

HI-FI NEWS

SEPTEMBER 1994 £2.50

RECORD & REVIEW

THE WORLD'S BEST?

WADIA 16 CD PLAYER

FREE

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THE HI-FI SHOW GUIDE

CHICAGO
FULL SHOW REPORT
FROM AMERICA



**HARBETH'S
BBC LS5/12A
SPEAKER**

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World Radio History



Outperforming the existing long-term references in Martin Colloms's listening tests, the Wadia 16 establishes itself as the best single-box CD player to date. The review starts on page 34: photography by Tony Petch

hi-fi

Chris Beeching
Dave Berriman
Martin Colloms
Peter J Comeau
John Crabbe
Ben Duncan
Barry Fox
Alvin Gold
Ken Kessler
Paul Miller

classical music

Andrew Achenbach
Nalen Anthoni
Peter Branscombe
Christopher Breunig
Robert Cowan
John Crabbe
Robert Dearling
Kenneth Dommett
George Hall
Antony Hodgson
Calum MacDonald
Bill Newman
Gill Newman
David Nice

rock/pop/jazz

Johnny Black
Fred Dellar
Colin Escott
Ken Kessler
Ben Watson

EQUIPMENT

34 SIMPLY THE BEST?

feature review on the Wadia 16 single-box CD player, which reaches a new high in listening test scores
Martin Colloms

39 NAKAMICHI MB4-S

a multi-player with a pedigree, and the promise of audiophile sound? Or not?
Nakamichi's clever Music Bank seven-disc CD on test
Peter J Comeau

42 AUDIO RESEARCH LS7

exclusive review on the revered tube specialist's new all-triode line pre-amplifier model
Martin Colloms

44 MERIDIAN 551

integrated amplifier: bringing Meridian sound quality to your system without breaking the bank
Peter J Comeau

46 HARBETH LS5/12A

now in production, the Harbeth edition of the new BBC mini-monitor speaker
Eric Braithwaite and Dave Berriman

48 SONIC FRONTIERS SFC-1

the Canadian brand offers an intriguing hybrid tube/solid-state integrated amplifier
Ken Kessler

51 TANNOY D500

following the big D700, Tannoy adds a more compact Dual Concentric
Martin Colloms

55 JM LAB MICRON CARAT

small speakers with big sound from a major French drive unit manufacturer
Ken Kessler

89 THE GOOD HI-FI GUIDE:

gives sound quality reviews and ratings plus technical data and supplier details on more than 200 selected hi-fi separates

FEATURES

FREE WITH THIS ISSUE

Hi-Fi Show Guide, entitling you to FREE entry to the Show on 10 and 11 September

26 CHICAGO

reports from the Summer Consumer Electronics Show
Ken Kessler

REGULARS

5 COMMENT

by Steve Harris

7 VIEWS

13 NEWS

19 TECHNOLOGY

by Barry Fox

21 RADIO

by John Nelson

23 HEADROOM

by Ken Kessler

25 BLACK BOX

by Ben Duncan

56 COMPACT DISC SERVICE

save on CDs by mail

59 SIDELINES

by John Crabbe

62 TEST DISC III

order form

64 BACK ISSUES and

binders order form

102 SUBSCRIPTIONS

order form

103 ACCESSORIES CLUB

reader offers

104 DEALER GUIDE

112 CLASSIFIED ADS



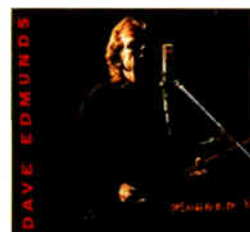
26 America: report from the Chicago Summer CES



46 Harbeth's BBC LS5/12A: a full technical review



42 AudioResearch LS7 triode pre-amp



79 Dave Edmunds



51 Tannoy D500 Dual Concentric



44 Meridian 551 integrated amp



55 JM Lab Micron Carat

RECORD REVIEW



Trevor Pincock: page 61

60 REVIEW INDEX

61 MUSIC NEWS

Trevor Pincock talks to Antony Hodgson

65 RECORD OF THE MONTH

Haitink's Mahler 'Resurrection'

65 CLASSICAL REVIEWS

79 ROCK/POP/JAZZ REVIEWS

114 FINALE

Colin Escott tells the transatlantic story of the Decca record label



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Link House, Dingwall Avenue, Croydon CR9 2TA. Tel: 081-686 2599. Fax: 081-760 0973 or (direct) 081+781 6046.
Hi-Fi News & Record Review incorporates: Stereo, Tape & Tape Recorders, Audio News, Record News, Audio Record Review, The Gramophone Record and Which CD.
Member of the Audio Bureau of Circulation.

Microfilms and Indexing

Microfilm and microfiche copies of HFN/RR or articles therefrom are available commercial form University Microfilms International. North American applications to: 300 N. Zeeb Street, Ann Arbor, Michigan 48106, USA. UK and rest of world: White Swan House, 60 High Street, Godstone, Surrey RH9 8LW. Technical articles of full page length or over in Hi-Fi News & Record Review are detailed in the Current Technology Index.

Binders

Loose-leaf binders for annual volumes of HFN/RR are available from Binders, 78 Whalley Road, Wiltshire, Blackburn, Lancs. BB1 9LF, or direct from HFN/RR (see Back Issues advertisement). 1971 to 1982 are covered by two binders (Jan-June/July-Dec): subsequent years require one binder each. Price: £6.00 each UK; £9.00 overseas (post paid). For earlier years, please ask for quotation.

Subscriptions

Annual subscription £30 (UK) \$65 (USA). Europe and Eire (airmail) £42.50 other zones: o/s surface £40; airmail £57.40.
Subscription enquiries to HFN/RR Subscription Department, 120-126 Lavender Ave, Mitcham, Surrey CR4 3HP. Tel: 081 646 6672. US and Canadian subscribers call toll-free on 800-688 6247 or write to Hi-Fi News & Record Review, PO Box 384, Avenel, NJ 07001, USA.
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Hi-Fi News & Record Review is published monthly on the second Friday of the month preceding cover date by Link House Magazines Ltd, Dingwall Avenue, Croydon CR9 2TA UK: Link House Magazines is a member of the United Newspapers Group © Link House Magazines Ltd 1993, all rights reserved. Reproduction in whole or part is forbidden, save with the permission, in writing, of the publishers. Distributed by UMD, 16-18 Tabernacle Street, London EC2A 4BM. Tel: 071-638 4666. Fax: 071-638 4665. Typeset by Atelier Dataset, St Austell, Cornwall. Printed Garnett Dickinson Print Ltd, Rotherham, South Yorkshire. ISSN 0142-6230.



A United Newspapers publication



Does the future have to be data-reduced? Having shown a double-sampling rate, high-bit rate 'super CD', Pioneer does not seem to think so

When Pioneer demonstrated its 'super CD' [see 'News'] to a group of hi-fi journalists, we were, for once, impressed. There did indeed appear to be a big and worthwhile improvement when switching from a recording of a jazz piano trio stored as a conventional CD signal to the same music recording stored in Pioneer's experimental 24-bit, 88.2kHz format. (The recording is said to be 24-bit, but the replay decoders were 20-bit.)

Of course, we cannot set too much store by this one demonstration. Our auditioning consisted of an uncontrolled, sighted A-B comparison, of the kind disparaged by so many 'objectivist' correspondents in 'Views'. (If I were to say that the 'super CD' seemed to sound more like analogue, I would be shot down in flames by this lobby!) We have no real knowledge of the provenance of the in-house recordings which Pioneer used, and little information was available. Above all, since Wide Range CD uses both a higher bit-rate and a doubled sampling rate compared with conventional CD, and we have no way of knowing which of these two factors might have been responsible for perceived improvements in sound quality.

This rather parallels the situation with Pioneer's D-07 'Wide Range' DAT recorder, where it was hard to assess the improvement due to the 96kHz sampling frequency, because this was combined with Pioneer's Legato Linear D/A conversion strategy, which adds artificially-created 'harmonics' above 20kHz.

Pioneer does not expect the industry to adopt Wide Range CD overnight, or perhaps even at all. The short term idea is to help push the general Wide Range marketing angle for Pioneer's middle-market hi-fi separates. In a broader sense, the 'super CD' backs Pioneer's claim that it will only introduce new formats when they are superior in quality to existing ones: and it is true that the company has not supported DCC, MiniDisc or Video CD. For the longer term, the 'super CD'

comment

must be seen as just pointing the way to what will be possible when the industry adopts shorter-wave-length 'blue laser' scanning for optical media. This will immediately multiply the amount of data that can be stored on a given size of disc. For example, a full length movie could be recorded on 120mm (CD-size) disc without resorting to severe data compression. This is relevant, of course to the future of Laserdisc [touched on in 'Comment', July]. It was interesting that, at the Pioneer press meeting, most of the questions journalists wanted to ask were about Laserdisc, which all present hoped would survive and prosper. Pioneer still says that Laserdisc will 'evolve', though it is a little hard to see exactly how. In the USA, *Stereophile* magazine has already attacked Pioneer's decision to go for the data-reduced Dolby AC-3 surround-sound system on new Laserdisc titles.

Back in 1992, when 'Video CD' was already looming on the Laserdisc horizon, Pioneer's senior managing director, Mr Kaneo Ito, estimated that it would be 'seven to ten years' before a 120mm Laserdisc format could be realised. Earlier this year, Pioneer announced that it now had a stable, practical blue laser source, usable in normal conditions. This has a wavelength of 425nm, derived by the SHG method from a red laser of 850nm wavelength.

