst the more expensive models, electrostatic drivers are used in open-backed phones. The majority of these come with some form of transformer which usually takes the signal from the speaker terminals on the amplifier, but some can run from a pair of tape out sockets.

The more down to earth (see affordable) models feature dynamic, or moving coil, drivers in circular open or closed backed designs. The advantage of open backs seems to be a correspondingly open sound, but one can also of course hear external noises. Closed-back designs are useful in situations where it is necessary to block out background noise, but they aren't

generally as good sonically.

Another means of distinguishing different types is the way they sit on your head. There are three styles: circumaural models enclose the ear and rest on the side of the head; supra-aural designs feature a flat pad which presses on the outer ear (pinna); and intra-aurals rest inside the ear itself, and are popular with personal stereos.

Headphones

Product	£Price	Comments	Type	Open back	Closed back	Dynamic	Electrostatic	Issue No.
AKG K44	42	A Good quality personal oriented phone, could have a better sense of space but is musically quite communicative	Supra-aural	•	•	•	•	99
AKG K70	30	A Cossetting on the ears, but not on the brain, thanks to coarse, shut-in sound.	Supra-aural	•	•	•	•	133
AKG K135	46	A The K135s don't live up to the usual AKG standards, though they do have the ability to reproduce rhythm well	Supra-aural	•	•	•	•	63
▲ AKG K240 Monitor	82	G Something of a classic, these AKGs are very user friendly in all respects; sonically on the warm side of neutral	Circumaural	•	•	•	•	63
▲ AKG K280 Parabolic	117	G+ A very revealing and unusual twin driver design that uses the same principle as a satellite dish to beam sound into the ear	Circumaural	•	•	•	•	63
▲ AKG K340	191	E Heavyweight cans in most respects, the K340 with its electrostatic tweeter is a very revealing headphone	Circumaural	•	•	•	•	75
▲ AKG K400	118	VG Comfortable over long sessions. Sound is exquisitely detailed, dynamic and uncoloured	Supra-aural	•	•	•	•	121
▲ AKG K500	138	G+ Open and clear, they reproduced music with impressive definition, balance is on the light side but transparency is high	Circumaural	•	•	•	•	111
▲ AKG K1000	646	E One of the best dynamics on the market, hooks directly to speaker outputs and makes much of the competition sound lame	Extra-aural	•	•	•	•	99

HI-WAY HI-FI LTD

CAR STEREO • HI-FI • VIDEO

EST '78

EXPORT CENTRE
Tax Free Goods
for
Overseas Visitors

CLEARANCE BARGAINS

Yamaha CDX-570
Was £239
Now £179

CD PLAYERS WAS NOW
Denon DCD-595 £179 £159
Denon DCD-695 £199 £169
Denon DCD-890 £269 £229
Rotel RCD-955AX £230 £185
Yamaha CDX-670 £290 £239
Yamaha CDX-660 £249 £199

CASSETTES WAS NOW
Rotel RD-945AX £149 £125
Rotel RD-955AX £199 £165
Yamaha KX-260 £160 £129
Yamaha KX-360 £199 £169

FM TUNERS WAS NOW
JVC FX-342 £129 £79
Philips FT-920 £139 £99
Pioneer F-676 £199 £149
Pioneer F-75 £279 £209

AMPLIFIERS WAS NOW
Philips FA-920 £199 £129
Rotel RA-940BX £199 £175
Rotel RA-920AX £129 £105

Portable DCC & Mini Disc

DIGITAL CD WAS NOW
Panasonic RQ-DP £399 £199

MINI DISC WAS NOW
Sony M22P £399 £299
Sony MDS101 £699 £629

WHARFEDALE

CRS-3 Loudspeaker
100w Max Input • 8Ω
Was £129.99

SAVE £50 Now £79.99

TECHNICS SC-CH750
Mini Separates Hi-Fi
Was £849
50wpc • Surround Sound
MASH 1-bit CD
DOLBY HX-Pro
Now Only £679.00
All Stock New & Guaranteed

For the Best Deals in Town - and that's a Promise!!

We will Match or Beat any Price from an Authorised Dealer for Goods in Stock.
Clearance Lines, Special Offers, Ex-Display Equipment Excepted.

Mail Order Hot Line 071 723 5251

AMPLIFIERS



DENON (2 Yr Guarantee)
PM 1-25011 30wpc
PM 1-35011 50wpc
PM 1-480R 50wpc
KENWOOD

K.A-1030 65wpc
K.A-3050R 45wpc
K.A-4050R 70wpc
K.A-5020 80wpc
K.A-5050R 95wpc
K.A-7050R 100wpc

PIONEER

A-102 30wpc
A-202 40wpc
A-300X 40wpc
A-602 80wpc
A-502R 70wpc
A-400X 60wpc
A-351R 70wpc

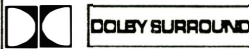
TECHNICS

SU-A600 40wpc
SU-A700 45wpc
SU-A800 55wpc
SU-A900 80wpc
SU-1220 30wpc
SU-1320 45wpc

YAMAHA (2 Yr Guarantee)
AX-570 100wpc

AV AMPLIFIERS & RECEIVERS

CINEMASOUND



PRO • LOGIC

DENON (2 Yr Guarantee)
11C-3530 110wpc
11C-1530 70wpc Best Hx
11C-3020 80wpc Best Hx

KENWOOD

K.A-13500 55wpc
K.A-17700 100wpc
KR-A4060 60wpc

PIONEER

LS-1-D802S 55wpc
LS-1-1701S 55wpc
LSA-452 50wpc Best Hx

SONY

TA-11570 70wpc
YAMAHA (2 Yr Guarantee)
DSP-12070 3 Chn Best Hx
DSP-E200 3 Chn
DSP-E580 3 Chn NEW
DSP-1780 5 Chn NEW
DSP-4970 7 Chn
RX-1470 50wpc Best Hx

CASSETTES



AIWA
AD-F410 Hx-Pro
AD-F810 3 Head
AD-WX828 Twin 1-Rev
DENON (2 Yr Guarantee)

DRM-540 Hx-Pro
DRM-710 3 Head
DRS-610 Hx-Pro
DRS-810 3 Head
DRW-760 Hx-Pro

KENWOOD

KA-3050 Hx-Pro
KA-5050 3 Head

PIONEER

CT-S420 3 Head
CT-S620 3 Head
CT-W420R A Rev
CT-W620R Hx-Pro
CT-W820R Rem Con

SONY

TC-K611 Dolby S Stereo Hx

TECHNICS

RS-TR373 T Rev NEW
RS-TR474 Hx-Pro NEW
RS-TR979 Tw Rec
RS-BX404 Hx-Pro
RS-BX646 3 Head
RS-BX747 3 Head

FM TUNERS



DENON (2 Yr Guarantee)
TU-260 "Winner"
TU-580 RDS Sys

KENWOOD

KT-2060 3 Band
KT-3050 RDS Sys

SONY

ST-311 "Winner"
TECHNICS
ST-610 24 Mem
ST-G70 3 Band
ST-G470 39 Mem
ST-GT550 Rem Con
ST-GT650 RDS Sys

AV DEMO ROOM
In Both Stores & Online

STOP PRESS!
...maintained superbly by the JBL "What Hi-Fi" April 1994

JBL Control 1's REL Strata
Six Speaker Pro-logic Package

IN STOCK £995

FANTASTIC SAVINGS ON MIDI & MINI HI-FI SYSTEMS

SAVE £150 ON THIS
SONY MHC 2800CD



Was £549.99
Now £399.99

MONEY SAVERS

AIWA Z650 £369 £349
AIWA NSX-D70 £499 £420
Hitachi AX-12 £349 £298
Hitachi AX-15 £449 £380
JVC Adagio S2 £369 £315
Kenwood M47G £749 £620
Kenwood M77MG £999 £910
Kenwood M57MG £849 £705
Kenwood UD551M £649 £585
Sony 759CD £1099 £935
Sanyo DCM51 £299 £255
Technics CDX120 £699 £595
Technics SCCH950 £999 £849
Pioneer J50 £749 £599
Pioneer J50 £1149 £919
Pioneer N33 £379 £300
Pioneer N93M £1049 £839

HI-FI SYSTEMS

AIWA
LCX-09 10wpc
NSX-270 16wpc
NSX-340 20wpc
ZD-7000M 40wpc
NEW '94/'95 RANGE IN STOCK

AKAI
MX-92 25wpc
DUAL VOLTAGE RX MINI'S IN STOCK
DENON (2 Yr Guarantee)
D-250 50wpc
D-65 30wpc
D-90 40wpc
D-110 40wpc
NEW DF-10 50W RDS IN STOCK
AVAILABLE AS SEPARATES

JVC
Adagio G7 50wpc
Adagio G9 55wpc
Adagio S30 NEW
CX-14 15wpc
CX-T1 8wpc
W-58CD 50wpc

KENWOOD
TD-951M 42wpc
M-281MG 40wpc
M-971MG 85wpc

PIONEER
N-63T 3wpc
N-93M 66wpc
J-10 49wpc
J-20 50wpc
J-40 102wpc

NEW TECHNICS '94/'95 RANGE IN STOCK
GRUNDIG HI-FI RANGE IN STOCK

THE CAR HI-FI SPECIALIST

JVC
KS-RV770 +
ML-MK500
CD Changer System
Was £499 **£349.00**

PIONEER
KE-2730 Radio Cass 4x7 Warts
Was £165 NOW £129
KE-3730 Radio Cass Dolby B NR
Was £185 NOW £145

ALPINE
798M In Dash 3 Tray CD Tuner
Excluding Power Amps
Was £679 NOW £529

KENWOOD
KDC 86R CD Tuner RDS-EON
Exc. Power Amps
Was £499 NOW £390

NEW JVC
KD-GT7 CD Receiver
4x25 Warts • 3 CD Changer
3 Band Radio • 24 Preset Memory
£374 PHONE FOR INTRODUCTORY PRICE

PIONEER
SPEAKER BARGAINS
TS-E1066 Was £37 NOW £27 pair
TS-E1399 Was £77 NOW £56 pair
TS-E1688 Was £66 NOW £48 pair
TS-G1033 Was £37 NOW £25 pair
TS-F1385 Was £37 NOW £27 pair

1994/95 PIONEER RANGE - NOW IN STOCK -

WE OFFER A FULL FITTING SERVICE FOR CAR HI-FI, ALARMS AND MOBILE TELEPHONES

318-324 Edgware Rd

For the Best in Fridges, Freezers, Microwave Ovens, Vacuum Cleaners, Cookers, Washing Machines, Dishwashers and more come to:

THE ONE STOP SUPER STORE

Hi-Way Hi-Fi Ltd
318-324 Edgware Rd
London W2 1DY

Also At
242 Tottenham Crt Rd
London W1 9AD

Tel: 071 723 5251
Fax: 071 724 6101

Opposite Paddington Green Police Station
Near Edgware Rd (Bakerloo) Tube

Tel: 071 636 5974
Fax: 071 323 4159

FREE DELIVERY
On UK Mainland

FREE*
in Mainland UK

*Price Match & Clearance Lines Excepted

E & OE

Please supply the following goods:

I enclose Cheque PO for £.....
or debit my Access Visa, Amex Card No

Expiry date.....
Name.....
Address.....
..... Post Code.....
Day Time Tel..... HFC 894

Headphones continued

Product	£Price	Comments	Type	Open back	Closed back	Dynamic	Electrostatic	Issue No.
Audio-Technica ATH-M2a	28	A	No bass, little treble and acceptable midband from low-weight, comfortable model	Supra-aural		•	•	133
▲ Audio-Technica ATH-910	90	G	The closed-back 910s are an improvement on the 909s with a nice rhythmic quality rarely found with headphones	Circumaural		•	•	55
Audio-Technica ATH-9000	246	G	Electrets which connect to the amps speaker outputs, it sounds a little too smooth but would suit aggressive amps	Circumaural	•			111
Beyer DT311	45	A+	Uncharacteristically tight, unrefined sound quality from otherwise well engineered 'phone	Supra-aural	•		•	133
Beyer DT411	59	G	A reasonable but not very thrilling headphone that doesn't really offer enough at the price	Supra-aural	•		•	111
▲ Beyer DT911	199	VG	Probably too revealing for many headphone amps these are very subtle and fine if expensive cans	Circumaural	•		•	111
▲ Beyer DT990	119	VG	A significant pair of dynamic headphones; they have a smooth and yet revealing neutral sound that is hard to criticise	Circumaural	•		•	55
▲ Jecklin Float Electrostatic	399	E	These electrostatics have an openness of sound rarely found in the breed, with good dynamic range to boot	Circumaural	•		•	55
▲▲ Jecklin Float Model One	75	G+	Whilst very unusual in appearance, the Floats give remarkable sound quality and openness at a reasonable price	Circumaural	•		•	55
▲ Jecklin Float Model Two	99	G+	Helmet shaped and pretty unflattering but open sounding and comfortable in the long term. The lack of adjustment	Circumaural	•		•	63
JVC HA-D690	40	A	Competent but rather undistinctive cans, a bit middle of the road and well suited to aggressive sources	Supra-aural		•	•	111
JVC HA-D910	65	A	Broadly acceptable if unexciting design with low level losses and some colourations	Circumaural		•	•	121
Kenwood KH-1000	20	A-	First step up from a true mini: a near miniature which is cheap, comfortable and inoffensive	Supra-aural	•		•	121
Koss TD/60	30	A-	AM radio like bandwidth limitations and colourations, and rather flaky build	Supra-aural		•	•	133
Maxell HP-3000	30	P	Solid, smooth sounding but congested and undynamic. Includes in-lead controls.	Supra-aural		•	•	133
▲ Pioneer SE-400D	37	G-	Acceptable if unexciting all-rounder, with good long-term comfort levels.	Supra-aural		•	•	133
▲ Ross RCH-300CD	20	P	In-lead controls are the highlights of this shoddy, sometimes aggressive sounding design.	Supra-aural		•	•	133
▲ Sennheiser HD320	40	E	Superb value: articulate, accurate and musically effective, but location on ears can be uncertain.	Supra-aural	•		•	133
▲ Sennheiser HD440 II	35	A+	Still the one by which others at the price are measured, though now slightly leaden sounding, cold treble	Supra-aural	•		•	121
Sennheiser HD 540II	120	G+	A good but not great headphone that due to its high impedance and efficiency should work well with most sources	Circumaural	•		•	111
▲ Sennheiser HD560 Ovation II	140	VG	Characteristic slightly heavy sound, but still the benchmark at this price level. High class sound and comfort	Circumaural	•		•	121
▲ Sony MDR-CD1000	170	G+	A fine sounding and comfortable headphone that's likely to work well with most sources	Circumaural	•		•	111
▲ Sony MDR-CD3000	350	G+	Better than most of the headphone outputs around so hard to make the most of, potentially up there with the electrostatics	Circumaural		•	•	99
▲ Sony MDR-CD350	30	G	Very impressive, possibly the most open sounding cheap closed back can around, lightweight in balance but transparent	Circumaural		•	•	99
▲ Sony MDR-CD450	45	G-	Fair acoustic isolation and comfortable circum-aural construction, moderate sound quality	Circumaural		•	•	133
▲ Sony MDR-CD550	60	G+	A very competent headphone, creates a remarkable sense of space for a closed back design and sounds natural to boot	Circumaural		•	•	99
▲ Sony MDR-CD750	90	G+	Reasonably comfortable and eminently listenable these Sonys have characteristically good bass power and relaxed hf	Circumaural		•	•	111
Sony MDR-CD850	100	A+	Very comfortable, and reasonable sound - better than most sealed designs - though hardness intrudes	Circumaural		•	•	121
▲ Stax Gamma pro/SRD-X pro	678	E	The Gamma pros are like a stethoscope for your hi-fi, revealing subtleties that many loudspeakers fail to resolve	Circumaural	•		•	63
▲ Stax Lambda Signature/SRM-T1	1644	E	The Signature when combined with the SRM-T1 valve driver must be the most transparent headphone available	Circumaural	•		•	72
▲ Stax SR Gamma	239	G+	The next model down the Stax range from the Lambda, the Gamma is an excellent headphone with little to criticise but the price	Circumaural	•		•	55
▲ Stax SR Lambda Pro/SRD-7SB	674	G+	An industry reference, frighteningly revealing, bringing across more information than loudspeakers costing twice as much	Circumaural	•		•	55
▲ Stax SR Lambda Pro/SRM-1	1239	E	Extracts layers of information that other headphones only hint at. The SRM-1 has more edge than the SRM-T1	Circumaural	•		•	75
Technics RP-F10	100	A	Another very comfortable sealed model, modest sound isolation and uneven sound favouring bass	Circumaural		•	•	121
▲ Vivanco SR606	40	G+	Although slightly overblown at times, this model is easy on the ears and essentially enjoyable.	Circumaural	•		•	133
▲▲ Vivanco SR808 Classic	55	G	A new mid price reference from a new and interesting source. Good all round, no obvious shortcomings	Supra-aural	•		•	121



Loudspeakers

Last item in the hi-fi chain, to some extent the loudspeaker is merely the slave of what has gone before, capable only of reproducing a signal as good as it is fed. Nevertheless the distortions (colorations and stereo effects) introduced by loudspeakers (and rooms) tend to be more immediately obvious than those anywhere else in the chain, so careful choosing according to taste is very important.

The average loudspeaker consists of a smallish

enclosure, much of which may have begun life as part of a tree, plus a couple of drive units hidden behind a removable grille. Inside the box lurks a simple electrical circuit known as a crossover, which divides the incoming (full range) signal into the right bits for the drivers to handle. Variations on the above formula are specifically identified in the entries. The designer's primary task is to balance the 'sensitivity' of the loudspeaker (how loud it goes for a given electrical input) against the

bass extension (how low does it go), shown as 'bass from', for the given box size. After that such subtleties as coloration (or lack of it) and dispersion come into the equation.

Careful placement of the loudspeakers within the room is as important as the initial choice of model. See siting columns for guidance. For good stereo they need to be more or less the same distance from nearby walls. Models not ticked as 'floorstanding' will require rigid stands.

Loudspeakers

Product	£Price	Comments	Size: HxWxD (cm)	Bass from (Hz)	Site close to wall	Site in free space	Floorstanding	Issue No.
▲ Acoustic Energy Aegis 1	452	G	Rich and slightly heavy balance doesn't mask fine mid/treble coherence and transparency. Entry level for all-metal drivers	39x21x26	28	84	•	118
Acoustic Energy AE1	950	G	Amongst the best miniatures around, shows exceptional mid focus and coherence, but is pricey and could be more agile.	29.5x18x25	48	84	•	102
▲ Acoustic Energy AE3	1650	G+	Solid, authoritative and impressively accurate - if a shade ponderous and slow	63x26.5x37	23	85	•	86
▲▲ Allison AL100	100	A	Loud and lively budget wall-mount is bigger and beefier than most of the competition, if lacking some subtlety and refinement	33.5x24x21.5	30	87	•	94
Allison AL105	170	A-	Pretty enough in appearance, sonically the AL105 doesn't really make the grade at the £150 asking price	37x24x21	45	87	•	78
▲ Allison AL110	220	G-	Compact bookshelf model is a little dry and mid forward, but bass is extended and solid	40x24.5x22.5	28	86	•	102
Allison AL120	420	A	Pretty well balanced if slightly mid forward, but sound quality is a little disappointing for the price	63x28x27	30	88	•	98
Allison MS 200	220	A-	Small and solid as a brick, this micro-miniature has limited bass and bright balance, but sounds agile and communicative	25.5x14.5x15	50	85	•	106
▲ Apogee Caliper Signature	3995	G+	Power hungry full range ribbon panels have remarkable transparency and delicacy, loudness and 'grunt' are a bit lacking	122x70x6.5	30	81	•	81
▲ Arcam Delta 2	300	G	Pretty luxury compact sounds a shade forward and coloured but has dynamic and lively bass for its size	37.5x22.5x27.5	40	87	•	94

MAIL ORDER
Tel: 071 436 1053
Fax: 071 637 2690

KAMLA

Coming Soon:
Large range of
NTSC Laserdiscs
will be available
from November

Product List

- AIWA
- AKAI
- AR
- ALCHEMIST
- ALPHASON
- AUDIO ALCHEMY
- AUDIOSTATIC
- AURA
- B&W
- BEYER
- BOSTON
- CERWIN VEGA
- CONRAD JOHNSON
- GOLDRING
- INFINITY
- JAMO
- JVC
- KEF
- KENWOOD
- KINSHAW
- MIRCROMEGA
- MORDAUNT-SHORT
- MOTH
- NAKAMICHI
- ORIGIN LIVE
- PHILIPS
- PIONEER
- PROCEED
- PROJECT
- ROTEL
- RUARK
- SANSUI
- STAX
- SME
- SYSTEMDEK
- TEAC
- TECHNICS
- THORENS
- TOWNSHEND

TEAC
VRDS 7
D700/P700
NOW ON
DEMONSTRATION

We also stock a large
range of TV's/Video's
from
**AKAI, HITACHI, JVC
MITSUBISHI, PANASONIC
PHILIPS, SAMSUNG
SHARP, TOSHIBA**

MICROMEGA
T-DAC
T-DRIVE
*the first front loading
transport from Micromega*

**Townshend Rock III
Turntable Now On
Demonstration**
See review in Oct '93
issue of Hi-Fi Choice

**New Rotel AV
Products Now
In Stock**
RSP 960 AX Prologic Processor
RB956 Six Channel Poweramp

SALE ON NEW AND EX-DEM HI-FI

		RRP	NOW
Audio Alchemy DDE-V1.0	new	420.00	295.00
Motif (Conrad Johnson) MS2001 200 Watt Power Amp	ex-dem	4000.00	2400.00
Motif (Conrad Johnson) MP11 Phono Stage	ex-dem	2250.00	1125.00
Conrad Johnson MF200 200 Watt Power Amp	ex-dem	2400.00	1800.00
Oracle Alexandria inc. SME345 arm	new	1890.00	945.00
Oracle Delphi III	ex-dem	1595.00	950.00
Alphason Sonata inc. HR100/Atlas	ex-dem	1785.00	1160.00
Teac D500 D/A Converter	ex-dem	330.00	265.00
SD Acoustics SD1	ex-dem	1650.00	825.00
SD Acoustics SD4	ex-dem	700.00	455.00
Nakamichi 1000mbi	new	4500.00	2295.00

UPTO 50% OFF

ACCESSORIES FROM:
AKG, ALPHASON, AUDIOQUEST, AUDIOTECHNICA, BEYER, CABLETALK,
FOUNDATION, FURUKAWA, GOLDRING, IXOS, KONTAK, LYRA, LYNWOOD,
MONSTER, ORTOFON, QED, SENNHEISER, SONIC LINK, SOUND STYLE,
STRAIGHTWIRE, STANDS UNIQUE, SUMIKO, SUPRA, TOWNSHEND, XLO,
VAN DEN HUL

ASK Electronics Ltd.
248-250 Tottenham Court Road
London
W1P 9AD
071 637 0353/0590

251 Tottenham Court Road
London W1P 9AD
071 323 2747

Harp Electronics Ltd
237 Tottenham Court Road
London
W1P 9AD
071 636 4611

Loudspeakers continued

Size: HxWxD (cm) Site in free space Floorstanding Issue No.

Product	£Price	Comments	Size: HxWxD (cm)	Site in free space	Floorstanding	Issue No.
ATC SCM20	1461	G+ Massively built, invariably informative but the rather forward presentation can be uncomfortable	44x24x31	28	82	• 86
▲ Audio Note AN-E/B	1300	G+ Lovely coherence, great midband dynamics and transparency, extended bass and high sensitivity — pity it's so darn ugly!	80x36x28	20	91	• 106
▲ Audio Note AN-J/B	799	G+ Light damping and local unevenness adds some coloration, but doesn't spoil the very lively, dynamic and coherent sound	58.5x33x24.5	25	90	• 110
Aura SP-50	400	A Two very tasty drivers rather outclass the cabinetwork; a capable but slightly dull compact stand mount	40x22x25	30	87	• 126
▲ B&W 2001	120	A Cunningly concealing its (very real) limitations, this is just about the smoothest and best balanced miniature around	29x18x21	48	87	• 118
B&W 2003	190	A- Flashy and assertive ghetto blaster styling is not reflected in the rather bland, if well balanced sound	43x21x25	30	88	• 122
▲ B&W DM620i	399	A+ Good material value, this compact floorstander has a beautifully voiced midband, less happy bass tuning	77x24x32	40	89	• 126
▲ B&W Matrix 801	3500	G+ Lacks the transparency of the best panels, and the drama of the best dynamics, but is something of an acoustic tour de force	77/99x56x43	<20	86	• 81
▲ B&W Matrix 805	845	G Stylish, with remarkable imaging properties, good balance and low coloration, though less successful at musical communication	42x26x22.5	30	87	• 98
▲ Bose 305	430	G- A bit of an oddball, fine dynamic liveliness and a good room match more than make up for the strange stereo imaging and treble	28x45x23	40	88	• 78
Bose 401	500	A Cheaply built but distinctively styled semi-omni floorstander suffers from heavy midbass but still sounds lively and open	78.5x30x28.5	28	89	• 110
Bose 901 MK6	1650	A The pre-equalised multi-driver 901 is cleverly engineered to deliver exceptional loudness	33x54x32	28	89	• 86
Boston HD5	139	A Tiny and prettily shaped miniature has an attractive lack of boxiness, but is a little short of drama and dynamic drive	25x16x18.5	30	86	• 110
▲ Boston Acoustics SW10	449	G- Clever powered subwoofer system integrates well and improves system loudness and power handling	50x28.5x42	35	NA	• 126
▲ Cabasse Bisquine	600	G+ Classy French large bookshelf speaker has great coherence and dynamic grip, but a rather mid-forward overall character	48x26x30.5	30	91	• 110
▲ Cabasse Skiff	1500	G+ Large floorstanding three-way gives great sensitivity and bass extension with fine dynamic grip	100x30x36	25	92	• 122
▲ Canon S-30	180	A+ Clever and unusual moulded design has attractive lively coherence, along with 'wide imaging stereo' effect	27x22.5x23.5	50	88	• 114
▲ Canon S-50	250	A+ Only a small cone miniature at heart, the fascinating styling and extended sweet spot feature make it utterly original.	30x24(diam)	48	84	• 102
▲ Castle Chester	650	G+ A brilliant throwback, using horn-type approach to provide startling midrange dynamics and coherence.	94x23x27	45	87	• 98
Castle Durham	250	A Like the slightly larger York, the very pretty presentation is not reflected in a similarly sweet sound	40x22x24	48	88	• 118
▲ Castle Howard	999	G+ Aply fills the price/size/sound gap between Chester and Winchester; a spacious semi-omni with a rich, laid back balance	104x23x35	25	87	• 132
▲ Castle Trent II	190	A Very classy finish for the price, plus a sound that passes muster without setting anything much alight	33.5x18x20	50	88	• 122
▲ Castle Winchester	1499	G+ Unconventional and beautifully crafted, large for its bass extension but engagingly agile and attractively open and airy	114x24x47	25	87	• 90
Castle York	349	A+ Pretty little real wood compact has an engaging transparency, good balance and fine timing, could do with more authority	43x22x26	30	86	• 110
▲ Celestion 1	109	A Pretty basic performance but at a very basic price — it all sounds a bit scrappy and untidy, but its heart's in the right place	27.5x16x21	50	87	• 114
▲ Celestion 3 MkII	130	A+ Smooth and polished by budget speaker standards, if a bit laid back for some tastes	31x18.5x20	45	87	• 130
Celestion CS135	139	A- Compact hiway passive subwoofer lacks serious bass extension; for high sensitivity speakers only	52x19x34	45	88	• 128
▲ Celestion 15	389	G Big box and bang for your bucks, short on subtlety and control, but long on both enthusiasm and perceived vinyl wood grain	103x20.5x25.5	28	90	• 114
Celestion 9	269	A Nicely presented and fair material value, with impressively flat bass-to-mid balance	49.5x20.5x24	30	89	• 102
Celestion SL12Si	629	A Elements of fine sound quality, but this 'grown up' SL6 variation has a lumpy response alongside its improved power handling	23x20x27	50	85	• 66
Celestion SL600Si	820	G Has certain remarkable qualities that some will find irresistible, but needs careful system and room matching	57x20x23	52	82	• 68
Celestion SL6Si	429	A+ This stereotype luxury compact can sound a bit dull and congested, but really opens up on Slate Audio stands; favours CD	37.5x20x25	30	86	• 94
Celestion 300	1099	G Splendid bass extension and fine panel-like openness and transparency, but dynamics and timing are suspect, balance very laid back.	100x21x31	<20	86	• 118
Dali 102	230	A Attractive bookshelf model has fine midband focus and bass extension, but treble's a bit restrained and bass a bit detached	37x21x25	30	86	• 114
Dawn Chorus FS	698	G Compact floorstander with superb coherence but rather forward midband. Would suit smaller rooms best	91x26x21	30	86	• 11
Dynaudio Contour 1.3	1199	G Heavyweight luxury finish bookshelf model has good scale and weight but is pricey and a bit ponderous	38x20.5x29	28	86	• 122
▲ Epos ES11	395	G+ Integral baffle/driver to give a remarkable combination of low coloration, transparency and speed; bass is a bit shy	37.5x20x25	45	86	• 94
▲ Epos ES14	595	G+ Substantial stand mount delivers delightful midrange focus and delicacy with good bass control. System sensitive	49x22.5x29	25	85	• 98
▲ Faraday FS1	225	A+ Concrete box on a budget, works surprisingly well despite cheap drivers, wood veneers here Direct sale only	47x27x28	45	86	• 114
Faraday FS5	575	G Pricey and ugly, but with its own sonic charm, thanks to substantial influence of the concrete enclosure has upon the sound	46x27x26	28	90	• 102
Faraday Siren	375	A- Interesting if ugly high mass concrete cabinet is let down by imbalance of ageing driver combination	46x27x27	48	87	• 94
▲ GLL Maxim	119	A Budget miniature offers well balanced strengths and few weaknesses at a very realistic price; a bit feeble	26x17x20	30	85	• 122
Harbeth LS3/5A	539	A Still a classic miniature, though not to every taste, and none the better for the recent update under our listening conditions	30.5x19x16	60	81	• 66
▲ Harbeth HL-P3	479	G Very limited loudness but impressive full-range scale from uncoloured and very well balanced but time-smearing sub-miniature	31x19x17	23	82	• 118
▲ Harman-Kardon LS 0200	150	A Laid back to a fault but entertaining nonetheless, and a big box for the price	38x21x29	30	86	• 130
▲ Heybrook Prima	130	A+ Neat and discreet miniature delivers fine coherence, pace and timing, though balance is a trifle forward and bass a bit light	29x19.5x18	50	86	• 110
▲ Heybrook Quartet	555	G Beautifully presented and built large bookshelf model with good sensitivity and a lively, forward sound	41x24x23	48	89	• 122

audio research • aura • cabletalk • castle
 chord company • copland • epos • jpw
 lyra • magneplanon • marin logan • micro
 omega • monitor audio • naim • nakamichi • neat
 rega • roksan • rotel • royce • sme • sonus faber
 stax • teac • tlc • xio • audio research • aura
 cabletalk • castle • chord company • copland
 epos • jpw • lyra • magneplanon • marin logan
 micro • omega • monitor audio • naim • nakamichi
 neat • rega • roksan • rotel • royce • sme • sonus
 faber • stax • teac • xio • audio research • aura
 cabletalk • castle • chord company • copland