Meanwhile, IBM has upped the stakes by announcing a multi-layer optical disk which will store staggering amounts of data. So perhaps the fruits of these labours will not so far away after all: and perhaps after all, Dolby or no Dolby, there may be still be a future in non-data-reduced storage media for those listeners and viewers who want 'something better' at home.

NEW COLUMNISTS

I must now give a welcoming mention to HFN/RR's new 'Radio' columnist, John Nelson, whose background in broadcasting and engineering makes him a most formidable commentator in this field. I know that many readers appreciated JN's no-nonsense approach to equipment reviewing a couple of years ago: and currently-awaited developments will certainly give him plenty to get his teeth into.

Also starting this month is a completely new column by Ben Duncan. In his 'Black Box' page, Ben (who will be even less of stranger to regular HFN/RR readers than JN) will attempt to de-mystify some of the more perplexing aspects of analogue electronics from an objective (or 'omnijective' point of view). I think this may be long overdue! ✎

KRELL'S ANGELS HEAR THE VOICES

Krell Reference 64 Digital Processor

The Reference 64 had a terrific sense of pace and rhythm...The music had a power and drive heard only from a handful of products. Moreover, the tempo seemed faster and more upbeat through the Reference 64, further adding to the sense of the music's forward propulsion.

Robert Harley, *Stereophile*, January 1994

Krell DT-10 CD Transport

If your system needs a little more life, drive and immediacy, the Krell DT-10 CD Transport will probably be just the ticket.

Robert Harley, *Stereophile*, January 1994

Krell KSA-100S Power Amplifier

With the KSA-100S, Krell has brought a good measure of the quality of the upper stratosphere of audiophile amplifiers down to an approachable price.

Martin Colloms, *Hi-Fi News & Record Review*, April 1994

Krell KSA-300S Power Amplifier

There was no superfluous warmth or richness, but neither was the sound

hard, edgy, electronic or cold in any way. It was fast, airy and transparent, images properly sized within a soundstage that was tight, wide and deep.

TJN, *Stereophile*, January 1994

Krell KSA-50S Power Amplifier

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Jimmy Hughes, *Audiophile*, January 1994



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'It would appear that many people, myself included, have been brain-washed by the Linn propaganda machine, and steam-rollered into buying truly dreadful products by deluded, obsessive salesmen. Seriously though...'

THE SMARTER LINN LOVER

Dear Sir, With reference to the Ken Kessler review of the Linn Tukan's [HFN/RR, July 1994]: so Kessler was upset when Messrs Dalglish and Gaydon suggested that 'he didn't know what he was talking about.' I think any antagonism between Mr Kessler and these gentlemen can be explained very precisely: they didn't like his anorak. Either he is a narrow-minded buffoon, or Mr T has outsmarted him and booked himself six months' free publicity, since KK's review is likely to have stirred up a bees' nest which will buzz around his bare backside 'til he can't sit down without being reminded about it.

What's up, Kessler, did this review take up one of your train-spotting weekends, or are you afraid that if all hi-fi manufacturers produced equipment as good as Linn then, really, you'd be out of a job?

And what's this obsession with 3D sonic imagery? Perhaps my analogy is weak, but are you really the kind of man who sits in front of a TV screen with cellophane sweet-wrappers over your eyes, captivated by the rubber spider as it seems to leap out at you - or do you, like most intelligent people, watch the spectacle unhindered by gadgetry, able to enjoy the really important elements like plot, credibility, and true involvement?

You mentioned that the Linn sound seemed as though it was about to fall apart. Well, did it? I think not. In my experience, the music is held together throughout.

You can be excused for suggesting that people either love Linn or hate it. You were wrong to make those of us who love it appear stupid. I own an £8k active Linn system. I now buy more than half a dozen CDs each month and, God knows why, most of the hi-fi magazines. I rarely watch TV. As the brochure proclaims, 'good music has changed my life'.

Paradoxically, I and many of my

fellow Linn devotees, in view of the money we now inject into all avenues of the hi-fi industry, just might, collectively, have changed the lives of a few other people as well. You have no right to pour ill-disguised ridicule on that type of enthusiasm.

I'll make you an offer. Put together the best £8k CD-based system you can, bring it round to my home, I'll listen to it, appraise it, and then tell you why, when the Devil offered to swap me a pair of Keltics for my wife and children, I thought there had to be a catch. And don't worry, contrary to what you might believe, we Linn owners don't bury our relatives in the back garden, we don't eat our off-spring, and we certainly weren't 'steam-rollered' into buying our hi-fi.

So please, come up and see me. But do me one favour - leave your anorak at home.

Bryan Palmer, Bakewell

Mr Palmer's use of the 'anorak' as a term of abuse led me to wonder if he might be connected with the trade, but he tells us that this is not the case. However, when we spoke on the 'phone he mentioned that since writing he has auditioned a £7k Naim system, and said that if he could, he would like to own both - Ed.

TRUST YOUR OWN EARS

Dear Sir, As an owner of a predominantly Linn system, I read Ken Kessler's review of the Tukan loudspeaker and associated equipment with great interest. It would appear that many people, myself included, have been brain-washed by the Linn propaganda machine, and steam-rollered into buying truly dreadful products by deluded, obsessive salesmen.

Seriously though, I wonder whether KK is doing his reputation, or those of HFN/RR and the industry generally, any good by writing such a vindictive and silly piece. To the casual eye it appears not a little odd that the least sympathetic reviews of Linn products in recent years have appeared in the same magazine. Leaving aside the overbearing Linn management style and the obnoxious publicity (what is all this rubbish about 'tunes' anyway?), which I am sure are just as much an irritant to customers as to dealers and reviewers, neutral observers might like to bear in mind the following points.

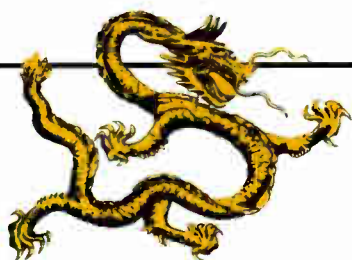
First, those who have opted for Linn products cannot all have bought through the 'life-style', 'B & O', first-class air travel mar-

ket sector that Ivor Tiefenbrun is currently pursuing. Before parting with their money, I would be very surprised if others, like myself, had not auditioned a range of equipment, much of it in their own homes. This is increasingly the way in which expensive hi-fi equipment is sold. For people to have bought Linn products in such circumstances, there must be something attractive about the sound described by KK as a 'sonic house of cards' and an 'echoey, phasey mess' that made it preferable to other makes. Those who buy Linn equipment in spite of terrible reviews (see for example Martin Colloms' panning of the Kairn/LK100 combination, HFN/RR, May 1993) have to be doubly certain that they are making the right choice for them. Or does KK think that sophisticated consumers spend thousands of pounds buying poorly-reviewed equipment without listening to alternatives?

Second, the consensus among most sensible enthusiasts is that, at the end of the day, any hi-fi product has to be a compromise. Some musical features (for instance, speed, timing and rhythm) have to be traded against others like imaging and depth. You pay your money and take your choice, depending on subjective preference and musical taste. Linn Products is known to favour the former approach, though I do not think their performance on the latter aspects is as bad as KK makes out, and I would be very surprised if those with a knowledge of the Linn sound recognise the description of 'floppy, sloppy lower registers.'

Third, the best advice to anyone out there with money to spend on hi-fi is this: read reviews by all means for a laugh, but don't be over-influenced by cynical, embittered reviewers pursuing their own vendettas. Find a good dealer who will let you take equipment home without obligation until you are absolutely certain you know what you want. Trust your own ears and believe in your own judgement! (By this method I bought a Meridian 500/563 in preference to a Karik to go with my active Linn system, so cannot be considered as proselytising for the all-Linn fan Club).

Finally, the current decline of the hi-fi press may be connected with changes in the way good equipment is sold (that is by home demonstration), making reviews and reviewers considerably less important in consumers' final deci-



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sions. If *HFN/RR* does not want to go the way of *Audiophile*, it should be confronting this challenge, and looking for new ways to interest its readers, rather than alienating them through cheap journalism.

P Jones, Sheffield.

A LINN RESPONSE

Dear Sir, Ken Kessler has never hidden his strong views, and now that he has given up smoking he expresses his views more strongly than ever. As a specialist hi-fi manufacturer we naturally have equally strong views about how hi-fi should perform. When an irresistible force meets an immovable object sparks are bound to fly!

Those who appreciate Ken's idiosyncratic approach to life, the universe and hi-fi journalism will be entertained by his review of the Linn Tukan and his belief that some Linn hi-fi is not even good enough to be used as ballast. During a recent visit to Linn, when I offered to take Ken out on my boat and use him as ballast he confessed that he would never step on one. Ken also has a well-known antipathy to classical music and a frequently expressed belief that no-one can possibly genuinely enjoy opera. He is undoubtedly a man of extremes: it takes one to know one!

With source equipment that makes the kind of sound that Ken likes, he loved the Tukan. Linn loudspeakers are designed to detract as little as possible from the quality of their input signal. So we were pleasantly surprised that with source equipment that Ken doesn't like he let us off so lightly!

Ken's articles are always entertaining, and his intention is to stimulate interest in hi-fi and encourage people to go and listen for themselves. If this review doesn't do that, we will both be disappointed. There are over 500 Linn retailers around the world who will be delighted to demonstrate the exceptional qualities of the Linn Tukan.

**Ivor Tiefenbrun MBE,
Linn Products Ltd, Glasgow**

ANOTHER CD PRICE HIKE

Dear Sir, It took just three days after publication of the MMC's findings for new additions to the CD shelves in the local branch of W H Smith to show a price hike. Premium issues from Polygram, for example DG '4D' titles, were priced at £15.49 and midprice reissues, for example Decca 'Ovation' were on offer at £10.49. Whoever said that the £15



CD would be here by Christmas was wildly optimistic. It's here! Now! On the shelves.

The report was neither a farce nor a tragedy. It was a pure licence to print money.

Dennis Chapman, Chippenham

The MMC also found that neither the record industry nor W H Smith (in relation to record retailing) were making excessive profits. But according to The Guardian, financial information which had been handed to the commission, including the levels of discount given to major retailers, was blanked out from published copies of the report on the orders of the Trade Secretary, Michael Heseltine. The Guardian also quoted some current examples of prices at Virgin Megastore, London, and compared them with discount prices at Tower Records, New York, including (converted US prices in brackets) Miles Davis's Kind of Blue £9.99 (£6.00), The Beatles' Abbey Road, £14.49 (£10.00), The Cure's 17 Seconds, £13.49 (£10.00) - Ed.

THE DAMPING FACTOR BRAKE

Dear Sir, In reference to the *HFN/RR*, July '94 'Views' letter 'Damping Factor Factors', the damping factor of an amplifier may well be an important factor in achieving the best sound quality possible from a loudspeaker in that it can exert a 'braking' effect on the voice coil in a driver and help control inherent, unwanted mechanical resonances.

However, the human ear is very sensitive to aberrations that confine themselves to specific parts of the audible spectrum, and with the average speaker the damping factor is highly inconsistent especially in the crossover region for the following reason.

Consider a typical woofer with an L-C 12dB/octave low pass crossover filter. These are designed so that, looking from the amplifier end, it presents an impedance $Z = 80\text{ohms}$ around the crossover region when combined with the rest of the crossover and drivers' impedances. This is great for the amplifier. The problem though is that we listen to the woofer not the amplifier, so what we are really interested in is the impedance at the woofer terminals

looking backwards to the crossover. This is where motor generated currents from the voice coil will have to flow to provide the wanted 'braking' effect.

Now we have a problem because assuming that the output impedance of the amplifier is very low (true), the equivalent circuit of the crossover driven from the woofer end is a parallel resonant L-C circuit, ie very high impedance in the crossover region. I am not talking about a few ohms, more like over 1000ohms depending mostly on the quality of the inductor L.

This means that our precious damping factor is a total nonsense in the woofer's crossover region.

I realised this some 10 years ago and, being a compulsive fiddler, I tried some experiments with my 1979 Castle Conway three-way speakers (crossovers at 750Hz and 3kHz) at the time. The main problem as I saw it was that there was no damping at all at the crossover frequency, so any at all would have to be an improvement. Therefore I tried a resistor across the woofer terminals to give motor currents somewhere to circulate. I found that 20ohms was a compromise between sound quality improvement and not lowering the impedance too much for the amplifier (i.e. wasting power). A certain muddiness, especially in male speech, was totally removed. Similar experiments with the midrange and tweeter did not produce anything audible, probably proving that these units are better damped mechanically and can manage without electrical damping. Removing these resistors after some years with the rest of the system having since been replaced gave entirely negative results and were immediately replaced.

The only full answer to having a high damping factor across the whole spectrum is probably a full active system.

S Bradshaw, Whitstable, Kent

GARRARD PLAYS ON

Dear Sir, On electrolytics, life of ['Views', passim, also see p11]: my own hi-fi system was bought in November 1963, consisting of; Quad 22 pre- and main amps, Electrostatic speakers, Garrard 301 turntable and tonearm, all mounted in a series D' cabinet.

Over the years, this system, has been a source of great joy to me, on many occasions being in use for 28 hours non stop. I have only ever secured screws in plugs and cleaned contacts on plugs.

When my father was alive, he did many experiments with hi-fi equipment using a probe, fitted

The cartoon on this page, by Simon Cooper, originally appeared in Punch magazine in 1992

'It took just three days after publication of the MMC's findings for new additions to the CD shelves in the local branch of W H Smith to show a price hike'

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Seriously though, please come and see us at the Show whether you are about to upgrade or just looking for the future you owe it to yourself to hear just what MIRAGE can do for your system.

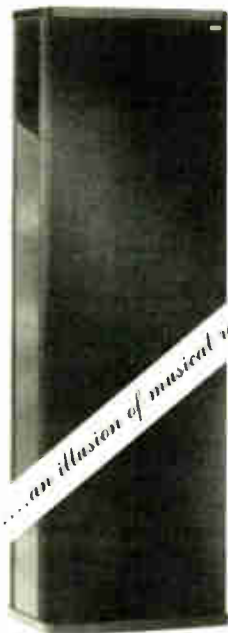
The highest recommendation?... the M1s have been my own personal reference for several years.

Come in and SEE THE MUSIC

Best regards

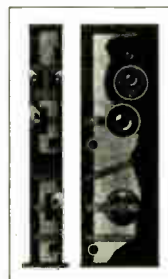
JOHN AND LYNDA CARNE

DEALERS please pop in for a drink and a chat on Trade Days

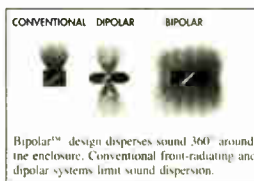


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SONUS FABER	MINIMA AMATOR	And that sound wonderrrrful
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MIRAGE	M1si	Words fail me!!
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MIRAGE	M7si	Bargain of the century
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READERS' LETTERS
We reserve the right to edit or shorten letters for publication, which should be addressed to the Editor and must contain no other material or enquiries. Letters seeking advice will be answered, resources permitting, at our discretion, but we regret that we are unable to answer questions on buying specific items of hi-fi. We cannot answer queries over the telephone

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CASTLEFORD Eric Wiley 0977 556774.
HUDDERSFIELD Huddersfield HiFi 0484 544668.

with ADC cartridge connected to an oscilloscope. I have to say, I wish I had been more interested at the time and taken note of his experiments. What did come from some of his studies, was a number of very interesting modifications to my 301 turntable.

I could go on at great length about some of his experiments with speakers. But to get back to the main point of my letter, component life, were I to purchase some new hi-fi, I wonder if I could possibly expect 31 years of trouble free use. Come to think of it, I wonder if I will still be here in 31 years. I'd be 89.

By the way, Peter Walker, should have been knighted for creating a World Superlative, with his Electrostatic speakers.
Stanley Glennall. Birmingham.

TOSLINK TURNAROUND?

Dear Sir, Two statements in your May, 1994 issue greatly surprised me.

In his review of the Counterpoint DA-11 transport Ken Kessler describes the three outputs as coaxial isolated, coaxial direct, and Toslink, and says, 'All three outputs sounded different, as expected, but there was never a clear winner'. This is an incredible turnaround for Mr Kessler, who has always been 100% anti-Toslink. For example:

'And in order to vote with my feet, I would be buying a transport which shows two fingers to the evil Toslink connector.' [HFN/RR, Oct 1992]

'I'll say only that the coax massacred the optics, while the optics massacred the music' [HFN/RR, Nov 1992].

'I think Toslink is a travesty.' [HFN/RR, Dec. 1992] 'I ignored the Toslink connection because it sounded harsh regardless of the optical cable I tried' [HFN/RR, July 1993].

'Which reminds me: the DITB defaults to coax because it sounds so much better than via Toslink. So what else is new?' [HFN/RR, Jan 1994].

The other surprising statement is that of Alan Watling in his article, *Golden Ears*: '...a second test

was run with the phase inverted on the pre-amps', and '...there was no definite reaction to the effect, which tends to confirm my view that it is noticeable only there is a loudspeaker/room interface.'

This conclusion is inconsistent with the experience of this writer, as well as that of many other audiophiles who have successfully identified normal vs reserve phase using earphones. In my case I have tagged all 500 CDs in my collection as N, R, or M (mixed) using either Stax or Etymotic earphones, both of which are phase-coherent. I draw the same conclusions whether I use my VMPS Super-tower loudspeakers or earphones, though in some cases more listening is required when deciding polarity using the loudspeakers.

I suggest Mr Watling listens to harpsichord solo, piano solo, brushed cymbals, or trumpets through his earphones, in which cases I think he will hear a difference between the two polarities.
Bernard A Engholm. California, USA

KK comments:

I still say Toslink sucks!

ROTEL'S CUSTOMER CARE

Dear Sir, Your review [HFN/RR, April 1994] of the Rotel RCD-965BX Discrete CD player reminds me of when I bought my own Rotel RCD-965BX a couple of years ago since, as usual, you say nothing of after-sales service.

he sound was fine, but I kept hearing these intermittent bumps, so I wrote to Gamepath freely admitting that they could be coming from any part of the sound system, including the discs.

What followed was quick, polite and thorough, and it soon became apparent that it was the recording quality of certain discs that was the problem. Even then I had a telephone call from the Technical Manager, saying that he would like another look at the machine just to satisfy himself (all carriage paid).

The moral is that it is not only the best sound and the best price that matter, but also the best customer care.