SALE

Savings of up to 35%
 Sale starts Saturday 23rd July
 Call for a copy of our sale list

the sound organisation

4 pickfords wharf • clink street • london bridge • se1 9dg

071 403 2255

give us a call for a chat and a map
 we're open from ten 'til seven • tuesday to saturday

RING FOR A DEAL

**SPECIAL
END OF LINE
BARGAINS
AVAILABLE**

AMPLIFIERS

TECHNICS

SUVZ 220 NEW, 30 watts per ch.
SUVZ 320 NEW, 40 watts per ch.
SU A800K NEW, 40 watts per ch. MOS, Class AA
SU A700K NEW, 45 watts per ch. MOS, Class AA, Remote
SU A800K NEW, 55 watts per ch. MOS, Class AA, Remote
SU A900K NEW, 80 watts per ch. MOS, Class AA, Remote

KENWOOD

KA1030 65 watts per ch.
KA 4050R NEW, 70 watts per ch. Remote
KA 5020 80 watts per ch.
KA 5050R NEW, 90 watts per ch. Remote
KA 7050R NEW, 100 watts per ch. Remote
KAV 8500 HOME CINEMA "What HiFi?" Award Winner
KA 2060R, NEW, 65 watts per ch. Remote
KA 3020SE, 50 watts per ch
KA 3060R, NEW, 80 watts per ch. remote
KAV 3700, NEW, AV ProLogic Amp
KAV 7700, NEW, AV ProLogic amp with DSP

SONY

TAF 211B, NEW, 30 watts per ch.
TAF 244B, NEW, 60 watts per ch.
TAF 442E, NEW, 80 watts per ch. UK sound
TAF 542E, NEW, 90 watts per ch. UK sound
TAAV 570B, NEW, Dolby ProLogic Home Cinema Amp

CD PLAYERS

TECHNICS

SLXP 150, SLXP 330, SLXP 440, SLXP 550, SLXP 570, Portables
SLPG 340A Budget MASH Player
SLPG 440K, NEW, Remote MASH Player
SLPG 740K, NEW, MASH digital servo
SLPG 840K, NEW, advanced MASH

KENWOOD

DP 2050, NEW, model with CCRS
DP 3050, NEW, 1 bit model
DP 5050, NEW, 1 bit model
DP 7050, NEW, 1 bit model
DPM 6060, NEW, 6+1 multiplayer
DPR 4060, NEW, 5 disc multiplayer

SONY

CDPM 302, NEW, midi size player
CDPC 325M, Midi size multiplayer
CDP 312, NEW, full size player, remote
CDPC 345, NEW, full size multiplayer
CDP 715E, NEW, advanced full size player
CDP 915E, NEW, top of the range, full size player
CDPX100, NEW, 100 disc player
D130, D121, D133, D231, D132 CK, D225 CP, D421 portables all in stock

CASSETTE DECKS

TECHNICS

RSBX 404K, NEW, Dolby B/C + HX Pro
RSBX 646K, NEW, 3 Head Deck with HX-Pro
RSBX 747K, NEW, 3 Head Deck with HX-Pro, Class AA

RSTR 232, NEW, A.R. twin deck
RSTR 333, NEW, A.R. twin deck with Bias adjustment
RSTR 515K, NEW, twin deck with HX-Pro
RSTR474, NEW, budget twin deck

KENWOOD

KX 3050 Dolby B/C, power loading
KX 5050 Dolby B/C, 3 motor, power loading
KX 7030 Dolby B/C, HX-Pro, 3 head, 3 motor
KXW 4060, NEW, twin deck, Dolby B/C
KXW 6060, NEW, twin deck - double record
KXW 8060, NEW, twin deck with HX-Pro

SONY

Single Decks
TCFX 211B, NEW, Dolby B/C
TCK 215B, NEW, budget full logic deck
TCK 415B, NEW, 3 head deck
TCK 511S, NEW, 3 head with Dolby S
TCK 611S, NEW, 3 head, 3 motor deck with Dolby S
TCW 445B, NEW, Dolby B/C
TCW 545B, NEW, auto reverse deck
TCW 6455, NEW, auto reverse deck with Dolby S

SPEAKERS

SONY

SS BSE UK design
SS 125E UK design
SAW-90, Sub Woofer

WHARFDALE

Diamond 5, NEW
NEW MODUS VIVANDI SURROUND SPEAKERS NOW IN STOCK
*CRS3, CRS5, CRS7, CRS9 - new range
*2130CS, centre speaker

MORDAUNT SHORT

New series MS10, MS20, MS30, MS40, MS50 now in stock
CS1 + SW1 - Home Entertainment Series in stock in dialogue,
stereo and ProLogic packs
NEV HT-30 Home Entertainment speakers

CANON

S30 + S50
VT100 corner units
*VS100, Sub bass corner units

TANNOY

603 Mk II 120 watts power handling
605 Mk II 150 watts power handling
607 Mk II 175 watts power handling
609 Mk II 200 watts power handling
611 Mk II 250 watts power handling
613 Mk II 250 watts power handling
615 Mk II 300 watts power handling

HiFi SYSTEMS

TECHNICS

All systems inc. speakers and CD
SSCH 404, NEW, Budget Minisystem
SCCH 650, NEW, 50 watts Minisystem
SCCH 655, Multi-play Minisystem
SCCH 750, NEW, 50 watts system with DSP
SCCH 950, NEW, ProLogic Minisystem
SHE 51 equaliser for CDX 120 & CDX 320 systems

KENWOOD

All systems with speakers, CD & remote control
M27 CDS - **Now at special unbeatable price!**
M28, NEW, with multipay option M47 G, NEW, 45 watts per ch.
M56 PX, 45 watts per ch.
M57 MG, NEW, 45 watts per ch. Multiplay system
M76 G, 60 watts per ch. inc. equaliser
M77 MG, NEW, 80 watts per ch. Multiplay system
M97 G, NEW, 85 watts per ch. ProLogic system
with multipay CD option

NEW KENWOOD

Minisystems with Multipay CD option

UD 302, NEW, budget 3 disc multisystem
UD310/351 M, 25 watts per ch.
UD 501/551 M, 32 watts per ch.
UD 701/751 M, 32 watts per ch., Dolby Surround
UD 901/951 M, 42 watts per ch., Dolby ProLogic
MSA7, NEW, Microsystem
EXTRAS AVAILABLE

P100 record deck for mini HiFi systems
CD6 centre speaker
CM 7ES rear surround speakers, 70 watts
CM 5ES rear surround speakers, 40 watts
SW 900 surround woofer for midsystems
SW 700 super woofer for minisystems
OMNI 7 top speaker

SONY

New systems now in stock ring for special
deals on end of line stock
Compact 190/195 NEW budget system with multiplay option
Compact 290/295 NEW 30 watts system with multiplay option
Compact 490 NEW 40 watts system

SONY MINI HiFi

Inc speakers & remote control & CD
MHC 510CD, NEW, 25 watts per ch.
MHC, C50 CD, NEW, MULTIPLAY SYSTEM
MHC 710CD, NEW, 40 watts per ch.
MHC, C70, NEW, CD MULTIPLAY SYSTEM
MHC 450 NEW budget system
MHC 650 NEW 35 watts system

MINI DISC

MZR1 + MZE2, NEW, portables
MDS 501, NEW, full size, mini disc player
MDS 101 for minisystems

JVC NEW SYSTEMS

UX-T1 MICRO SYSTEM with remote
UX-A4 MICRO SYSTEM with remote
ADAGIO S2 MINI SYSTEM 2 way speakers
ADAGIO S3 MINI SYSTEM 3 way speakers
ADAGIO S6 MINI SYSTEM 45 watts per ch.
ADAGIO S7 MINI SYSTEM 50 watts per ch.
ADAGIO S9 MINI SYSTEM Dolby ProLogic
ADAGIO 530 NEW MINI SYSTEM

DAT RECORDERS

SONY

TC DD7, NEW, Budget portable
DTC 690, NEW, Full size deck

TUNERS

TECHNICS

ST 610 24 Presets
STG 70 twin tuner
ST GT550K with RDS
ST GT650K with RDS

KENWOOD

KT 1060, NEW, model
KT 2030, with timer
KT 2050, NEW, model
KT 3050, NEW, model with RDS
KT 6050 remote compatible

SONY

STS211B, NEW, with 30 presets
STS 311B, NEW, with RDS - EON
STS 505ES with RDS

RECEIVERS

TECHNICS

SAGX 130K, 60 watts, 30 presets
SAGX 550K, NEW, Dolby ProLogic
SAGX 230K, 80 watts, VCR input
SAGX 350K, NEW, ProLogic

KENWOOD

KR-A4050 with RDS
KRV 6060, NEW, model with Dolby ProLogic and RDS
KRV 7050, NEW, model with Dolby ProLogic RDS + DSP

SONY

STRD 311B, NEW
STRD 511B, NEW, ProLogic model
STRD 611B, NEW, ProLogic model
Dolby ProLogic, kit, NEW, total surround package