Dr Colin Butler, Canterbury

NEXT MONTH A FREE COMPACT DISC

With your copy of the October issue you will receive a free full-length classical CD, with a decidedly Russian flavour: more than an hour of music from the Royal Philharmonic Orchestra, all recorded using Sony's SBM (Super Bit Mapping) mastering system. Equipment reviews include the Wilson Audio X1 Grand Slamm speakers, more affordable floor-standers from Monitor Audio and Mordaunt Short, new season's amplifiers from Aura, Denon, Technics and Croft. The Record Review section includes an interview with Russian pianist Boris Beriozovsky as well as a bumper crop of CD reviews and, for vinyl enthusiasts, more RCA 'Living Stereo' reissues. Don't miss the October, with your free CD, on sale Friday, 16 September.

MUSICAL FIDELITY

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*Linn Products' new
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LINN REVEALS SEKRIT



LOWTHER BRINGS BRIO TO BRAVURA

Impressive bass, a tangible stereo image and totally dramatic dynamics...all these virtues are claimed for the latest horn loudspeaker to hit the market. The Bravura Brio, which has taken Thomas Transducers two years to develop, is a floor-standing, folded-horn design rated at better than 98dB sensitivity and intended to work particularly well partnering valve amplifiers. A Lowther PM6A Hi-Ferric drive unit, centrally mounted on the front baffle, is acoustically coupled to a 15ft folded horn housed in the 51 x 15 x 32in (hwd) cabinet, which is finished in a wide range of natural woods or black lacquer. The Brio retails for £4750 per pair. Thomas Transducers. Tel: (0732) 851408.



Dragged kicking and screaming to Glasgow in the wake of the Linn Tukan review [HFN/RR, July '94], I caught glimpses of several products destined for imminent introduction. Only one of these 'launches' will involve standalone hi-fi; the others will be pitched into the two key growth sectors in audio-related equipment: Home Theatre and multi-room.

Linn has been promoting the concept of multi-room hi-fi for quite a while. By suggesting that the Tukan is suitable for rear-channel use, Linn has now dipped a toe into the Home Theatre market. Shortly, Linn will launch purpose designed speakers for both of these developing markets, which together represent the main focal points of audio-related expansion in the UK.

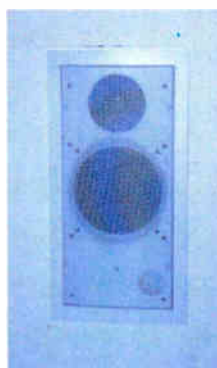
On the Home Theatre front, Linn has taken the inevitable step of developing a centre-channel speaker, the Centrik, to be used in, for example, Dolby Pro Logic installations. Linn's neat solution has been to adapt one of its current hi-fi speakers, the Keilidh, by removing the bottom section and turning it on its side. I spied a large shipment of Centriks destined dealer-wards for assessment, which suggests that Linn's launch date is early Autumn. Linn steadfastly refused to confirm or deny that a subwoofer will follow in due course (but who'd bet against Linn having a true Dolby Surround 5.1 channel Home Theatre system by this time next year?).

During my visit, Linn demonstrated its fully-working multi-room system, with wall-mounted keypads and Knekt zone controllers in place. The latest addition to Linn's multi-room set-up is the Sekrit loudspeaker, available in hung-from-wall or in-wall form, the latter more suitable for those with cavity walls, which aren't exactly the UK norm. Sekrit is a two-way system (though not directly comparable to the Index or Tukan) and it can be powered by a small-ish amp like the Majik-i, or upgraded to full active status.

My primary reason for visiting Glasgow was the prospect of audi-

tioning Linn's first amplifiers to be based on switch mode power supplies. The 'Brilliant' power supply is due to appear in the Kairn pre-amp and Numerik DAC, and current owners of these models will be offered an upgrade kit. In due course, other amplifiers will also be fitted with switch mode supplies but not, for the time being at least, Linn's integrated or power amps.

Linn had prepared a Numerik and a Karik for the purposes of easy comparison.



Gains in certain aspects of performance were easily and repeatedly identifiable. Without question, the switch mode power supply versions had cleaner,

more detailed lower registers and enjoyed a reduction in background noise. The trade-off was a loss of some midband warmth, but this wasn't as consistently obvious as the reduction in hash. Me? I split a handful of demonstration tracks down the middle, preferring the switch mode power supply half the time and the conventional supply for the other half.

One thing's for certain: audiophiles will no longer be able to dismiss switch mode power supplies as computer-world detritus. Linn Products' designs look set to lend this controversial technology an air of serious hi-fi respectability.

Ken Kessler

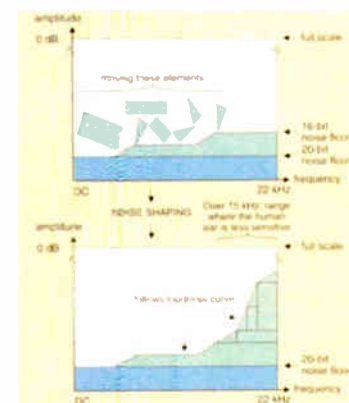
SONY MOVES ON TO 'SECOND GENERATION' SBM

Sony's second generation of Super Bit Mapping technology is now upon us. The arrival of SBM Version 2.2 effectively distances professional from domestic SBM-equipped hardware such as Sony's DTC-60ES DAT recorder.

The K-1203 Super Bit Mapping Processor, featuring Version 2.2, adds a small amount of dither to the input of the digital noise shaping filter. This results, says Sony, in 'a pronounced improvement in spatial positioning and overall transparency'. Sony believes that in this latest incarnation, SBM and associated noise shaping can realise close to the theoretical 120dB dynamic range limit of 20-bit recordings with 16-bit masters, and points out that the improvement 'is particularly noticeable in the critical sub-4kHz frequency range'.

While the K-1203 can process 20-bit or even 24-bit production masters created on a suitable recorder, the benefit of SBM circuitry would be lost processing 16-bit digital masters. As for the DTC-60ES, its SBM processors are accessible only through the DAT recorder's A/D input.

Sony Software Corporation. Tel: 071 629 5555.



Principle of Sony's Super Bit Mapping recording/mastering technology

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'... Stage is the most radical
but best thought-out idea in
CD player design to date'

WHAT HI FI - May 1994

STAGE

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STAGE 1 - integrated cd player £ 449.99

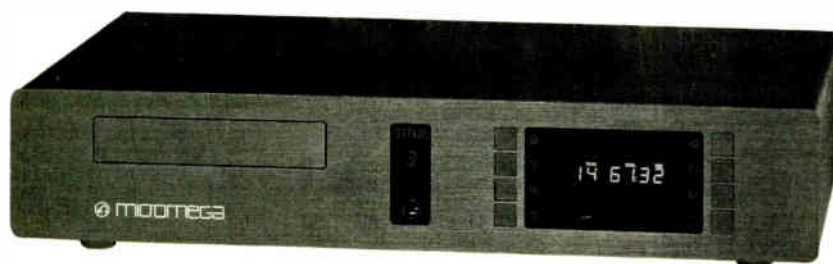
STAGE 2 - integrated cd player £ 599.99

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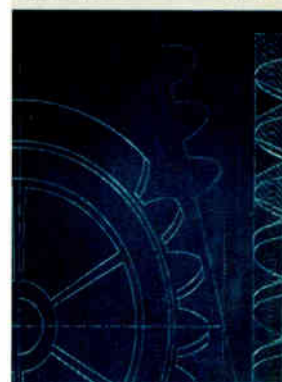


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ALPHA ONE CD PLAYER TAKES ARCAM UNDER £300

Arcam has broken the £300 CD player price barrier for the first time. The Alpha One sounds 'demonstrably better' than competing Far East-

ern imports, according to Arcam's MD John Dawson. Equipped with a Sony three-beam laser pickup, Burr-Brown's latest PCM1710 multi-level delta sigma DAC and fourth order noise shaping, the Arcam One is 'future proofed' through its coax digital output socket.

Another Arcam digital product, the Black Box 500, will be unveiled this summer. Priced at £750, this Digital Audio Control Centre, or DACC, has no fewer than seven digital inputs. Built around a one-bit D/A converter, Black Box 500 can be used with Arcam's Sync Lock equipped Delta 250 CD transport, a £1500 combination claimed to set 'new standards of jitter-free CD sound reproduction'.

Arcam. Tel: (0223) 861550.



Arcam Alpha One CD player (top) and Delta Black Box 500 one-bit D/A converter (above)

PIONEER DOUBLES SAMPLING RATE FOR 'WIDE RANGE CD'

An experimental double-speed, high bit-rate 'super compact disc' has been developed by Pioneer, in partnership with Matsushita Electric. The Wide Range CD record/replay system, also described as Advanced Resolution and Twice-Frequency Sampling (ARTS), was demonstrated at a recent press day, when Pioneer also unveiled new hi-fi and video products [see News story, page 17].

Essentially, it uses the increased data capacity of a CD-ROM format with double-speed drive to provide a higher-quality audio-only storage medium. Wide Range CDs provide a playing time of only 35 minutes, but the signal is encoded with 24-bit resolution at a sampling frequency of 88.2kHz. This provides a frequency response of 0-40kHz, with a theoretical signal-to-noise ratio of 149dB, compared with 0-20kHz and 98dB for conventional 16-bit CD. (Note that only 20-bit replay is available from current A/D converters.) The data format used on the disc is CD-ROM Mode 2 (Yellow Book).

The Wide Range CD continues Pioneer's advocacy of extended high-frequency response as a route to improved fidelity. Last year Pioneer launched its D-07 double-speed 96kHz-sampling DAT recorder, which itself followed the introduction of Legato Link digital-to-analogue conversion strategy (where harmonics above 20kHz are synthesised and added to the original input signal). Pioneer even has an analogue cassette deck able to record and replay up to 30kHz, and also designates its latest low-feedback amplifiers, Wide Range

Although no date could be given for a commercial launch of Wide Range CD players or discs, the demonstration of this format was clearly intended to underline Pioneer's stated commitment to high quality audio and video formats for the future [see 'Comment', page 5].

Pioneer High Fidelity GB Ltd (0753) 789789.

DECCA RIBBONS FROM PRESENCE

Following the news item 'New for old Deccas' ['News', July], we are reminded that replacement tweeter ribbons for the DK30/London, Kelly Mk II and Supertweeter are still available from official London products distributor Presence Audio. Price is £30 per pair. Also available from Presence are the London (Decca) cartridges, made under licence from Decca, including the latest London Jubilee model.

Contact Presence Audio: (0444) 461611.



'UK SOUND' CD FROM DENON

Denon's latest £220 'audiophile' CD player, the DCD-825 is packed with advanced digital and analogue technology, the design said to have been 'honed using UK expertise' and specified at UK board level.

Selected 18-bit Burr Brown PCM61 DACs combine with NPC 8-times oversampling 20-bit digital filters. There are four regulated 12V supplies and a large power transformer for low-noise power supply. For the four stage analogue amplifier, selected OP275 amps, metal film resistors and polystyrene capacitors were chosen for their audio quality.

Top cover contact damping, gold-plated analogue signal sockets and a Display Off control add to the image of a player designed primarily for optimal sound per pound.

Hayden Laboratories. Tel: (0753) 88844.

BRIEFING

ELDA (the European Laserdisc Association) has formed a second industry platform to improve understanding of the format both within hardware and software industries and the consumer market. European Platform for Optical Discs (EPOD) will collect and disseminate home entertainment Optical Disc data with the goal of improving acceptance of laser disc products. The 19 leading manufacturers of ELDA support EPOD. ELDA. Tel: (010 31) 4902 89269.

HARRODS is opening a 23,000 square feet area devoted to selling audio visual hardware and software. Companies such as Linn, B&O, Sony, Philips and Akai will have dedicated demonstration areas alongside sections selling carphones, CDs, tape and videos. Harrods. Tel: 071 730 1234.

LFD is producing a six-way mains distribution socket, based on gold-plated MK sockets internally wired with 30A silver plated copper wire insulated in PTFE. The standard version with 2m of cable retails for £150. Fitted with an LFD HiAmp mains lead, it costs £240. LFD Audio. Tel: (0255) 422533.

MPI Electronic has a new address. MPI Electronic, 13 Weston Road, Guildford, Surrey GU2 6AU. The former Manchester office is now closed. The Guildford telephone number is (0483) 454993.

RUARK Acoustics Ltd has relocated to the following address: Ruark Acoustics Ltd, 59 Tailors Court, Temple Farm Industrial Estate, Southend-on-Sea, Essex SS2 5TH

SONY UK has moved to its new headquarters. The new address is Sony United Kingdom Ltd, The Heights, Brooklands, Weybridge, Surrey KT13 OXW. Tel: (0932) 816000

SZCZEPANSKI Designs is producing a horn stand conversion device capable of generating bass down to 20Hz from small loudspeakers. The idea is to recover wasted energy inside the small speaker cabinet and use it to increase the overall system efficiency. Szczepanski Studio. Tel: (0742) 551731



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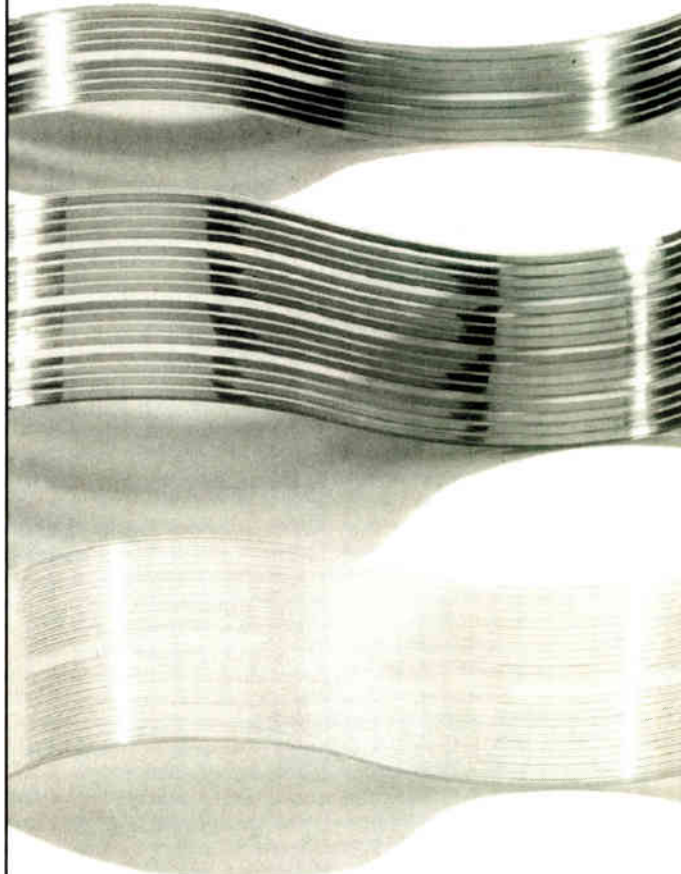
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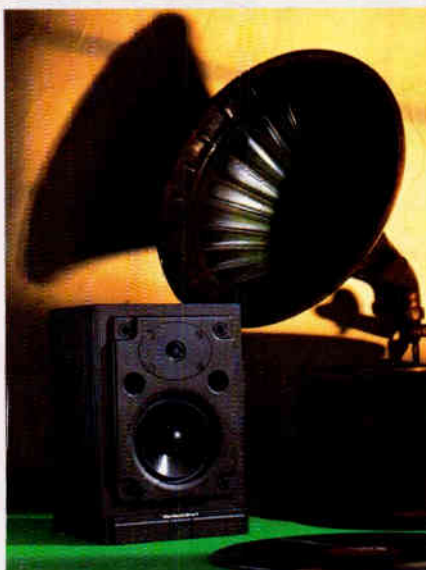
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MORDAUNT-SHORT'S NEW BABY

Having recently won the British Federation of Audio Best Loudspeaker award for its entry level MS10 model Music Series loudspeaker, Mordaunt-Short has added a baby brother, the MS05. Retailing at £110 per pair, the MS05 was originally intended purely for export markets. It shares the Moulded Cone and Surround (MCS) technology of the more expensive Music Series models. The MS05 was designed (with the aid of CAD-CAM) to work optimally when positioned next to a rear wall. Mordaunt-Short. Tel: (0705) 407722.



EVENTS

8-11 SEPTEMBER: *The Hi-Fi Show*, sponsored by HFN/RR. Open to the public 10-11th, Trade only 8-9th. See Show Guide with this issue.

15-19 SEPTEMBER: *The 26th SIM HI-FI* (international Exhibition of Musical Instruments, High Fidelity, Video and Consumer Electronics) will be held at the Milan Fiera. This year will see an enlarged home video sector and an initiative aimed at younger visitors and dedicated to Japanese car and motor production.

20-25 SEPTEMBER: *Live '94 consumer electronics show*, Earls Court One, all levels. Opening hours are 9.30am to 7.30 pm Tuesday, Wednesday and Sunday, extended to 8.00pm on Thursday, Friday and Saturday. Admission £4 for a single adult. Pre-booking (0891) 500103.



CELESTION'S BIRTHDAY LAUNCH

Celestion has celebrated its 70th birthday with the launch of a multi-purpose, lifestyle speaker, one of a series featuring stylish and innovative cabinet designs.

The injection moulded cabinet combines curved faces, a flared bass reflex port and magnetic shielding. Applications range from Home Theatre and computer games to pool-side, boat or even office use. There is a switchable speaker overload protection facility and a choice between matching stands or wall fixing.

Celestion has also introduced a three-strong series AV of speakers, the Little 1 for rear channel application, Centre 2 for centre dialogue use and a powered subwoofer, the CSW. Prices are £149 for the MP1, £99 for the Little 1, £179 for Centre 2 and £299 for CSW.

Celestion International Ltd. Tel: (0473) 723131.



ALLISON'S RDL SPEAKERS ON 'HOME TRIAL'

RDL Acoustics, the new company formed by US speaker designer Roy Allison, will offer its two loudspeaker ranges to UK buyers direct, on a unique 30-day trial basis. The idea is simple: to eliminate sales hype and replace it with unpressured home listening aided by Allison's experience of room acoustics. Every customer will have access to a free copy of a computer programme illustrating the effect of room boundaries on speakers for given circumstances. The RDL (Room Designed Loudspeakers) range is clearly specified for a variety of domestic requirements. The floorstanding FS-1, for example, with front-baffle mounted woofer and tweeter is intended for placement away from walls. The F-1, with top panel mounted woofer, works best close to one wall and away from obstructing surfaces at the sides. Since his departure from Allison Acoustics in 1992, Roy Allison has also developed a number of more conventional speakers, the

RA Labs Black Gold Series. These range from the £80 Micro-Monitors to the £400 Reference 4a. In the 1960s, Roy Allison designed speakers (including the now-revived AR3a) for Acoustic Research, before leaving to found his own company. Edgar Villchur, who was Allison's mentor at Acoustic Research, is an advisor to RDL.