IN BUSINESS FOR 30 YEARS

Essex Discount

CHELMSFORD: 2-3 West Square, High Chelmer. Tel: (0245) 490747

HARLOW: 57 Harvey Centre. Tel: (0279) 426155

LOUGHTON: 152 High Road. Tel: (081) 508 4838

ROMFORD: 8-9 Swan Walk. Tel: (0708) 746600



**FOR FAST & EFFICIENT
MAIL ORDER
PHONE
(0708) 721854**

Loudspeakers continued

Product	Price	Comments	Size: HxWxD (cm)	Bass from (Hz)	Sensitivity (dB)	Site close to wall	Site in free space	Floorstanding	Issue No.
▲ Heybrook Sextet	1099	G+	Engagingly coherent and a highly analytical, partly due to distinct and t always comfortable upper-mid forwardness	96x27x20	25	85	•	•	102
▲ Heybrook Solo	189	A+	Discreetly styled, sounds a little untidy in both bass and treble but handles complex rhythmic material much better than most	36x23x22	28	87	•	•	90
▲ Heybrook Trio	359	G	Same drivers as HBS1 in prettier real wood enclosure give a sweeter and more forgiving if less committed sound	47x24x25	45	89	•	•	118
Impulse H7	785	A	Ultra-compact horn has fine midband contrasts but very little bass and detached treble; gives amplifiers a hard time	87x15x30	45	85	•	•	132
Infinity Kappa 6.1i	995	A	Good extension and laid back balance from high-tech drivers in classy cabinet, but bass is fat and slow and dynamics unconvincing	97x30x24	25	89	•	•	132
Infinity Modulus	795	A+	Carefully conceived and beautifully built. Undeniably attractive in the mid and treble, it failed to handle the bass as well	30x18x26	45	84	•	•	86
▲ Infinity Reference 10	200	A	An engaging and lively sound from a prettily finished and substantial small bookshelf size model	36x23x23	50	87	•	•	98
Infinity Reference 20	300	A	Well presented and balanced with good bass control, but somehow lacks convincing cohesion and agility.	46x27x24	27	88	•	•	102
▲ Infinity Reference 30	400	G	Budget price floorstander has good overall balance and bass extension, but is rather coloured and uneven	86x27x24	25	89	•	•	122
Infinity Infinitesimal sub	499	A	Cute but pricey amplified subwoofer is too small to deliver real bottom octave grunt	34x34x34	40	NA	•	•	128
Jamo 707	900	G-	Superb styling and cosmetics but indifferent build and engineering quality; decent balance apart from detached bass	105x26x39	25	88	•	•	132
Jamo Cornet 40.3	130	A	Pretty presentation and a strong box, but poor driver fixing. Decent if bright sound	32x20x22	48	86	•	•	130
JBL Control 1 Plus	250	A	Sub-miniature with forward midrange and real bass; highish price partly justified by near-indestructible Pro build	23x15.5x14	50	89	•	•	90
JBL L1	479	G	Good power handling, decent transparency and deep but current hungry bass from a compact and solid enclosure	40x21x25.4	47	87	•	•	121
JBL ti1000	1500	G	Ultra-engineered, beautifully crafted bookshelf model. Performance compromised by over enthusiastic midbass output from port	44x30x28	45	89	•	•	118
▲ Jordan JH400	590	A+	Piano finish hexagon has single full range driver and controversial sound, with uneven balance but delightful mid coherence	33x24x30.5	50	83	•	•	106
▲ JPW AP2	180	A	Offers real wood veneer at a bargain price; performance is cleaner but broadly comparable to P1 Vinyl overall	43.5x25.5x26	45	86	•	•	106
▲ JPW AP3	225	A+	Pretty good stereo and well balanced overall it had its own character which is well suited to vinyl replay	52x25x29.5	57	90	•	•	46
▲▲ JPW Gold Monitor	80	A	Great sound for pound value through bass and midband, but the top end's rather coarse	27x18x18	50	85	•	•	130
▲ JPW Minim	79	A-	Very civilised but dynamically limited, the Minim is well suited to the smaller room and where limited loudness is acceptable	27.5x18x19.5	28	85	•	•	82
▲▲ JPW Mini Monitor	60	A-	Ultra cheap Richer Sounds special is lightweight and short of welly, but a snip for surround sound use	27x18x17	50	85	•	•	122
▲ JPW P1	155	A+	Honest and basically articulate if not very sophisticated, resolution is good but can sound a little wearing in bright systems	44x25.9x26.1	60	89	•	•	59
▲▲ JPW P1 Vinyl	135	A	A lot of highly competent loudspeaker for the price, with a safe sound that's unlikely to disappoint.	43.5x25.5x26	32	87	•	•	102
▲▲ JPW Sonata	115	A+	Well balanced and integrated, offers fine sound if limited bass and dynamic range, plus real tree wood at a nearly silly price	32x23x20	55	86	•	•	71
JPW Sonata Plus	135	A-	This luxury variation on the redoubtable Sonata theme features a metal dome tweeter, and isn't the better for it	32x23x21	30	87	•	•	90
▲ JRT AD1	500	G+	A fair share of cosmetic deficiencies do little to spoil the impressive coherence and timing	59.5x28x36	28	86	•	•	86
▲ JRT AD1 Micro	389	G	Delightful life and coherence, gives surprising impression of scale; some aggressive tendencies but very open to system tuning	28x17x21	50	87	•	•	94
▲ Jordan JH400	504	A+	Piano finish hexagon has single full range driver and controversial sound, with uneven balance but delightful mid coherence	33x24x30.5	50	83	•	•	106
▲ KEF 104/2	1595	G+	A reference point for dynamics, preferred without KUBE, suited to many rooms. Good stereo, high sound level	90x28x41.5	50	92	•	•	60
KEF K120	169	A	Physically pretty and sonically competent but undistinguished bookshelf size model has good sensitivity but limited extension	34x20.5x26	45	87	•	•	106
KEF Q30	349	A	Fine focus from Uni-Q driver, but lacks drive and time coherence; acoustically smaller than it looks	73x19x29	44	88	•	•	126
KEF Q80	569	A+	Uni-Q floorstander has good stereo and fine midband coherence, but bass lacks extension, drive and resolution	85x24.5x26.5	45	87	•	•	106
KEF Q90	739	A	Generous floorstander has even balance and decent extension but fails to communicate excitement and involvement effectively	90x25x32	25	88	•	•	118
KEF AV1	2499	G-	Awesomely built, finished and powerful subwoofer lacks the subtlety and unintrusiveness for top class hi-fi applications	43x56x50	<20	NA	•	•	128
▲ Kenwood LS-770G	260	G	Impressively communicative bookshelf model has fine vigour, scale and dynamics, if not the smoothest sound around	48x27x25	25	89	•	•	106
▲ Kenwood LS-500G	500	G	Japanese designed and built luxury compact delivers an invigorating and exciting sound; an interesting contrast to some lazier models	45x23x26	48	89	•	•	118
▲▲ Legend II	200	G	Liveliness, coherence and fine information retrieval justifies the odd looking moulded baffle construction	37x21x30	48	88	•	•	122
▲▲ Linn Index II/KuStone	374	G	Stand and speaker looks and sounds very good, good bass extension and control, fine dynamic range. Clean, clear if a shade slow	44x21x23.5	28	86	•	•	90
▲ Linn Kaber	1298	G+	Dry, bright balance emphasises superb dynamic range and transient precision, but can sound unforgiving	89x19x29	25	85	•	•	118
▲ Linn Keilidh	579	G+	Stunning timing and coherence and awesome bass drive, especially with ceramic plinth; sounds a bit shut in	83x20x27.5	22	87	•	•	114
Living Voice Air Partner	11990	E	Formidable horn design with astounding transparency, dynamics and speed. Its idiosyncrasies are compensated by sheer energy	165x64x92	40	101	•	•	117
▲ Lumley Monitor Reference 3	895	G+	Lovely free stander suffers from indifferent bass alignment, but is fast, coherent, solid and very informative indeed.	87x27.5x28	30	90	•	•	106
Lumley Monitor Reference 4	375	A	All metal diaphragm and real wood at fair price; balance uneven — upper mid forward with suspect bass tuning	36x17x23	44	86	•	•	126
Magneplanar SMGa	668	A	Tonally 'rich', in the right room it proved a satisfactory musical experience	122x48x4.5	56	85	•	•	46
Meridian Argent 1	995	G+	Beautifully built, finished and shaped, has fine bass extension and virtual absence of 'boxiness'; needs a big amplifier	33x27x27	28	83	•	•	98
Meridian Argent 2	875	G	Beautiful high-tech 'large compact' delivers extended, smooth and neutral sound with fair speed. Slate Audio stands essential	48.5x21x29.5	23	85	•	•	94
Meridian M30	950	A	Pricey active speaker, easy on the ears and worth considering especially where space is at a premium	38.5x18x32	40	NA	•	•	46
▲ Mission 753	700	G+	Gorgeous presentation and potential for open transparency. Floorstander with lots of drivers that gives lots of loudness	90x22x30.5	45	88	•	•	114
▲ Mission 760i	130	A+	Attractive little wall-mount miniature has livelier dynamics and bass drive than most of its type, but sounds as little shut in	29.5x18x20	48	87	•	•	110
▲ Mission 760i SE	150	A+	Tweaked 760i variation is one the prettiest and best balanced babies around; a demanding amp load	29.5x18x20	50	87	•	•	130
Mission 764i	480	A	Generous and handsome floorstander looks fine material value for money, but good scale sound has lazy tendencies	89x25x32	22	86	•	•	118
Mission 765i	680	A+	Big heavyweight floorstander has good sensitivity and bandwidth, but somehow lacks agility, authority and dynamic grip	102x25x33	22	91	•	•	110
Mission 751	300	A	Attractive luxury miniature has great sonic potential, but our our review samples have been marred by sample variations	32x17x27	45	86	•	•	126
Monitor Audio MA1200 Gold II	1200	G	Pricey but classy floorstanding variation on MA800 theme; beautifully voiced midband, heavy midbass	93.5x17x27	28	85	•	•	122
▲ Monitor Audio Studio 6	800	A+	Pretty but pricey metal diaphragm compact has clear and transparent midband but is ultimately lacking in vim, vigour and drive.	35x22x25	45	86	•	•	118
▲ Mordaunt-Short MS-10	130	A	Hi-tech baby has fine bass/mid integrity but the top end is less appealing	30.5x18.5x21	50	86	•	•	130
Mordaunt-Short SW-1	150	A-	Prettily finished and inexpensive passive subwoofer is only really useful with sub-miniature speakers	24x58x25	40	85	•	•	128
Mörel Bassmaster 602	1200	G+	Superbly built compact stand-mount, did well in listening tests but suffers (enjoys?) upper midband peak	24.5x40x22.5	25	84	•	•	114
NAD 801MM	100	A-	A rather undistinguished sub-miniature with low sensitivity and indifferent sound quality	27x18x18	48	84	•	•	130
▲ NAD 804	320	A+	Good value compact floorstander sounds lively and coherent, but quite coloured due to uneven balance too	75x20x26	25	89	•	•	126
▲ NVA Cube 1	720	G+	Attractive, semi-omni is very sturdily built, and gives an idiosyncratic but unusually open, spacious and informative sound	33x32x32	52	85	•	•	71
▲ NVA Cube 2	480	G	A rude but exciting miniature, with unusually accomplished bass capabilities for its size	28.5x27x28.5	48	85	•	•	82
NVA Cubix	1400	G	Too idiosyncratic for recommendation, the Cubix possesses remarkable bass extension for its size, but is tricky to optimise	60x32.5x32.5	28	84	•	•	78
Naim IBL	895	G	This tiny floorstanding wall mount delivers outstanding dynamics, speed and detail, marred by pronounced upper mid forwardness	80x18x15-20	30	84	•	•	94
▲ Naim SBL	1708	G+	Impressive scale, full bandwidth, coherent, attractively discrete, coloured midband, very well balanced and agile	88x26.5x17-27	25	86	•	•	102

Sound Video Centre

SPECIAL OFFER ON YAMAHA DSP-A970 IMPRO LOGIC AMP

AUTHORISED DEALER FOR ALL MAJOR BRANDS

RING US FOR BEST PRICE IN TOWN - WE CAN BEAT ANY PRICE!

SONY

MINI HIFI

Compact 190.....	£POA
Compact 195.....	£POA
Compact 290.....	£POA
Compact 295.....	£POA
Compact 490.....	£POA
MHC 510CD.....	£POA
MHC 710CD.....	£POA
MHC 450.....	£POA
MHC 550.....	£POA
MHC 650.....	£POA
MHC 2750CD.....	£POA
MHC 2800CD.....	£POA
MHC 3800CD.....	£POA
MHCC 50.....	£POA
MHCC 90.....	£POA
MHC 20800.....	£POA
MHC 30800.....	£POA
MDS 101.....	£POA
SS V77.....	£POA
SS J80AV.....	£POA
SA W90.....	£POA
DSP 2070.....	£POA

CD PLAYERS

CDP 411.....	£POA
CDP 711E.....	£POA
CDP 911E.....	£POA

CASSETTE DECKS

TCK 411B.....	£POA
TCK 511B.....	£POA
TCK 611B.....	£POA

TUNERS

CSTS 2118B.....	£POA
STS 311LB.....	£POA
STS 505ES.....	£POA
Graphic 9.....	£POA
SEO 411B.....	£POA

YAMAHA

AMPLIFIER

DSPA500.....	£POA
DSPA970.....	£POA
DSPA2070.....	£POA
DSP E200.....	£POA
DSP E1000.....	£POA
NS E100.....	£POA
NS C90.....	£POA
AX 401.....	£POA
AX 470.....	£POA
AX 570.....	£POA

CASSETTE DECKS

KX260.....	£POA
KX360.....	£POA
KX650.....	£POA
KXW262.....	£POA
KXW362.....	£POA
KXW952.....	£POA

JVC

MACRO HIFI

UXA4.....	£POA
UXA5.....	£POA
UX T1.....	£POA
ADAGIOS9.....	£POA
ADAGIOS7.....	£POA
ADAGIOS6.....	£POA
ADAGIOS4.....	£POA
ADAGIOS30.....	£POA
ADAGIOS20.....	£POA

MICRO HIFI

UXA5.....	£POA
UXA4.....	£POA

AIWA

CASSETTE DECKS

ADF810.....	£POA
ADF500.....	£POA

ADF410.....	£POA
ADWX 929.....	£POA
ADWX 828.....	£POA

PIONEER

J200.....	£POA
J10M.....	£POA
J20M.....	£POA
J300.....	£POA
J400M.....	£POA
N50W.....	£POA
N70W.....	£POA
N100W.....	£POA

MISSION

SPEAKERS

760 SE.....	£POA
7601.....	£POA
761.....	£POA
762.....	£POA
763.....	£POA
764.....	£POA
780.....	£POA
780 SE.....	£POA

BOSE

SPEAKERS

AM 7.....	£POA
AM 5.....	£POA
AM 3.....	£POA
301.....	£POA
401.....	£POA
205.....	£POA
601.....	£POA
701.....	£POA

JAMO

SPEAKERS

PRO 200.....	£POA
PRO 300.....	£POA
PRO 400.....	£POA
D 165.....	£POA
D 265.....	£POA
D 365.....	£POA

TECHNICS

MINI HIFI

SC CH950.....	£POA
SC CH750.....	£POA
SC CH650.....	£POA
SC CH550.....	£POA
CD X920.....	£POA
CD X520.....	£POA
CD X320.....	£POA
CD X120.....	£POA
CD C120.....	£POA

AMPLIFIERS

SUA 900K.....	£POA
SUA 800K.....	£POA
SUA 700K.....	£POA
SUA 600K.....	£POA
SUV2 320K.....	£POA
SUV2 220K.....	£POA

TURNTABLES

SL 1210.....	£POA
SL 1200.....	£POA
SL DD33.....	£POA

CASSETTE DECKS

RS BX808K.....	£POA
RS BX747K.....	£POA
RS BX646K.....	£POA
RS BX404K.....	£POA
RS TR777K.....	£POA
RS TR515K.....	£POA

RS TR474K.....	£POA
RS TR373K.....	£POA

CD PLAYERS

SLPG 340.....	£POA
SLPG 440.....	£POA
SLPG 520.....	£POA
SLPS 620.....	£POA
SLPS 700.....	£POA
SLPS 900.....	£POA

KENWOOD

MINI HIFI

UD 301.....	£POA
UD 501.....	£POA
UD 551M.....	£POA
UD 701.....	£POA
UD 751M.....	£POA
UD 901M.....	£POA

MIDI SYSTEMS

M 26.....	£POA
M 47G.....	£POA
M 56G.....	£POA
M 76G.....	£POA
M 97G.....	£POA
CM 5ES.....	£POA
CM 7ES.....	£POA
SW 900.....	£POA
CS 6.....	£POA

NAD

AMPLIFIERS

302.....	£POA
304.....	£POA
306.....	£POA

CD PLAYERS

502.....	£POA
505.....	£POA

SVC

132 Balham High Road, Balham, London SW12. Tel: 081- 673 3398. Fax: 081-673 3068

264 Lavender Hill, London SW11. Tel: 071-228 3123 or 081-675 0048

385 North End Road, London SW6. Tel: 071-381 0706

Sound Video Centre

Loudspeakers continued

Size: HxWxD (cm) Site close to wall Site in free space Floorstanding Issue No.
Sensitivity (dB) Bass from (Hz)