RDL Acoustics Ltd. UK Tel: (0484) 603333.



PIONEER KEEPS PRICES KEEN

New CD players and amplifiers from Pioneer are intended to maintain a strong position in the UK budget separates market. A new 'starter' amplifier, the A203, comes in at £149, while on the CD front, 'Legato Link' D/A conversion is now offered in a £200 player, the PD-S503. At £249, the PD-S703 replaces last year's '702. Both these new models have Pioneer's 'clean laser' pick-up, featuring vibration-proof capacitors in the power supply and Pioneer's 'silent ground' noise filter to prevent high-frequency noise entering the analogue circuit block via the common ground. The '703 also has a 'beefed up' higher-current power supply for the digital circuit block, with claimed improvements in bass impact and treble clarity. The 'UK model' PD-S802 continues unchanged.

As well as new home multi-players using the standard JD-M300 six-disc magazines (the PD-TM3 holds up to three of these), there is a new PD-F100 100-disc 'library' CD player at £599. Also due soon is the N-501F mini-system, containing a 50-plus-one disc player. In a new cassette deck range, Pioneer now has a Dolby S machine retailing at just £199, the CT-S430S.

New Laserdisc players from Pioneer offer greater benefits at lower price points than before. For convenience when playing audio CDs, all models now have a small inset drawer for 5in discs so that the main 12in tray does not have to be extended when loading audio CDs. Base model is now the PAL-only CLD900, at £399; while the £499 CLD950 is the cheapest LD player on the market to offer PAL and NTSC replay; this is also available on the more luxurious CLD1950, which features Pioneer's HQ picture enhancement circuit and has an S-Video output.

Finally, for enthusiasts, the PAL/NTSC-capable CLD2950 (£699) plays both sides of the disc automatically, and will also play old PAL Laservision discs with analogue sound. The CLDM5 multi-player continues at £599. Aside from these stand-alone models, Pioneer claims a first with the inclusion of a PAL/NTSC Laserdisc player in its V600 mini-system, priced at just £1199.

Pioneer High Fidelity GB Ltd. Tel:(0753) 789789

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Here's a sampling of recent articles: ST-70 with Solid-State Regulation, Rebuilding Tube Amps, An Electrostatic Headphone Amp, Greening the ReVox G36, Restore your Scott Tuner, Soft Start for Tubes, 70 Watts of McIntosh Power, Output Transformerless Amp, Vacuum Tube Voltage Regulator plus Vacuum Tube AC Feedback Amps.

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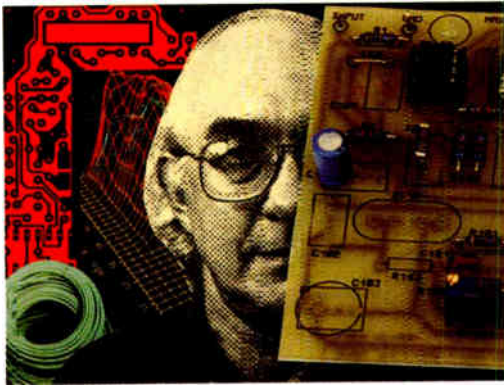
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Sensaura and Q-Sound could be destined to follow that noisy ship in the night, Holophonics, over the horizon into oblivion

Whatever happened to Q-Sound, the phase distortion system that spreads a stereo image wide outside a pair of loudspeakers to create something vaguely similar to binaural headphone stereo? It's now five years since massive hype from Archer Communications of Canada persuaded Polygram to sign for use of the technology.

Polygram's classical music engineers vetoed any use of the system on 'serious' music material, so it was applied only to the pop catalogue. The first release was Madonna's *Immaculate Collection*. This was prone to the technical problem from which no phase distortion system can escape. The wider the stereo shift, the worse the mono compatibility, because the width comes from putting signals in anti-phase and they cancel out when added together.

Why should mono-compatibility matter? Ask Richard Branson who bid for (and now seems to regret winning) the franchise to broadcast rock and music in mono on the Medium Wave AM band. If featured sounds from a recording were to be lost even before they're broadcast, Virgin's AM transmissions would sound worse than they already do.

Polygram promised a whole string of Q-Sound releases to follow Madonna. But the idea sank without trace and Q-Sound is now used mainly to trick up the audio for video games. When talking recently to Polygram representatives about DCC, I asked about Q-Sound, but drew only blank stares.

Roland's RSS system worked in similar fashion, making it as far as an Audio Engineering Society seminar. Doubtless some studios now have an RSS effects box sitting in a rack, ready for musicians or producers who want more distortion.

Before that Hugo Zuccarelli had sailed his Holophonics concept through the industry like a noisy ship in the night.

Last year, B&W started a record label and made an unashamedly 'audiophile' recording of percussionist Airtó Moreira and his band

The Fourth World. This was obviously a new experience for Moreira. Talking in the basement studio at 145 Wardour Street he confided: 'We took two full days to set up the microphones on the drum kit. I am used to recording a whole album in one day'.

Engineer/producer Mark St John spent those two days setting up a Neumann dummy head sphere (with two mics set like ears in a wooden sphere) and the first Calrec Sound-field mic ever made. The aim was to capture the live sound of a Moreira performance, direct onto 24-track analogue tape, without noise reduction and with Q-Sound to spread the image wide.

'We were planning to do something with Dave Gilmore of Pink Floyd, and Holophonics. But it all fell apart because the dummy head man wanted a one per cent royalty. So we're using Q-Sound for Airtó.'

Q-Sound for an audiophile recording? Surely the last thing audiophiles want is deliberate phase distortion? 'We shall not be using Q-Sound the way they did with the Madonna recording. I shall be using the system to make the phase relationship accurate', explained St John.

Press reports on the recording session promised Q-Sound. Moreira said he was waiting with great interest to hear the results. So was I. Well the record came out, and I looked in vain for any reference to Q-Sound on the sleeve note.

Confirms a fax from B&W, 'The album was *not* mastered with Q-

Sound. No-one liked the results!'

Sensaura, the dummy-head-sound-from-speakers system developed for EMI by its Central Research Laboratories in Hayes, looked and sounded more interesting [HFN/RR, January 1994]. Frank Sinatra's *Duets* album won publicity for the system, simply because of Sinatra's name and the musical cuteness of the project. In fact the recording used Sensaura only minimally on the strings of some tracks.

EMI promised to follow through with a series of classical releases, in full-blown Sensaura. That was to be the real acid test. I phoned EMI Records Head Office in mid June 1994 and asked for an update on progress. EMI Classical press office had not heard of Sensaura and after several days hadn't got back to me.

It will be interesting to see which comes first, the return phone call promised by EMI's Classical Music Press Office or the next magic system to add distortion to music in the dubious cause of creating a partial surround effect from two loudspeakers.

Meanwhile...

I bring you news of a truly fascinating offer from EMI. It is buried in the May 1994 issue of the *Elgar Society Journal*.

This rather erudite magazine ends with a little exchange between myself and old sparring partner Richard Abram, with the Society Chairman Andrew Neill putting in his four penn'orth too. It all stems from EMI's decision not to try to create true stereo recordings from ancient discs made by Sir Edward Elgar.

To recap, two discs were often cut at sessions in the '20s and '30s, in case one was faulty. If the machines which cut the discs were fed from different microphones, the discs could now be used as the left and right channels of a stereo CD.

EMI has cancelled its plan on the strength of predictions that there would be no true stereo. For a while it looked as if that was to be the end of the matter, with no-one ever knowing for sure whether or not Elgar's music is there to be heard in stereo or not. The original disc recordings in EMI's vaults, confirms Richard Abram, are now in the public domain. While EMI will not try to recreate stereo from them, Abram says, 'Others are free...to pursue such a project'.

If anyone out there would like to take up the offer, they should contact Andrew Neill c/o the Elgar Society, 'Huntingdon', Orchard Road, Malvern, Worcs WR14 3DA and Richard Abram at EMI Records in Manchester Square.

Barry Fox

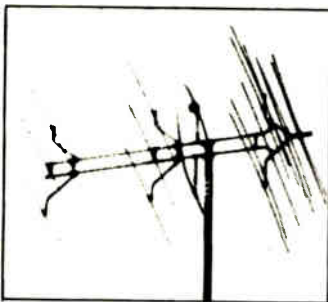


Sensaura: dummy head recording enters the digital era. But where are EMI's promised CD releases?

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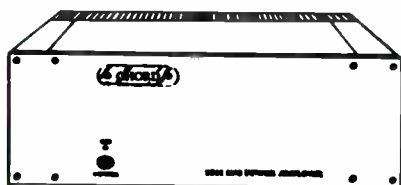
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Starting this month, our new 'Radio' columnist will cover aspects as diverse as spectrum pricing and OB link quality. But first the Proms...

In taking over this column from Trevor Butler, I am acutely aware that he is going to be the proverbial hard act to follow. Trevor set high standards of insight and discrimination, and I don't intend us to lose sight of them if I can help it.

Perhaps I ought to begin by setting out my stall and telling you why I agreed to take over the 'Radio' column in the first place. I fell in love with radio when I was a child, partly because making radios was a satisfyingly creative act which gave access to an engaging and often enthralling end-product. I also noted very early on in life that pictures of Daventry's HF broadcast antennas in books induced pleasant sensations that were, I suspected, associated with what adults meant when they described something as beautiful.

Hearing the 'Voice of America' on a receiver I had made myself, at a forbidden early hour of the morning, brought about a variety of powerful sensations that lasted for days afterwards. And so, all in all, you will not be surprised to hear that I joined the BBC after university and worked at Bush House and BH for a little over eight years. I also became, and remain, a radio amateur, although that hobby has sadly declined in recent years into a parody of the creative, inventive and life-enhancing thing it once was. For much of my time at the BBC I was a studio manager, although I did some announcing on Radio 3 and the World Service and also was involved in various technical areas.

I tell you these things so you will understand that I have a foot in both camps, the engineering and the artistic. As a matter of fact, I don't believe they're mutually exclusive, or even particularly complementary. As a Buddhist would say, they are folds in the same garment. Some of the most creative people I knew in the BBC were technicians and engineers, but in Britain we tend not to value engineering creativity in anything like the same fashion as we value artistic creativity. Which is curious, because both come from the

same unconscious wellsprings. As a side-issue, why do we not tend to value the unconscious, even though Freud and Jung between them showed us 90 years ago that it is where our creative roots are?

So what can you expect from this column? Well, perhaps an appreciation of radio-related creativity in whatever form it appears, together with a degree of technical and aesthetic rigour. Many aspects of radio broadcasting in Britain today bear careful scrutiny; but we live, as the Chinese curse has it, in interesting times, and even state-of-the-art crystal balls tend to have undesirably high noise figures.

Some issues need our urgent attention, and will probably find themselves addressed here at an early date. To take a few at random: spectrum pricing, DAB, the quality of Radio 3 and Classic FM, the strong-signal handling and synthesizer performance of FM tuners, antennas for domestic reception (with particular attention to claimed gain figures), issues around electromagnetic compatibility, musical balances, OB link performance, and so on.

But I should also like to hear from you. What does radio mean to you? What do you expect from it, in artistic terms as well as technical? Does the ability of radio to reach your inner ear, in effect allowing you the psychoanalytic luxury of massive transference, constitute its magic? Or is it just aural wallpaper?

This column was written about a fortnight before the 1994 Proms season opened on 15 July with a performance of Schoenberg's *Gurrelieder*. This titanic score should have given the Group 3 studio managers and engineers an interesting time, to say the least. The BBC Proms 94 guide is available as usual from most bookshops and costs £3.50. The guide notes that since 1994 is the 100th Prom season, the programme of music given in the Queen's Hall on Thursday 6 September 1900 was repeated on Saturday 16 July 1994. The logic of this seemed rather Birtist, although what was on offer sounded intriguing.

My memories of working in the Albert Hall on both sides of the microphone are not especially happy ones; it is a venue in which obtaining a reasonably decent balance is

fairly easy, but obtaining an outstandingly good one is a nightmare, especially where very large orchestral/choral forces are concerned.

By and large the BBC does very well, but listeners to last year's Proms will recall several instances of lopsided or otherwise peculiar balances, unnatural soundstages and limiters somewhere in the programme chain, probably in the NICAM distribution, being hit hard rather too often for comfort. However, no doubt the Prommers will assist the engineers in every way possible, as usual. The channel identification test some years ago was entertaining (Tutti: 'Here is a stereo transmission test'. Stage right: 'Left channel'. Stage left: 'Right channel' and so on. Very confusing if you happen to be the duty announcer listening on stereo headphones!) and no doubt this year will bring variations on games of tennis.

I gather that no particular technical innovations were planned for this year by the Group 3 studio managers; the same 20-bit link between the Albert Hall and Crystal Palace which proved very robust and reliable last year will be implemented again for 1994. The infamous 'Optimod', much loathed by almost all BBC technical staff, will be switched off for all the live broadcasts. Incidentally, there was a chance that the broadcast on 14 August (the world premiere of John Tavener's *The*



The 100th Proms season is set to be a classic. But will the broadcast quality do justice to the programmes?

Apocalypse, commissioned by the BBC) would produce a sound quality noticeably different from usual. If it did, watch this space for an explanation of why...

John Nelson

John Nelson can be contacted via CompuServe (100014,636) or Telecom Gold (83:JNL601)

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Multimedia could sound the death knell for audio-only music recording. Will the 'short attention span' generation crave hi-fi as well as games and video encyclopaedias?

Interest in pure music is dying. By 'pure', I mean one or two channels of sound. No TV monitor, no joystick, nothing behind the listener. You know, music on its own. The reasons are clear: the parlous state of pop, the economy, our education system, generational differences. Today the attention span of most under-20 year olds is slightly shorter than that of a single song. And they need video assistance if they're to listen from start to finish. This horrible, MTV'd destruction of intellect and imagination is a fait accompli. We can no more add IQ points to the intelligence of the average 2Unlimited fan than we can make Serbs love Croats. It's too late to expect a reversal (or, to put it another way, there'll never be a revival for the vinyl LP whatever audiophiles say or do), so it's time the hi-fi community accepted rather than fought the inevitable. And if you think I'm overestimating the mass-market's influence on trends in serious hi-fi, just look around and see how home theatre has been accepted if not quite embraced by the purist manufacturers, retailers and magazines. We can't beat 'em so we'd better join 'em. And immediately, if we're to contain the damage...like protecting the notion of sound quality, no matter what's appended to our systems.

Last month, I reached 'multimedia capability' by converting my computer into what the PC industry wants to be the standalone home entertainment tool of the future: I added a CD-ROM drive. Most importantly, my computer sports a Soundblaster 16 card producing 'stereo, 16-bit digital' sound. Without dipping into the alphabet soup of computerese, I can say that my PC is fast enough to handle most programs, while it contains all that's needed for exploiting the sonics and visuals in current software except for Video CDs, which require the addition of an MPEG video compression/expansion board. (For those who've not been following developments, Video CD is the new CD

standard for compressed video and full-length feature films released on a 5in CD.)

So what does a PC add-on have to do with the salvation of music? Even though it's early days yet (CD-ROM is jerky and slow and the concept of multimedia is young) the path to a tolerable audio/video/gaming/computing compromise has already been signposted. I purchased two of the first pop music multimedia titles, both of which are typical of the way in which sound, text and moving images will be used to combine entertainment with education. (I, too, hate the neologism 'edutainment', but I suppose it's better than the alternative: 'entercation'.) One is the Beatles' *A Hard Day's Night*, the entire feature film plus extras which make it 'interactive', and *Rock 'n' Roll Years: The Fifties*, an elementary introduction to the birth of the genre. (Rock haters mustn't worry: loads of similarly interactive classical CD-ROMs exist, including studies of Dvorak, Schubert, Mozart and others.)

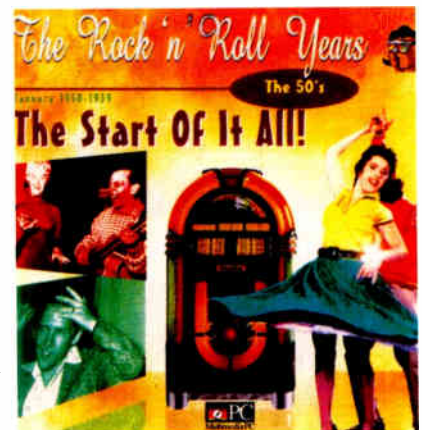
A Hard Day's Night is a blessing and a curse, latterly because it was released too early, prior to the launch of a passable video compression standard. Instead, it uses QuickTime, truly risible Mac-sourced technology. And so to the bottom line: as a way of seeing the film in linear fashion, this is a bad joke — the video tape sells for £5.99. This CD-ROM's images are barely watchable in a tiny 'window'. Expand it and you have the jerkiest, least-fluid movement this side of a kiddies' flicker book. So forget the film, look to the add-ons and you'll see why multimedia could be a boon for audio formatting if a multimedia wedding is inevitable and music-only formats must die...

Using your mouse, you can click on a song title and shoot straight to its location in the movie. Click on a name and you get a biography, eg Wilfred Bramble's; you find yourself reading about *Steptoe and Son*. The disc contains an interview with the director, 166 pages of text including the full script with all the ad-libbing and the scenes which were cut, the prologue to the 1982 re-release, the cinema trailer and more. For cineastes or hardcore Beatlefans, it's the most thorough and enjoyable study of this seminal film, bettering a book or the film on its own because it provides the images, the sounds and the reference info in one fun-to-use format. I just hope that it's re-released using MPEG compression, in which case it'll earn five stars. *Rock 'n' Roll Years: The Fifties* combines sonic and visual snippets to give you a feel for the era. A juke

box appears on screen, each button representing a year from that decade. Click one and you get the US and UK charts for each month, a key song, a bit of film footage, a Trivial Pursuits-style quiz and more. Though no substitute for The Guinness Encyclopedia of Popular Music, it's an ideal way of producing what can be thought of as an interactive equivalent of the BBC TV series, *The Rock 'n' Roll Years*. The remaining 'decades' will follow soon, with the '60s edition in the shops by the time this appears. (And I would not like to be the guy who has to deal with the various licensing arrangements for this series...)

In both cases, the makers have succeeded in marrying sound, vision and interactivity. These CD ROMs cost about the same as a double CD, so it would be crass to carp about price. But I said that we must be on guard; sonically, playback via PC is truly awful. Compression and the on-board 2W amps in sound cards redefine the concept of 'crap'; feeding the output into a Krell KRC just ain't worth it.