Product	Price	Comments	Size: HxWxD (cm)	Site close to wall	Site in free space	Floorstanding	Issue No.
▲ Neat Petite	525 G+	Far from perfect, but one of the most entertaining and enjoyable speakers around, colorations notwithstanding.	30.5x20x18	33	86	•	102
▲ Origin Live OL2A	469 G	Compact floorstander sounds open, transparent and evenly balanced; needs a big amp but enjoys hard driving	82x19x19	25	85	•	122
Origin Live OL1	499 G	Luxury miniature has very good overall balance, sacrificing sensitivity to achieve remarkable bass extension for the box size	30.5x19x21	25	82	•	106
Pioneer S-4UK	250 A+	Carefully developed minimalist audiophile design has some vigour but suffers an intrusive upper mid peak	37x21x28	50	87	•	122
Polk LS70	1200 A+	High sensitivity and lots of loudness potential, but in-room balance has far too much midbass boom; mid and treble are very laid back	96x31x37	22	91	•	132
Polk RM 1000W	349 A-	Not a true subwoofer at all, but rather the bass section of polk's elegant upmarket three box speaker system	31x52x33	45	90	•	128
▲ Professional Monitor Co LB1	998 G+	Delightful smoothness and transparency, though bass extension and sensitivity are both limited	53.5x18x26	33	86	•	110
Professional Monitor Co AB1	1600 G	Bulky stand-mount transmission line has lovely panel-like transparency, slightly shut in balance, and needs a big room	79x27x43	22	89	•	114
▲ Quad ESL-63	2384 G+	This classic electrostatic may not be punchy in the bass, but has strengths that some can't live without	92x66x27	34	84	•	60
▲ Rega EL8	298 G	Kyte drivers in compact floorstander give more bass but a shade less coherence; good for small rooms and budget systems	75x16.5x21	55	86	•	122
▲ Rega ELA	405 G	Very compact floorstander with integral stand has serious coherence and dynamics, but a measure of brightness and untidiness	84.5x20x30	30	86	•	110
▲▲ Rega Kyte	198 G	Has splendid timing and coherence, sounds very explicit and informative, if a bit bright and short of grunt	31x19x20	50	87	•	114
▲▲ REL Strata	499 G+	Outstandingly value and performance active subwoofer adds serious bass unintrusively to any small speaker system	52x42x31	<20	NA	•	128
▲▲ Rega XEL	1040 VG	Looks good, measures well and sounds great too; balance is bright but even, with delightfully bass-to-mid coherence and timing	102x21x33	40	89	•	132
▲▲ Rogers LS2a/2	229 G	Balance is a bit warm and rich but 2a/2 has delightful mid-to-treble coherence and transparency, and more welly than Mk1	35.5x23x22	30	84	•	106
Rogers LS4a/2	300 A+	Civilised but a trifle lazy, this large bookshelf model hasn't quite the timing or agility to be particularly engrossing	43x25.5x25.5	25	86	•	110
Rogers LS6a/2	399 G	Largish stand-mount is well built, measures well, good material value, but sounds a bit heavy and lacklustre	51x28x29.5	22	87	•	114
Rogers LS8a	499 A+	A mixed bag, with plenty of scale and welly but lacking the subtlety, clarity and agility delivered by some rivals	89x25.5x25	48	91	•	102
▲ Rogers Studio 3	450 G	Pricey LS3/5A-derived wall-mount sub-miniature is excitingly coherent if a bit lightweight; no real loudness capabilities	31x19x17	30	83	•	118
▲ Rogers Studio 7	880 G	Latest variation on classic BBC-monitor theme looks old fashioned but has beautifully voiced, laid back sound	63x30.5x30.5	30	88	•	122
▲ Roksan Ojan 3	895 G+	Squat, stylish and black, with unusual tweeter decoupling; great bass extension and flat but somewhat uneven balance	78x28x45	<20	85	•	132
Royd Topaz	173 A+	Cheerful, articulate and essentially communicative miniature can also sound a trifle scrappy and shut in; well worth trying	30.5x20.5x19	50	87	•	114
Royd Abbot	666 A+	Engaging and dramatic dynamics and fine transient coherence are hampered by a rather coloured mid-forward balance	83x20x34	43	88	•	118
Ruark Templar	479 A+	Compact floorstander with striking baffle has decent bass/mid but dull treble; could tame over-bright system	73x19x27	25	85	•	122
▲ Ruark Talisman 2	700 G	Less ideologically committed than some compact floorstanding rivals, its key strength lies in fine all round compromise	86x25x31	30	86	•	118
SD Acoustics Ribbon	2950 G+	Amplifier sensitive, Ribbon is a lively and loud hybrid marred by some colorations; some like it, others don't	152x30x(15-30)	30	91	•	81
▲ SD Acoustics SD1	1650 G+	A large scale, airy and unusually detailed system with excellent dynamics. A warmer balance than original model	123.5x38.2x32	50	90	•	60
▲ SD Acoustics SD3	399 G	Port firmly blocked, the new SD3 has the agility and charm of a quality miniature, with good bass extension but low sensitivity	38x19.5x29	25	83	•	106
SD Acoustics SD4	699 G	Tall slim floorstander has fine balance, good bass extension and lovely open midband transparency	100.5x20x30.5	25	85	•	114
▲ SD Acoustics SD5	1235 G	Bass tuning and coherence suspect but forward midband is delightfully smooth; high class drivers include ribbon tweeter	112x20x30	30	86	•	132
Shahinian Arc	1062 G	Unusual and occasionally wonderful small floorstanding omni; too bright but exceptionally coherent and revealing	69x35x25	24	85	•	110
Snell Jill	770 G	Dated styling belied by fine sensitivity and bass extension, and a lively if slightly untidy and not quite coherent sound	58x33x25	30	89	•	118
▲ Spendor S20	579 G	Maintains Spendor's tradition for peerless mid-to-treble coherence and perspectives. Bass is rather unconvincing.	38x22x26	25	83	•	102
Spica Angelus	1295 A	A little bass shy and soft in the bass and lower mid, otherwise tidy, extremely lively and fluid, if uneven overall	116.8x53.3x26	50	86	•	60
Spica TC50	649 G	This triangular-profile 'grown up' miniature is a shade boxy and laid back but has good rhythmic and musical integrity	40.5x33x29	55	88	•	71
Spica TC50SE	849 G	A heavily UK-modified TC50, the SE sounds less boxy and more spacious, but lacks some of the urgency of the standard model	40.5x33x29	55	88	•	71
TDL NFM	120 A-	A disappointing underperformer in our tests, at a price that's not very nice either	27x18x18	50	86	•	130
▲ TDL RTL3	400 A+	Bargain price floorstander has rich, heavy and bright sound with good scale and fine basic neutrality	92x20x38	25	88	•	126
TDL Studio 0.5	499 G	Tiny floorstanding transmission line has good agility but doesn't provide the coherence or even balance of Studio 1	55x20x30	40	85	•	94
▲ TDL Studio 1	699 G	Genuinely extended bass from a compact enclosure, very detailed but a shade clinical and detached in presentation	76x23x33	25	84	•	78
▲ TDL Studio 1M	899 G+	Transmission line helps bring the best from metal cone driver: lovely transparency and fine bass extension	81x23x33	<20	84	•	118
▲ TDL Reference Monitor	1999 G+	Fine solidity and good accuracy, with great bass extension. Needs a big room and can sound a bit lazy and a shade tinkly	118.5x30x47	28	85	•	66
Tannoy 603 II	140 A-	Pretty looking but altogether rather dull sounding mini-hexagon is less effective than larger brethren	33.5x22x16	45	86	•	130
▲ Tannoy 607 II	220 A	Large bookshelf, smart hexagonal box has fine bass for the price, but treble sounds rather shut in	50x32x24	25	88	•	122
▲▲ Tannoy 609 II	295 A+	Large bookshelf size model with dual concentric driver has fine balance and scale with low coloration	50x32x24	22	86	•	126
▲ Tannoy Westminster	6000 G+	These awesome horn loaded speakers are remarkably controlled and impressive, if only suited to a few pockets and rooms	Huge	38	96	•	Col
Technics SB-EX2	180 A	Nicely presented, well built and decent size enclosure sounds solid but somewhat dull	48x23.5x27	20	86	•	98
▲ Technics SB-RX50	650 A+	A smooth and well balanced loudspeaker, its minor weakness being a mildly excessive low bass	48x30x26	40	86	•	46
▲ Thiel SCS	1069 G+	Luxury piano-gloss compact sets class-leading standards for coherence and communication, can sound a shade dark and shut in	40x22x23	45	87	•	114
Thiel CS1.2	1219 G	Elegant compact floorstander has fine balance and dynamic range, but transient timing and dynamics are less convincing	94x27x27	30	86	•	118
▲ Totem Model One	995 G	Utterly delightful but exasperatingly expensive luxury miniature sets the benchmark for its size	31x16.5x23	28	86	•	122
Vandersteen 2Ce	1395 G+	This compact American floorstander's elegant staggered baffle arrangement contributes to a refreshing freedom from boxiness	100x30.7x25.6	23	87	•	86
Visonik David 6001	163 P	Sharp styling but the complex grillwork worsens a sound which starts off with too much top and not enough bottom	20x12x13	130	87	•	74
▲ Wharfedale 425	200 A+	Large bookshelf size 505 heir shows fine control and a conservative balance ideally suited to quality systems on a budget	40x27x26	45	87	•	118
▲▲ Wharfedale Delta 30.2	100 A	Has a bigger main driver than many, and so packs a bit more welly and loudness. Coloration is rather obvious, but timing is good	38x22x17	48	88	•	98
▲▲ Wharfedale CRS3	89 A+	Loads of fun — a remarkably coherent and lively performer at any price; pity it doesn't look prettier	38x22x18	50	88	•	122
Wharfedale Diamond V	130 A	This miniature is smoother than most, but rather stodgy with it, inspiring little enthusiasm among our listeners	27x18x20	50	86	•	114
Yamaha YST-SW50	199 A	Bargain price amplified subwoofer is too small for serious bass freaks, but does a fair job for the price	48x21x33	35	NA	•	128
▲ Yamaha NS-1000M	1200 G+	Living up to its monitor label, and tonally well suited to digital material, it's superbly crafted and capable of high levels	67.5x37.5x32.5	40	90	•	46
▲ Zyp A1	199 A+	Cute metal cased micro-miniature is quite coloured but great fun, with surprising dynamics and fine wall-loaded room balance	22.5x14.5x13	30	85	•	110

WATCH OUT FOR A SMALL BUT SELECT BUNCH OF VERY SERIOUS LOUDSPEAKERS IN THE NEXT COPY OF EAR (ENLIGHTENED AUDIO REVIEW); THE ONLY ZEN HI-FI PUBLICATION. FREE WITH THE OCTOBER ISSUE OF HI-FI CHOICE.



Myers Audio

EST. 1972

6-7 Central Parade, Hoe Street,
Walthamstow, London E17 4RT
(Near Tube and Cinema) FAX: 081-503 6677

MAIL ORDER

Our mail order service is fast and efficient. All we require are your credit card details when your order is placed. Our Data Post service operates daily, ensuring quick, safe delivery. Carriage is FREE OF CHARGE FOR ANY SALE OVER £100 throughout the UK, but not on price match*. Delivery charge of £8 per unit below 10k.

FREE DELIVERY MAINLAND UK

081-520 7277

Our prices are competitive but should a product be available at a lower price from an authorised dealer...

We will beat it by up to £20!

FOR FAST & EFFICIENT
MAIL ORDER
HOTLINE
081-520 7277

1. All goods fully guaranteed
 2. All goods brand new
 3. Delivery free
 4. All prices include VAT
- Our own service department will make sure you continue to enjoy that great sound both during and after our one year warranty period.

PRICE PROMISE

AV PRO LOGIC AMPS/RECEIVERS

KENWOOD	
KRV6060/7050	£349/£399
KAV3700/7700	£299/£599
KAV8500	£699
SONY	
STRD 511/611	£279/£329
TAAV570 KIT	£489
DOLBY PRO KIT	£349
SAV43	£799
TAAV510B	£399
TECHNICS	
SAGX550LK	£449
SAGX350LK	£329
PIONEER	
VSAD802S	£569
VSA701S	£469
VSA452	£379
YAMAHA	
DESPE 200	£369
RXVE 580/1000	£449/£669
DSV 470	£1099
DSPA780/970	£629/799
DSPA2070	£1099
MARANTZ	
PM700AV	£399
AV500 PRE AMP	£599
MA POWER AMP	£249
SR73 RECEIVER	£699

SONY

AUTHORISED DEALER
TCK 611 Dolby S P.O.A.

PIONEER

A300X £179

AMPLIFIERS	
TAFA118 30W PCH	£149.00
TAFA44E 40W PCH	£199.00
TAFA42E 80W PCH	£249.00
TAFA42E 90W PCH	£299.00
TUNERS	
STS 211B STS 311B	£129/£199
STS 505ES	£249.00
SINGLE CASSETTE DECKS	
TCF6211B	£399.00
TKC1258415B	£129/£179
TKC511S	POA
TKC611S Best Buy	POA
TWIN CASSETTE DECKS	
TCW445E/TCW645E	£119/£199
TCW645S	£249.00
CD PLAYERS	
CDP32/CDP345	£149/£229
CDP715E/CDP915E	£249/£299
CDPX100	£799.00
LASER DISC PLAYERS	
MDP 650/MDP 850	£599/£699
BAT RECEIVERS	
WMC DT-1	£279.00
DTD 690/DTG 605E	£599/£799
WDC D7	£449.00
MINI DISCS	
MDS101/MDS501	£699/£799
MIDI SYSTEMS	
COMPACT 190/195	£329/£379
COMPACT 290/295	£399/£449
COMPACT 490	£499.00
MINI SYSTEMS	
MHC450/550	£299/£329
MHC350/2500	£379/£499
MHC250/270	£249/£399
MHC4900/5900AV	£799/£999
MHC7500 AV ELECTROSTATIC	£1400

YAMAHA

AUTHORISED DEALER

AMPLIFIERS	
KX380/55W PCH	£199.00
AX470 65W PCH	£239.00
AX570 100W PCH	£289.00
TUNERS	
TX470	£129.00
TX470	£159.00
TX670RDS	£239.00
CASSETTE DECKS	
KX380/CDX45	£239/£279.00
KX580/KX670	£249/£289
DOUBLE CASSETTE DECKS	
KXW282	£199.00
KXW482	£249.00
KXW582	£499.00
CD PLAYERS	
CDX480/CDX580	£199/£249
CDX880/CDX945	£239/£279.00
GRAPHIC EQUALISERS	
EX550	£199.00
YST MINI SYSTEM	
DC70W EX SPEAKERS	£599.00
NS20 SPEAKERS FOR HOME	£400
EFFECT SPEAKERS	
NSE80	£119.00
NSC90	£99.00
NSC110	£149.00
YSTW50	£199.00
YSTW100	£299.00
YSTW200	£399.00
SPEAKERS	
NS10M	£259.00
NS1000	£199.00

NAKAMICHI

AUTHORISED DEALER

CASSETTE DECKS	
KX380/CDX45	£169/£199
KX580/KX670	£249/£289
DOUBLE CASSETTE DECKS	
KXW282	£199.00
KXW482	£249.00
KXW582	£499.00
CD PLAYERS	
CDX480/CDX580	£199/£249
CDX880/CDX945	£239/£279.00
GRAPHIC EQUALISERS	
EX550	£199.00
YST MINI SYSTEM	
DC70W EX SPEAKERS	£599.00
NS20 SPEAKERS FOR HOME	£400
EFFECT SPEAKERS	
NSE80	£119.00
NSC90	£99.00
NSC110	£149.00
YSTW50	£199.00
YSTW100	£299.00
YSTW200	£399.00
SPEAKERS	
NS10M	£259.00
NS1000	£199.00

BEYER DYNAMIC

AUTHORISED DEALER

HEADPHONES	
DT331/311	£49/£44
DT511/801	£99/£149

Visit our Showrooms
Open Mon-Sat 9am-6pm
Please ring before coming for stock availability

AV PRO LOGIC AMPS/RECEIVERS

KENWOOD	
KRV6060/7050	£349/£399
KAV3700/7700	£299/£599
KAV8500	£699
SONY	
STRD 511/611	£279/£329
TAAV570 KIT	£489
DOLBY PRO KIT	£349
SAV43	£799
TAAV510B	£399
TECHNICS	
SAGX550LK	£449
SAGX350LK	£329
PIONEER	
VSAD802S	£569
VSA701S	£469
VSA452	£379
YAMAHA	
DESPE 200	£369
RXVE 580/1000	£449/£669
DSV 470	£1099
DSPA780/970	£629/799
DSPA2070	£1099
MARANTZ	
PM700AV	£399
AV500 PRE AMP	£599
MA POWER AMP	£249
SR73 RECEIVER	£699

SONY

AUTHORISED DEALER
TCK 611 Dolby S P.O.A.

PIONEER

A300X £179

AMPLIFIERS	
TAFA118 30W PCH	£149.00
TAFA44E 40W PCH	£199.00
TAFA42E 80W PCH	£249.00
TAFA42E 90W PCH	£299.00
TUNERS	
STS 211B STS 311B	£129/£199
STS 505ES	£249.00
SINGLE CASSETTE DECKS	
TCF6211B	£399.00
TKC1258415B	£129/£179
TKC511S	POA
TKC611S Best Buy	POA
TWIN CASSETTE DECKS	
TCW445E/TCW645E	£119/£199
TCW645S	£249.00
CD PLAYERS	
CDP32/CDP345	£149/£229
CDP715E/CDP915E	£249/£299
CDPX100	£799.00
LASER DISC PLAYERS	
MDP 650/MDP 850	£599/£699
BAT RECEIVERS	
WMC DT-1	£279.00
DTD 690/DTG 605E	£599/£799
WDC D7	£449.00
MINI DISCS	
MDS101/MDS501	£699/£799
MIDI SYSTEMS	
COMPACT 190/195	£329/£379
COMPACT 290/295	£399/£449
COMPACT 490	£499.00
MINI SYSTEMS	
MHC450/550	£299/£329
MHC350/2500	£379/£499
MHC250/270	£249/£399
MHC4900/5900AV	£799/£999
MHC7500 AV ELECTROSTATIC	£1400

NAD

AUTHORISED DEALER

AMPLIFIERS	
302/304	£179/£239
306	£349.00
TUNERS	
402	£169.00
PRE AMPS	
1000/1000S	£209/£339
PRE REUSERS	
1600/1700	£359/£579
POWER AMPS	
2100/2070	£309/£469
PD01M3	£189
902/906	£199/£499
CASSETTE DECKS	
602/6100F15/199/£309	
CD PLAYERS	
5000/501/502	£199/£179/£229
SPEAKERS PAIRS	
801/800	£99/£149
802/804	£229/£329
RECEIVERS	
701/705	POA

HARMAN KARDON

AUTHORISED DEALER

AMPLIFIERS	
HK6150/6250	£199/£279
HK6350R/6550	£399/£429
HK1200/AVR30	£279/£1149
TUNERS	
TU9200/9400	£219/£299
CD PLAYERS	
HD7400/7450	£199/£219
HD7500/7525	£299/£449

DUAL

AUTHORISED DEALER

TURNTABLES	
CS430	£129.90
CS505-2	£179.90
CS2215	£179.90
CS505-4/CS-705-1	£229/£349

BARGAIN CORNER

CD PLAYERS	
PIONEER PD202	£129
PIONEER PDS702	£249
PIONEER PD801	£199
SONY CKP411	£159
SONY CDP711	£249
CASSETTE DECKS	
SONY TCW435	£149
SONY TCX150	£99
SONY TCWR635	£239
SONY TCX311	£129
PIONEER CT5410	£149
PIONEER CT1620	£249
PIONEER CTW420R	£149
PIONEER CT5220	£149
PIONEER CT5240	£179
PIONEER CT1620	£199
PIONEER CT5240	£179
TAFA211	£99.95
TAFA242	£119.95
TAFA319R	£129.95
TAFA442	£159.95
TAFA44E	£159.95
TAFA244E	P.O.A.
TAFA540E	£169.95
TAFA542	£169.95
MINI SYSTEMS	
KENWOOD 301	£379
SONY MHC3800	£329
SONY MHC2750	£349
SONY MHC2800	£349
PIONEER N33M	£449
PIONEER N33M	£449
PIONEER N33T	£449
AMPLIFIERS	
TAFA211	£99.95
TAFA242	£119.95
TAFA319R	£129.95
TAFA442	£159.95
TAFA44E	£159.95
TAFA244E	P.O.A.
TAFA540E	£169.95
TAFA542	£169.95

TARGET STANDS IN STOCK



T20, T50, T70, ST30, ST50, ST70 P.O.A.

RING FOR BEST PRICES

EX-DISPLAY

THESE ARE ONE ONLY GENUINE PRODUCTS AT PHENOMENAL SAVINGS. ALL ARE NEW IN MAKERS BOXES AND FULLY GUARANTEED FOR 12 MONTHS

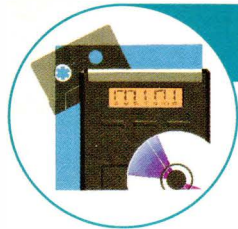
CD PLAYERS		P.O.A.
MARANTZ CD525E/M2		P.O.A.
MARANTZ D100/CD53		P.O.A.
MARANTZ D72/CD63		P.O.A.
NAD502	£179	
NAD505M/5000	£219/£199	
KENWOOD DP2050/3050	£199/£159	
KENWOOD DP5050/7050	£219/£239	
CASSETTE DECKS		
SONY TCX611S	£229	
SONY TCX711S	£169	
KENWOOD CKZ3050	£149	
KENWOOD CKZ5530	£179	
AV AMPS & RECEIVERS		
KENWOOD KRV650/6600	£299/£299	
KENWOOD KR7050/7700	£249/£229	
SONY STRV 511/611	£449	
SONY TAAS7020	£499	
BOSE SA/V3/TA/V510	£99/£149	
TECHNICS SAGX550LK	£449	
TECHNICS SAGX350LK	£289	
MARANTZ PM700AV	£329	
AMPLIFIERS		
MARANTZ PM45E/2SE	£199/£149	
MARANTZ PM63/54SE	P.O.A.	
KENWOOD KA1030/2060R	£109/£149	
KENWOOD KA3025E/5050	£179/£299	
NAD 302/304	£129/£159	
PIONEER A400/A400X	£99/£249	
PIONEER 102/602	£99/£249	
JVC AKR502/742	£189/£269	
SPEAKERS		
TANNOY 603M2/605M2	£109/£139	
TANNOY 607M2/609M2	£179/£239	
TANNOY 611/612/615M2	£359/£669	
BOSE		
BOSE AM3	£309	
BOSE AM7	£599	
JANNOON 530	£139	
JBL TLX110	£279	
JBL TLX120	£149	
JBL TLX150	£249	
B&W 620M2	£299	
B&W 600M1	£229	
GERWIN VEGA AT40	£299	
JAMO ART	£169	
NAD 800/802	£119/£289	
CELESTION 7/5	£139/£179	

KENWOOD

AUTHORISED DEALER
KR-V6600 £349



AMPLIFIERS	
KA1030 85-WPCH	£139.00
KAZ3050R 65-WPCH	£169.00
KAZ3205E 50-WPCH	£199.00
KA3060 60-WPCH	£229.00
KA4505R 70-WPCH	£279.00
KA500 80-WPCH	£249.00
KA5050R 95-WPCH	£349.00
KA7050R 100-WPCH	£499.00
TUNERS	
KT1060L	£119.00
KT2050L	£149.00
KT3050L	£179.00
KT6050	£229.99
KT7050	£329.00
KX7350R/55	£399.00
KX9050	£549.00</



Systems

Systems is a generic title that we've chosen to describe any form of complete system package. Fundamentally what we're talking about here is midi and mini systems, you know those all singing all dancing, lights blazing systems that hi-fi snobs are allergic to. Sold on the basis of their ability to play virtually all mediums at the flick of a remote control switch stack systems offer a plethora of features, and the dearer the system the more complex they tend to

become. With things like double cassette decks, multi preset tuners, CD players and graphic equalisers supplied as standard the big boys of the stack world offer such luxuries as Surround Sound, separate chassis for different components and occasionally a record player. They usually have a few line inputs for extra sources and a few are available without loudspeakers. As the latter are often the weakest part of a stack system buying good quality speakers separately will bring

worthwhile improvements. The section headings for stack systems include size of the complete stack without speakers and rated output per channel — where a system has more than two channels this is indicated in the comments. Tuner presets and the existence of a remote control are self explanatory. A blob in loudspeakers shows that they supplied, an "o" indicates that they are optional. The final column is for those of you with records to play.

Systems

Product	£Price	Comments	Size: HxWxD (cm)	Rated output Watts	Tuner presets	Remote control	Loudspeakers	Turntable	Issue No.
▲ Denon D110/S	870	G Nearly hi-fi from pretty but pricey silver stack; richer, fuller speakers would help	37x27x33	40	30	•	•	o	125
Goodmans System 700	600	A Separates flexibility and upgraeability in remote midi package; anodyne sound	69x35x37	50	20	•	•	•	125
▲ JVC Adagio G7	799	A Wondrous 2-speaker surround movie sound system, but a very uneven package elsewhere. Four by 20W output	42x28x28	20	40	•	•		125
▲ Kenwood HD-1000	1000	E Mini lifestyle system, well built with minimalist facilities and exacting performance standards all round	30x27x35	40	30	•			131
Marantz 1020	1000	G Component lifestyle system which is as elegant on audition as it is to look at	22x42x32	30	20	•			131
Onkyo L-909	1200	G Simple yet flexible lifestyle mini system suffers iffy cassette deck set-up, but otherwise satisfies	38x28x32	40	30	•			131
Philips FW91	999	A+ Good looking and performing package rendered expensive by inclusion of DCC deck	37x26x32	60	30	•			125
▲ Technics SC-CH950	1000	A+ Classy if rather bland allrounder includes useful Dolby Pro-Logic AV capabilities	42x27x34	60	39	•	•		125



Tuners

The radio medium operates at a much lower profile than TV, but in areas outside pop music the BBC service is the envy of the world. Live Prom concerts can rival all other sources from a hi-fi perspective.

Only the FM (VHF) bands give stereo hi-fi sound, though AM (MW & LW) are useful for certain transmissions in the UK.

Something of a hi-fi afterthought, tuners are often selected merely to match a chosen amplifier

cosmetically. However, the task they carry out is far from simple, combining the skills of RF (reception) and audio (signal processing) engineering. The importance of the former will depend on local reception conditions, but money invested in a high quality outside aerial system is well spent.

Tuners come in two basic types. Analogue models tune gradually (and usually manually) across the bands, and can have analogue or digital displays; they are often preferred for sound quality,

and are certainly best for AM bands. Digital tuners offer convenient automatic tune facilities and preset memories.

The 'Presets' column heading shows how many different frequencies a tuner can memorise for instant station access. FM, LW and MW shows which wavebands a tuner can access. 'Signal strength meters' are useful for aerial alignment. 'Automatic tuning' means that a tuner can seek out signals for you.

Tuners

Product	£Price	Comments	Presets	FM	LW	MW	Signal strength meter	Manual tuning	Automatic tuning	Issue No.
Aiwa XT-003	120	A- Economically designed and built in the UK, but trade-offs have a marked influence on FM and AM sound quality.	30	•	•	•			•	93
▲ Aiwa XT-950	150	A Decent enough performance all round given the modest price, though RF tweaks have limited value	24	•	•	•			•	129
Arcam Delta 280	350	G+ Fine sound quality marred by mild synthesiser whine; RF performance only average, remote £60 extra	20	•				•	•	120
▲ Audiolab 8000T	700	VG Unusually combines fine sound quality and RF performance (inc AM); superb ergonomics are a joy to use	39	•	•	•		•	•	120
Aura TU-50	300	G Tonally neutral, but with rather poor imaging and a certain woodiness to the sound.	16	•					•	109
▲ Denon TU-260L	120	G+ Bare minimum of features. Careful designwork promises a surprisingly open and vivacious sound, so don't overlook it!	20	•		•			•	93
▲ Denon TU-580RD	220	G Fine feature package including remote and RDS, plus excellent RF performance and decent sound quality	30	•		•		•	•	120
Harman Kardon TU9200	219	A The listening panel appreciated its liveliness, but found it a little muddled.	32	•		•			•	109
▲ Harman Kardon TU9400	299	G+ Striking in appearance and with a sound to match, it comfortably exceeded our expectations. On stereo FM it's HK's best yet.	24	•		•		•	•	93
Harman Kardon TU9600	499	G Good bass and detail, and good - perhaps slightly enhanced dynamics	24	•		•			•	109
JVC FX-362	140	A- Disappointing all round performance — watch out for aerial input overload in strong signal areas. Tuning knob unspecial	40	•	•	•			•	129
Kenwood KT2050L	150	A- Decent RF capabilities despite simple front end. Sounds a bit bright and ergonomics are a bit complex	30	•	•	•			•	129
Kenwood KT-3050L	170	A Excellent RF performance and plenty of features including RDS, but did sound rather ordinary under our conditions	39	•	•	•			•	120
▲ Linn Kremlin	1995	E Controversially good sound at a very high price. The reviewer's saving up but you should check it out for yourself	80	•				•	•	120
▲ Magnum Dynalab FT101	825	G+ Although expensive for its fairly minimum set of facilities, its excellent sound makes up for what it lacks elsewhere		•				•	•	72
Marantz ST-53	170	A+ Sweet sound could well satisfy audiophile sensibilities, but selectivity is not great	59	•	•	•			•	129
▲ Meridian 604	1350	VG Unique digital convertor makes most sense in Meridian system context; smooth sweet sound with fine front end	30	•				•	•	120
▲ Naim NAT 01	1453	E There may be better sounding tuners in the world, but we have yet to hear one		•					•	50
▲ Quad FM4	434	G+ Fine sound, excellent ease of use, good build and finish and a more than satisfactory technical performance	7	•				•	•	50
Quad 66	532	G+ Very pretty and compact but technically unadventurous. Smooth sound but only makes sense in Quad system context	19	•				•	•	120
▲ Rotel RT-930AX	175	G- A competent rather than exciting performer, with low audible interference though slightly compressed and muddled sound.	20	•	•	•				108
Sherwood TX-3010C	120	A Lots of features and fine RF discrimination for price. Sound is communicative but inconsistently tacky	30	•		•		•	•	120
▲ Teac T-X4030	120	A Not exactly special, but still a well balanced, tolerable and capable allrounder at a very reasonable price	20	•		•		•	•	129
Yamaha TX-350L	130	A- Enticingly pretty and compact presentation but performance isn't great; beware of aerial overload	40	•	•	•		•	•	129

PRICE PLEDGE

WE WILL MATCH OR BEAT ANY AUTHORISED DEALER ADVERTISED PRICE

AMPLIFIERS

AUDIO INNOVATIONS	
Aito	
L1	£299.00
Series 500	£999.00
AURA	
VA50	£249.90
VA100	£299.90
VA100C	£349.90
CAMBRIDGE	
P25	£134.90
C70 PRE/P70 POW	£375.00
DENON	
PMA250III	£159.90
PMA350II	£219.90
PMA450	£249.90
PMA480r	£219.90
HARMAN KARDON	
HK6150	£199.90
HK6250	£279.90
HK6350R	£399.90
HK6550	£429.90
HK1200	£279.90
KENWOOD	
KA1030	£129.90
KA3020SE	£199.90
KA4040	£249.90
KA5050	£349.90
MARANTZ	
PM53	£249.90
PM44SE	£199.90
MUSICAL FIDELITY	
AIMI	£299.90
NAKAMICHI	
IA1	£749.90
IA2	£599.90
IA3	£349.90
NVA	
AP35	£295.00
PIONEER	
A300X	£229.90
A400	£279.90
A400X	£299.90
A602	£349.90
ROTEL	
RA920AX	£147.90
RA930AX	£159.90
RA935BX	£199.90
RA940BX	£249.90
RA960BX	£299.90
RA980BX	£399.90
RB960BX	£210.00
RC980BX	£325.00
RB980BX	£425.00
SONY	
TAF211B	£149.90
TAF242B	£179.90
TAF442B	£249.90
TAF542B	£299.90
TECHNICS	
SUVZ220	£109.90
SUVZ320	£134.90
SUA600	£199.90
SUA700	£249.90
SUA800	£329.90
SUA900	£399.90
SUVX920	£394.90
YAMAHA	
AX470	£239.90
AX570	£289.90

TUNERS

AURA	
TU50	£299.90
DENON	
TU260L	£119.90
TU380RD	£189.90
TU580RD	£219.90
HARMAN KARDON	
TU9200	£219.90
TU9400	£299.90
MARANTZ	
ST53	£169.90
ST63	£199.90

***FREE DELIVERY
THROUGHOUT UK
MAINLAND
ABOVE £250.00**

PIONEER	
F202L	£129.90
F401RDS	£179.90
F676	£199.90
F550RDS	£229.90
ROTEL	
RT7930AX	£159.90
RT950BX	£199.90
RTC950AX	£419.90
SONY	
STS 211 LB	£129.90
STS 311 LB	£199.90
STS505ES	£249.90
TECHNICS	
ST610LK	£119.90
STG550	£189.90
STG650	£229.90
STG70	£249.90
YAMAHA	
TX350L	£129.90
TX470	£159.90

CASSETTE DECKS

ARCAM	
ADF410	£119.90
ADF810	£229.90
XK57000	£549.90
ADWX828	£199.90
ADWX929	£229.90
DENON	
DRM540	£159.90
DRS610	£199.90
DRS710	£259.90
DRS810	£290.90
DRW650	£199.90
DRW76 0	£249.90
KENWOOD	
KX3050	£159.90
KXW4060	£169.90
KXW8060	£259.90
NAKAMICHI	
DR1	£849.90
DR2	£599.90
DR3	£399.90
CLARENCE BARGAINS	
ARCAM A1	£270.00
DELTA 60	£210.00
ALPHA 3	£150.00
BB1	£185.00
BB2	£215.00
BB3	£26 0.00
ALPHA 2+	£195.00
ARCAM 3	£110.00
MARANTZ	
CDSIISE	£220.00
SR53	£225.00
MUSICAL FIDELITY	
MA50	£725.00
A120	£420.00
RX202	£599.90
PIONEER	
CTS220	£169.90
CTS420	£249.90
CT95	£999.90
SONY	
TCFX211	£99.90
TKX311	£149.90
TCK411	£199.90
TCK511	£249.90
TCK611	£299.90
TCW435	£169.90
TCWR535	£199.90
TCWR635S	£279.90
TECHNICS	
RSBX404	£179.90
RSBX646	£199.90
RSBX747	£299.90
RSTR515	£269.90
RSTR979	£359.90
YAMAHA	
KX3080	£169.90
KX4080	£199.90
KX580	£249.90
KX260	£159.90
KX360	£199.90
KX650	£259.90
KXW282	£199.90
KXW482	£249.90
KXW952	£499.90

TURNTABLES

ALPHASON	
Solo	£439.90
Sonata	£759.90
TECHNICS	
SLBD20	£129.70
SLBD22	£149.90
SLDD33	£159.90
SLQD33	£199.90
SL1210MII	£399.90
THORENS	
TD180	£179.90
TD166 VI	£264.90
TD166 VI REGA	£299.90
TD280	£199.90

CD PLAYERS



DENON	
DCD615	£179.90
DCD1290	£329.90
HARMAN KARDON	
HD7450	£199.90
HD7225	£229.90
HD7325	£299.90
HD7425	£349.90
HD7525	£449.90
KENWOOD	
DP7050	£299.90
MARANTZ	
CD52II	£199.90
CD52IISE	£269.90
CD63	£249.90
CD72	£449.90
CD72SE	£549.90

CLARENCE BARGAINS	
NIMBUS	£1650.00
SNELL TYPEK	£350.00
SNELL TYPE J	£525.00
DALE 310	£290.00
HEYBROOK SOLO	£130.00
HEYBROOK POINT 7	£120.00
INFINITY R20	£215.00
INFINITY R40	£320.00
INFINITY 3001	£220.00

NAKAMICHI	
CD4	£379.90
MB3	£649.90
PIONEER	
PDS502	£189.90
PDS702	£249.90
PDS802	£289.90
ROTEL	
RCD945AX	£229.90
RCD955AX	£199.90
RCD965BX	£299.90
RCD965BXD	£349.90
RCD965LE	£379.90
RCD965BXL	£399.90
SONY	
CDP411	£164.90
CDP711	£199.90
CDP911	£249.90
CDPX303ES	£499.90
TECHNICS	
SLPG320	£119.90
SLPG440	£139.90
SLPS740	£249.90

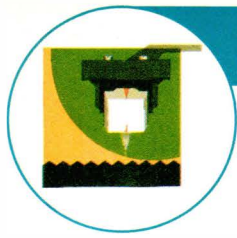
SLPS840	£419.90
TEAC	
VRDS10	£769.90
YAMAHA	
CDX560	£159.90
CDX660	£199.90

LOUDSPEAKERS

ACOUSTIC ENERGY	
AEI	£763.75
B+W	
2001	£119.90
2002	£159.90
DM600	£179.90
DM610	£239.90
DM620	£399.40
Solid	£229.90
SolidTeam	£129.90
BOSTON	
404V	£99.90
525V	£149.90
CASTLE	
Warwick	£229.90
Chester	£599.90
CELESTION	
1	£109.90
3II	£129.90
5II	£169.90
7II	£219.90
CERWIN VEGA	
YS8	£249.90
YS10	£349.40
YS12	£549.90
DC10	£549.90
DC12	£649.90
HARMAN KARDON	
LSO200	£149.90
LSO300	£199.90
LSO500	£299.90
INFINITY	
Ref 20	£229.90
Ref 30	£329.90
Ref 40	£429.90
Ref 50	£549.90
Ref 60	£749.90
JPW	
Sonata	£114.90
AP3	£224.90
KEF	
K120	£169.90
K140	£239.90
Q10	£199.90
M90	£249.90
M100	£349.90
MISSION	
76 0	£129.90
760isc	£149.90
762i	£249.90
764i	£479.90
780	£199.90
781	£249.90
780SE	£239.90
MONITOR AUDIO	
MIGold	£189.90
M9-II	£289.90
M14-II	£469.90
MA201	£249.90
MA202	£399.90
ROGERS	
LS2 A/2	£229.90
LS4 A/2	£299.90
LS6 A/2	£399.90
SNELL	
TYPE K	£499.90
TYPE J	£769.90
TANNOY	
603 II	£129.90
605 II	£169.90
607	£189.90
611	£399.90
613 II	£599.90
615 II	£749.90
TDL	
NFM	£119.90
RTL1	£199.95
RTL2	£299.95
RTL3	£399.90

FREE £40 SPEAKER STANDS WITH ANY BOOKSHELF SPEAKERS WORTH £150 OR OVER	
---	--

Mail order; simply send your cheque together with your name and address, or phone your access or visa number.



Turntables – cartridges

Cartridges fall into two groups: high output models, capable of working directly into most amplifiers and categorised as having a normal (N) output, and more expensive low and very low output models (L, VL). Stereotypically, low output cartridges use the moving coil principle of operation, have better mechanical integrity and tighter tolerances, and give better performance but

at much higher cost. With CD now the dominant medium many amplifiers are no longer equipped with the necessary phono input for a cartridge and a separate phono stage is necessary. Valve designs need either an extra head amp or transformer to cope with the low output of moving coil cartridges.

Cartridge/amplifier interfacing can be very subtle, but even basic high output MM designs

benefit in overall balance from optimised amplifier capacitance loading. The mechanical characteristic of cantilever compliance ('springiness') needs to be considered in the light of the effective mass of the tonearm, and to achieve a good match compare the effective mass requirements figures with the actual effective mass of specific arms. 'turntables' and 'tonearms' sections.

Turntables – cartridges

Product	£Price	Comments	Arm effective mass (g)	Output	MM	MC	Issue No.
▲▲ Arcam C77	30	A+ A sensible moving magnet package with good bounce at a competitive price	6-16	N	•		48
▲▲ Arcam C77Mg	40	A Punchy sound quality with plenty of extra energy to liven things up. The solid body seems well worth the extra £10	4-8	N	•		67
▲ Arcam E77Mg	60	A Our sample had a disappointing stylus, but gave a coherent, rich and laid back sound, with good 'scale'	3-8	N	•		48
▲ Arcam P77Mg	73	A+ Preferred to its cheaper partner by virtue of a better tip. Channel balance could have been better	4-9	N	•		48
▲ Audio Note IO IIV	1395	E One of the best, giving 'an extraordinarily relaxing midrange clarity', needs a transformer	8-18	VL		•	100
▲ Audio-Technica ART1	850	VG This is a delicate and very fluid-sounding MC that tracks well, offers very low distortion and exceptionally good separation	9-18	L		•	72
▲ Audio-Technica AT-420E	36	A Better suited to pop recordings, this MM bears some of the sonic hallmarks of the Linn K5	7-14	N	•		67
▲▲ Audio-Technica AT-95E	20	A Clear, dynamic if richly balanced, the magnetic '95E is a definite Best Buy	8-14	N	•		48
▲ Audio-Technica OC-5	130	G For the price, it's unusually effortless and detailed, but it tends to become rather relentless and tiring after a while.	5-14	L		•	103
Audioquest AQ 404i-L	500	G+ Slight harshness detracted from the performance of this otherwise clear-sounding and detailed cartridge	8-16	L		•	84
Audioquest AQ 7000	1295	G+ Stunning stereo imaging and good detail at low levels are spoiled by less-than-perfect tracking and high sensitivity to arms.	6-20	L		•	91
Denon DL103	100	A+ Good performance in bass and general 'life' is seriously let down by its spherical stylus which kills subtle details.	9-22	L		•	103
▲▲ Denon DL110	70	G Firmly recommended as a fine all-rounder, this high-output MC model is likely to perform well in nearly all circumstances	6-16	N		•	48
Denon DL160	90	G Although listeners just preferred the 110, its brother here proved a twin in lab tests and is still "thoroughly competent"	6-16	N		•	43
▲ Denon DL304	200	VG Uncoloured, detailed, neutral, superb tracking; top notch altogether, and a top notch bargain too.	4-12	L		•	103
▲ Dynavector 17D2	298	G Clear, detailed, neutral and generally very informative - excellent.	6-18	L		•	91
Dynavector XX-1	698	VG Good, but not immensely competitive at the price, and not helped by comparison with the low output version	7-15	N		•	84
▲ Dynavector XX-1L	698	VG Very clear, very detailed, no troubles with tracking; response lift around 20kHz seems to do no harm	7-13	L		•	84
Empire Benz Micro MC-Gold	150	G Nothing is obviously wrong, but nothing is stunningly right either. Safe, but perhaps a little too safe	7-17	L		•	103
▲ Empire Benz Micro MC-Silver	150	G Ultimately not the peer of the MC Gold is more appropriate to the sort of equipment it's likely to be partnered with	8-18	N		•	103
▲ Empire Benz-Micro MC-3	800	G+ Offers a warmer and very transparent account of the music. Its tracking prowess is slightly limited	5-12	L		•	72
Glanz GMC-10LX	80	A+ Bearing some of the hallmarks of the '10EH, the '10LX is still less competitive in the sonic stakes	7-15	L		•	67
▲ Glanz GMC-20E	129	G+ Very good tracking, smooth sound and good detail. Very slight surface noise enhancement	5-10	L		•	91
▲ Goldring 1012	50	G Slightly harsh sound but plenty of life and quite good detail. Some very high frequency coloration apparent	6-12	N	•		85
▲ Goldring 1022	70	G As with 1012, a touch harsh; detail and transient purity improved, though, and it goes well with electric guitar!	5-11	N	•		85
Goldring 1042	90	G Not terribly subtle, and not such good value alongside 1012 and 1022. Quite lively, though	7-12	N	•		91
▲ Goldring Elan	20	A A lightweight and frisky-sounding MM that appears to be based upon the same body as the Nagaoka mm4	7-15	N	•		67
Goldring Elite	200	G The basics are right, and it will cheerfully tackle any source material, but its sound possesses a certain dirtiness	8-18	L		•	103
Goldring Eroica H	100	G- More confused and coloured than low-output LX, high output less of an issue these days	8-15	N		•	84
▲ Goldring Eroica LX	100	G Not the most subtle cartridge in the world; can sound edgy at times, but lively and informative	8-14	L		•	84
Goldring Excel	549	G Errs on the warm and heavy side of neutral. Strong bass lines are its forte, but resolution of subtle treble details is weak	6-13	L		•	72
Goldring Excel GS	600	G+ True high end quality in its lack of colorations, but tracking seems indifferent and high levels tend to sound rough and edgy.	9-20	L		•	103
▲ Linn K5	49	A+ Not as crisply focused as the costlier Linn magnetics, the K5 offers a smoother presentation	7-16	N	•		67
▲▲ Linn K9	98	G Linn threw this model into the leading pack by beefing up the Basik's bodywork and adding a super stylus	6-15	N	•		Col
London Maroon	199	A+ Now manufactured under the London brand name this Decca cartridge is as iconoclastic as ever	9-20	N	•		67
London Super Gold	339	A- Immediate and detailed, but very coloured, very nonlinear and questionable effect on records. Devotees swear by it	9-15	N	•		84
▲ Milltek Aurora	299	G+ An overall feeling of relaxed ease characterised this clear and atmospheric Kiseki-built cartridge	8-16	N		•	Col
▲▲ Ortofon 510	32	G+ For the price, a good blend of virtues - weight, clarity and neutrality.	3-11	N	•		85
▲ Ortofon 520	55	A+ Very sensitive to load capacitance this new Ortofon maintains the company tradition for a lively, effervescent SQ	7-16	N	•		67
▲ Ortofon 530	85	G+ Very clean and assured sound; transients not quite perfectly pure but plenty of detail.	4-11	N	•		85
Ortofon 540	110	A Graced with FGII stylus but possessed of too high a compliance for broad arm matching. It could also sound a little unforgiving	3-8	N	•		67
▲▲ Ortofon MC10 Super	85	G "What a delightfully sweet-sounding cartridge this is..." we said	5-15	L		•	48
▲▲ Ortofon MC15 Super	110	G+ A good all-rounder, with outstanding performance in detail retrieval, even if it can be very slightly bright and close-up	10-24	L		•	103
▲ Ortofon MC3 Turbo	110	G Not terribly subtle, but it obviously doesn't aim at that. The 3 Turbo is bright, cheerful and bouncy - take it as it comes!	10-24	N		•	103
▲ Ortofon MC3000 MkII	950	E Low levels of body resonance are a real ear-opener. Nothing to criticise elsewhere; one of the very best	9-16	VL		•	84
Ortofon MC5000	1500	G Review sample could not be fully run-in, limited tracking ability, bright and forward sound, though imaging is excellent	12-20	VL		•	91
Rega Bias	34	A+ Difficult to mount in some arms due to its shallow build, the bias offers a gentle, refined SQ	4-10	N	•		67
▲ Rega Elys	74	G Clearly superior to the Bias, despite their common heritage, the Elys is both more detailed, accurate and musically convincing	8-15	N	•		67
▲ Roksan Corus Black	130	G Recognisably related to Corus Blue, but distinctly more civilised and smoother.	7-12	N	•		91
Roksan Corus Blue	75	G Roksan-specified modified Goldring 1012; slight harshness detracts from otherwise good sound.	7-12	N	•		91
▲ Shure ME97HE	55	A+ It won't turn a sow's ear of a turntable into a silk purse, but will at least keep going and produce an acceptable result	8-20	N	•		48
Shure V15 VMR	220	A+ Initial listening gave promising results, but extended familiarity gave the feeling of a lack of energy and a "shut-in" sound	5-12	N	•		38

Do you want to choose your hifi in a comfortable and relaxing environment . . . ?

Do you want friendly and helpful advice (and a cup of tea) . . . ?

Do you want to buy your system based on what you hear (and not what somebody tells you) . . . ?

Do you live in GUILDFORD . . . ?

. . . or Addlestone, Aldershot, Ashford (Middx), Ashstead, Bagshot, Basingstoke, Bracknell, Camberley, Chertsey, Cranleigh, Dorking, Epsom, Esher, Farnborough, Farnham, Frimley, Godalming, Hartley Wintney, Haslemere, Hook, Horsham, Kingston, Liphook, Leatherhead, New Malden, Odiham, Petersfield, Reading, Reigate, Redhill, Richmond, Shepperton, Virginia Water, West Byfleet, Weybridge, Windsor, Woking?

Nobody else in these areas stocks all the following major brands: Acoustic Energy, Arcam, Audio Innovations, Audiolab, Aura, B&W, Celestion, Creek, Cyprus, Dali, Epos, Deltec, Harman Kardon, heybrook, Infinity, JPW, KEF (Reference), Linn Products (including records), Marantz, Meridian, Mission, Musical Fidelity, NAD, Nakamichi, Onix, QED (Systemline), Quad, Rega, Revox, Rogers, Rotel, Sony, Supra, Sound Org, Target, Yamaha (including Home Cinema Systems) & Top Tape.

Visit us first and you won't need to go anywhere else, we have superb demonstration rooms where you can decide in comfort, and we will deliver and install free of charge (and part exchange is possible).

Complete service – We are the only outlet in the area to offer the *complete* service. As well as stocking selected items from the above manufacturers we are able to serve and/or repair *on the premises* all the above brands (and others also).

The Hi Fi Shop

Guildford's only REAL Hi-Fi shop



We are at:
3 BRIDGE STREET, GUILDFORD
(by the traffic lights –
next door to Alfred Marks)

0483 504801 • 0483 304756



Access • Visa • Switch Open Monday – Saturday 9am – 6pm (later by appointment)

Turntables – cartridges continued

Product	£Price	Comments	Arm effective mass (g)	Output	MM	MC	Issue No.
van den Hul Grasshopper IIIGLA	3200	E Undoubtedly one of the finest cartridges available, it has tremendous bandwidth, energy and finesse	6-10	L		•	122
▲ van den Hul MC One	975	G+ This extended all the positive qualities of the '10 but added greater authority and scale worth it for the extra money	6-12	L		•	60
van den Hul MC One/High	1100	G+ Slight softening on transients was the only real flaw, but it didn't quite seem to have that special touch one expects	8-15	L		•	84
▲ van den Hul MC Two	1300	G+ Connected directly to any standard MM input it rewards with a highly detailed yet fluid and musically convincing portrayal	6-13	N		•	72
▲ van den Hul MC10	775	G+ A neutral balanced performer giving transparent midrange, fine depth and focus with firm extended bass. Gosh!	5-10	L		•	60
▲ van den Hul MM1	275	G+ If woody midrange coloration could be tamed, the excellent imaging and admirable security would make it excellent	7-15	L		•	103



Turntables and tonearms

Specialist turntables are what high fidelity sound is all about, CD may offer silent backgrounds and flat frequency responses but they can't match the dynamics and superlative timing that serious turntable users take for granted. Turntables at the cheaper end of the market (sub-£350) tend to be supplied with matching tonearm, and often include a 'starter' cartridge. Still better quality is found at higher prices amongst the

separate motor units and tonearms. Careful partnering and set-up is essential for these components, but 'sympathetic' combinations exist.

The columns show from left to right, 'arm effective mass' relates to cartridge compatibility with regard to compliance (springiness) and is explained in the 'Cartridges' introduction. 'Suspended subchassis' — decks which have some form of internal isolation, generally in the form of

springs but occasionally more solid materials such as rubber. 'Manual' and 'Automatic' refer to the operational tendencies of the deck/arm combination — automatic high end turntables are as rare as hens teeth. 'Cartridge' — if one is supplied. 'Belt drive' as opposed to direct drive is the preferred method in most quality decks. An 'Electronic PSU' offers switchable speed change and a 'smoother' power supply for better sound.

Turntables

Product	£Price	Comments	Arm effective mass (g)	Suspended subchassis	Manual	Automatic	Cartridge	Belt drive	Electronic PSU	Issue No.
▲ Alphason Sonata/HR100S MCS	1785	G+ Good sound in all areas - bass, clarity and neutrality all in the top class and bettered by very few decks at price	13	•	•			•	•	79
▲ Dual CS-503-2	160	A Not wholly inspiring; generally coarse and wooly sound is at least not offensive, but easily bettered by the CS505-4	10			•	•	•		91
▲ Dual CS-505-4	200	A Consistent sounding and well isolated turntable. It is slightly lacking in balls, compensates with a consistently unmuddled presentation	10			•	•	•		103
▲ Kuzma Stabi/Stogi Reference	2000	G+ Beautifully made solid oak plinth, the Stabi also sounds very clear, detailed and extended. Stogi Reference is very capable.	12	•	•			•		91
▲ Linn Basik	299	A+ Strong midband analysis and imagery, clean if sharp treble is matched to a good if occasionally wooden bass	10		•			•		103
▲ Linn LP12 Basik/Akito	904	G Trails the full LP12 significantly, but pace, rhythm, timing etc. still in top class, and bass tauter than of old	10	•	•			•		103
▲ Linn LP12-Lingo/Ekos	2642	G+ The classic reference is improved by the Lingo but charming character remains. Ekos is well made and suited to many decks	9	•	•			•	•	91
▲ Michell Gyrodec	697	G Sweet and natural sounding player, well suited to Rega RB300. Aesthetics, and the acres of clear acrylic are very distinctive	NA	•	•			•	•	55
▲ Michell Syncro	325	G A happy blend of qualities endows the stylish Syncro with a blend of subtlety and force - the mailed fist in the velvet glove	NA	•	•			•		67
▲ Pink Triangle Anniversary	1495	E Possibly the most detailed, clear and neutral deck around. Likeness to master tape is uncanny	NA	•	•			•	•	91
▲ Pink Triangle Export	890	E The PT T00 with built in PS. Retains features of great transparency and neutrality. Review sample had highish motor noise	NA	•	•			•	•	91
▲ Rega Planar 2	185	G A remarkable product at the price, surprisingly articulate and confident	11.5		•			•		48
▲ Rega Planar 3	250	G A long time leader in its category, the '3 (with excellent RB300 arm) sounded nicely 'musical' in a balanced and coherent manner	11.5		•			•		48
▲ Roksan Radius/Tabriz zi	740	G Design is subtle, refined and easy on the eye. Musically it offers exceptional performance with a minimum of fuss	9		•			•		103
▲ Systemdek 1.920	235	A- The motor unit is derivative of the Rega Planar 2 with a Moth arm. Up tempo even bright at times but never lacks enthusiasm	12		•			•		115
▲ Systemdek IX/900	230	G A high performance budget turntable which is particularly strong at fine detail resolution and imagery	NA	•	•			•		103
▲ Systemdek IXE/900AP	388	G+ The acrylic platter'd IXE is one of the most capable budget decks on the market, good resolution, dynamics and timing	NA	•	•			•	•	103
▲ Thorens TD-3001/TP90SF	760	G Excellent middle ranking esoterica, with strong all round abilities rather than excellence in particular areas	NA	•	•			•	•	103
▲ Thorens TD166 VI/UJ/RB250	280	A- Refined and articulate sound with well focused imagery, suitable for use with good MM and budget MC cartridges	11.5	•	•			•		103
Thorens TD2001	650	G- Similar to TD320 but much dearer - why? Sound is comfortable but not very detailed	15	•		•		•		91
▲ Voyd 0.5	3368	E Halfway between standard and Reference Voyds with the latter's platter and bearing. Superb finish, colourful and dynamic sound	NA	•	•			•	•	72
▲ Voyd Reference	5950	E Voyd's flagship, equipped with three substantial motors, a Lexan platter and brute PS. A strong contender for world's best	NA	•	•			•	•	C91
▲ Well Tempered WTAT	1690	G+ Intriguing/challenging design. Musically it is not ideal, but has a limpid quality and a lack of artificiality that sets standards	7.5		•			•		67

Tonearms

Product	£Price	Comments	Effective mass (g)	Height adjustment	Parallel tracking	Pivoted	Issue No.
▲ Alphason HR100S	490	VG S-shaped arm sounds smooth, but nevertheless reproduces transients with fine attack	10	•	•		C86
▲ Kuzma Stogi Reference	1000	VG Large, solid and well made arm, gives exceptionally clear sound with just a hint of brightness	12	•	•		79
▲ Linn Ekos	1297	VG Superb, state of the art design which builds significantly on predecessor Ittok's strengths	9	•	•		67
▲ Moth arm	95	G+ The ultimate budget arm? Refined, detailed, sweet and natural	12		•		60
▲ Rega RB300	139	VG Despite its modest price it sets exceptional performance standards and could be used on many high end turntables	11.5		•		60
▲ Roksan Tabriz	190	G+ Targetted at the Xerxes, this is a good alternative to the Rega arms in many cases - a trifle bright	9	•	•		91
▲ SME 309	568	VG Beautifully made and finished, fully adjustable, a highly neutral performer	10	•	•		79
▲ SME Series IV	828	VG Superb engineering and finish with a finely balanced sound, impressive stereo focus and low colouration	10.5	•	•		60
▲ SME Series V	1233	E Excellent in all respects, this arm arguably sets the standard for pivoted arms regardless of price	10.5	•	•		60

Personal messages

Hi-fi guru Paul Messenger, former editor of *Choice*, takes a close look at a new high-end product from Audiolab which he hopes will lengthen the life of the vinyl disc. The company's *8000PPa* makes a valiant effort to keep analogue addicts loyal.



Audiolab is not known for surprises. The company's fortunes are built on the *8000A* integrated amplifier. This is a worthy, mid-price product, which has remained cosmetically almost unchanged for 10 years. That it continues to sell better year by year is a credit to the original design concept and its subsequent refinement.

If the *8000A* has developed an image of middle-of-the-road respectability, the excellent and more expensive *8000T* radio tuner, launched in 1993, gave pause for thought about Audiolab's direction and possible achievements.

If the *8000T* was a surprise, this brand new *8000PPA* is a downright

featured as any such device could be, with two separate inputs which can be configured very precisely to match any MM or MC cartridge, and is crammed with high class components. Not in the signal path, I'm assured, since this is kept deliberately simple, but in all the good housekeeping required to support a decidedly radical circuit configuration.

These days, innovatory analogue circuit designs are rarer than new digital recording formats. This one is certainly unusual – possibly unique – in direct coupling the signal path throughout. It's all done by means of DC servo circuits with complex micro-processor controlled time constants to keep everything stable and under control.

strain, the oodles of detail, and a remarkable opening up of the soundstage.

It has always seemed strange that my box-less (flush wall-mounted Tannoy dual-concentric drivers) speakers still had a modest residual 'boxy' coloration. When I substituted the *8000PPA* for my regular (Naim) phono stage, the boxy character seemed considerably reduced, and the image became altogether bigger, wider and more disembodied.

Which doesn't mean I'm going to urge everyone to rush out and buy the Audiolab. Like any product with state-of-the-art pretensions, this is very much a listen-before-you-buy proposition, and I'm certainly not guaranteeing it will appeal to all tastes or systems. Although it only took a couple of minutes to figure out what I did like about the *PPA*, it took until the third day to figure out what was also leaving me uneasy.

The sound is a little too unruffled and over-controlled, through the mid and treble especially. With hindsight, one reason I'd been playing it so loud was to compensate for the lack of real bite and drama.

Simply for its services in expanding the vinyl disc's horizons, the *8000PPA* deserves a medal, and is destined to pick up review accolades worldwide. But like any seriously good hi-fi component, it all comes down to the art of compromise in the end – specifically how well the balancing act adopted here blends in with the other components of a serious system, and the tastes of the listener.

I can't see the horn 'n' triode league going a bundle on it, nor the Linn/Naim set for that matter, but those seeking stunning out-of-the-box stereoophony and exceptionally low coloration should bend an ear in this direction.

Most tellingly, the *PPA* has a distinctly CD-like quality. Which is both good and bad, as CD fans regard the medium's sonic strengths as no less important than its convenience. This Audiolab may not remotely control your record playing, but it can still make your vinyl sound better than your CDs, while achieving a unusual consistency of character between the two.



improbability. It's a standalone amplifier phono stage whose only task is to receive, boost and equalise the output of vinyl disc cartridges, and feed a flat line level stereo signal to a preamp's line input. This isn't just a little gadget to clutter up the shelves of those who refuse to fall in and buy CDs. It's at least the size and weight of an *8000A*, and sells for a startlingly upmarket £800.

And this is 1994, several years after vinyl discs were supposed to be comfortably dead and buried. So what does Audiolab think it's up to?

Idealism is part of the motivation. This is intended to be the definitive phono stage, according to Audiolab. It's as fully

Mad idealism or a sane business venture? For the *8000PPA*, only time will tell.

The *PPA* also represents a toe-in-the-water for this new approach. A line-level preamplifier is well on the way, and other relatively high-end Audiolabs may follow in due course.

Direct coupling should promise superior bass performance, and in this respect the *PPA* is unlike anything I've heard in recent memory. It delivers extraordinary slam and drive with prodigious extension and consummate control. There were two immediate repercussions. The first was to start digging out all my killer bass albums and become well and truly impressed. The second was to wind the volume up to near clip levels and enjoy the lack of

The highest fidelity. Naturally.

HD 580

Top of the range dynamic headphone using new duofoil diaphragm which virtually eliminates sound colouration.



HD 320

Part of the new generation of dynamic hi-fi stereo headphones, the HD 320 has ergonomic styling with a sound quality that is designed to optimise transparency and clarity, whilst ensuring a strong bass definition.



HD 560 II

"A detailed and open headphone with the ability to recreate the power and depth in a piece of music."
Hi-Fi Choice
Oct 91.



Immerse yourself in the music. No distractions, just pure sound reproduction.

It's no coincidence that Sennheiser headphones are acclaimed again and again in the hi-fi press.

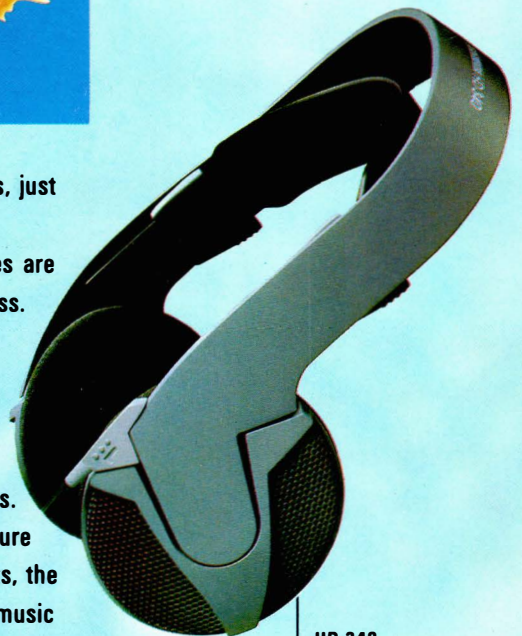
We set new standards of sound reproduction and quality at the leading edge of acoustic

technology. Supremely comfortable and near-unbreakable, the headphones are specially designed for easy replacement of parts.

With accurate, detailed response and rich pure tone, recreate the eloquence of the instruments, the vitality of the vocals. Whatever your taste in music you'll appreciate the transparent natural sound quality, balanced by a wide dynamic range.

Now prove it. Try out our headphones for yourself.

You'll be convinced. Naturally.



HD 340

A headphone which produces a roomy and detailed sound whilst incorporating high quality in its design making it lightweight and comfortable to wear.

 **SENNHEISER**

Sennheiser UK Ltd, Freepost, Loudwater, High Wycombe, Buckinghamshire, HP10 8BR. Telephone 0628 850811. Fax 0628 850958

MISSION



The European Loudspeaker System of the Year