Tell a lie: it is worth it. Even with the sorely compromised sonics of a soundcard — still light years beyond the squawking of a PC speaker — the overall benefits can convert a personal computer from a tool with entertainment pretensions into a near-worthy extension of one's hi-fi. And if that isn't a definition of mul-



timedia, albeit in reverse, then I don't know what is. Hi-fi with pictures and interactivity? Isn't that what we've been dreaming about all along?

But what's this in the owner's manual? Remove two jumpers and I can bypass the soundcard's amp? Where's my screwdriver? This PC's coming apart...

A Hard Day's Night retails for £35 and is available from Sofline (Tel: 081 401 1234). *The Rock 'n' Roll Years: The Fifties* which is available from Supervision is priced at £24.99 (Tel: 071 702 9391).

Ken Kessler



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Conceptual Design - Sound Engineering



Attempting to unravel the seeming un-logic of the diverse approaches to today's hi-fi designs, this column looks inside the Black Box*

In this new column, I will discuss and attack technical issues, particularly seeking to clarify widespread public misapprehensions about analogue electronics, sound reproduction and the state of the rationale in general. Some audio enigmas that are wrapped in mysteries will be identified, hosed down, scrutinized and set down clearly. Metaphoric safety helmets should be donned here and now.

For many years, balanced circuitry in professional recording, broadcast and PA equipment has helped reject hums, buzzes and RF hash and garbage, improving sound quality and promoting quiet residuals in bad environments.

PINK FLOYD'S LABYRINTH

Right now, Pink Floyd's labyrinthine, quadraphonic PA system is touring the USA. It's possibly the most complicated touring show on earth, complete with power amps I know well, having been co-designer. At the front of these, and at every other audio port in between the system's kilometres of wiring, good balanced connections are paramount. Without them, ironing out hums and whines would take days each time the system was moved on, and there would be no saleable show.

Only recently (in the past decade) have balanced interfaces begun to appear on domestic equipment. When this began, I considered it a good thing and pioneered perhaps the world's first published designs for balanced moving-coil (1983) and, subsequently, moving-magnet (1988) disc pre-amps. With such low-level transducers, and granted there are almost always some AC (50/60 Hz) power fields in the vicinity of the turntable, they remain a good thing. Certainly it's a universal experience, especially for those who've enjoyed balanced connections, that vinyl replay is otherwise coloured by mains-induced hum including high order harmonics.

The balancing I've espoused uses balanced inputs only, with minimum

parts count. The simplest one op-amp type of balanced input adequately 'decouples' grounds between each item of powered equipment in the chain. That the inter-unit ground voltages with the minimum circuit have only a few volts of play is barely an issue in domestic settings. Assuming reasonable standards and safeguards in the signal wiring/routing, and essentially correct connection of shielding and grounding, then basic balanced inputs with Common Mode Rejections (CMRs) better than -40dB (1/100th) or even -30dB effectively wipe away audible buzzes and/or hash.

PROFESSIONAL BALANCING

In professional equipment of the highest calibre, balancing may be trimmed to reject much harder, sometimes below -120dB (1 millionth) around 50 to 120Hz. Also, balancing is taken the whole way, as balanced inputs are partnered with balanced outputs. Ultimately, each item of equipment becomes self-referring, like a gyroscope. In upmarket mix consoles, the process is taken down a hierarchy, so critical internal sub-circuits are also balanced. Having rather less circuitry, some high end hi-fi makers have taken this to the limit of a 100% balanced signal path - audio linkage through a veritable field of gyroscopes.

Considering urban environments are increasingly beset by RFI (radio frequency interference) pollution, it seems promising that high end hi-fi makers are generally introducing such full balancing of line level connections. In the Orient and USA, balanced connections between high end gear is almost *de rigueur*. A bad sign perhaps, is that more balance-needy disc pre-amps have been forgotten. Another is that balanced standards are wildly divergent; conventional connections remain more robustly compatible. Yet on the surface it all looks good. Like sink cleaner, balancing attacks distortion and wipes away noise.

TILTING AT GYROSCOPES

Having finally gotten around to it, what makers do not mention is that balancing is a chequered card. Critical listeners will probably hear improvements only when there is a bad electrical noise problem, or when wiring and grounding are sub-optimal. If your environment is so bad that balancing positively improves sonics, skip to the final paragraphs. But when there is no such problem, or if it's of borderline significance, the downsides must be wheeled onstage. First, any extensively balanced system naturally dou-

bles the component count. This is likely to damage sonic quality, since the added path is effectively in series with the signal, in the return line, thus violating the cardinal doctrine of the minimum signal path.

The audience was aghast. The Professor lunged forward as a shelf of EEC engineering change order forms cascaded down behind him. 'Balancing that seems but a simple doubling easily gets whipped up into "complexity spiralling" where extra stuff has to be added eventually to make it all hang together'. The professor continued crisply, 'as any engineer will tell you.'

What is almost never mentioned is that the hum and RF rejection promised by balancing can be obtained and even improved upon, by other means. Worse, balancing cancels all (and solely) even-order distortion products. As the distortion spectra of equipment and real musical instruments is always either predominantly even or odd order, but never purely odd, then

the latter will itself be the outcome. Such a strange harmonic structure may be expected to wreck sonic quality if it isn't limited to a fraction of the signal chain. Even in a generously balanced professional setup, under 20% of total signal stages will be balanced.

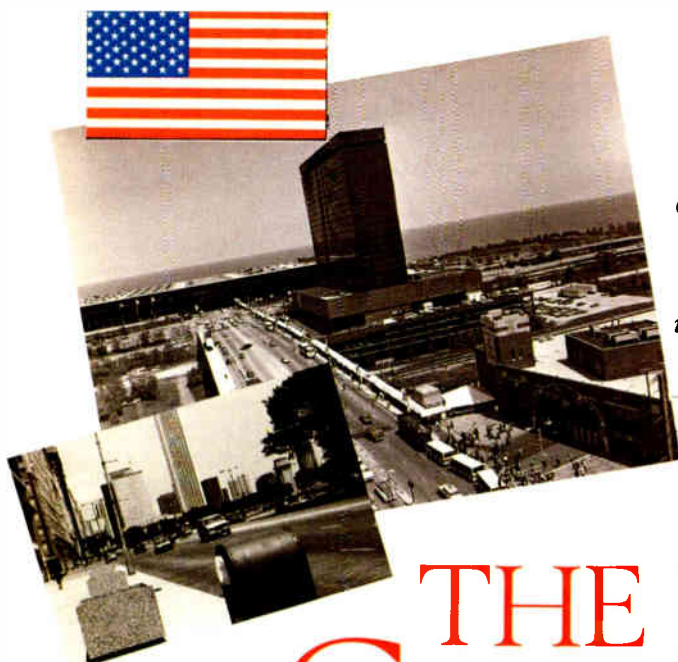
One final caveat: it's not always possible to know for sure in a one off instance, whether balancing is itself ('on balance') good for sonics and your enjoyment or not. If a balanced system has better sonics than the same system when using its unbalanced ins and outs, then you can be fairly certain that balancing (and a bad electrical environment to go with it) is the main or sole cause. But if a balanced setup is only comparable to a different previous setup, then no-one can be sure the extent to which balancing helped.

To be realistic, right now, any situation shown to yield best results is fine. The central message is to be sure whenever you change equipment or location always to re-evaluate balanced vs unbalanced units or variants. And equipment makers 'going balanced' should maintain unbalanced inputs and more especially outputs, as options.

Ben Duncan



*A Box that is Black traditionally symbolises any processing machinery (or some equivalent) whose internal workings are not and/or can't be known or fixed down, but whose input and output (cause and later effect) can be measured or are otherwise known. Many DIY-ers will be familiar with the ensuing game of induction logic.



*Is 1994 a watershed
for serious hi-fi?*

*Chicago CES, the hi-fi
trade's top show, had
its final fling this June*

by KEN KESSLER

THE FINAL CHICAGO

*Audio Physic's
Caldera, made in
Germany, is
1110mm tall and is
intended to be run
tri-wired*



Here we go, 'ere we go, 'ere we go...who'd've thought that this moronic chant would prove a more appropriate soundtrack to Chicago circa late June 1994 than some typically audiophilic sonic spectacular? Sad, but true: the 50th Consumer Electronics Show proved to be the last Summer CES held in the Windy City, and it was overshadowed by a flood of...football supporters? Yes, the World Cup circus reached Chicago at the same time as CES so I wasn't surprised, only saddened, when I heard that dimbulb anthem as I walked past the Kitty O'Shea Bar in the Hilton Hotel on 'the morning after'. It was a sorry end to a run of conventions which — up until four or five years ago — were the most impressive audio gatherings in the world. Now?

Pure history, to be replaced by some Sega-fuelled nonsense completely devoid of any hi-fi content in Philadelphia in 1995. And, no, I'm not exaggerating the sense of loss. Ask Editor Harris to name his fave American city and he'll say 'Chicago' without missing a beat.

Why should any member of the British public mourn what was (despite a couple of lapses) a trade-only show? Even though you might never have attended it, this CES affected us all in more ways than you can imagine. Sure, there were the show reports it engendered in most magazines, a source of news well in advance of the products' reaching the shops. But that's the obvious bit. What Chicago provided, its supremacy now lost entirely to the January show in Las Vegas, was an annual tribal gathering for the industry which makes the toys we so adore. And there's no substitute for the casual meetings which take place all over a typical CES: gossip, collaborations, headhunting, information exchanges, tips, warnings. The mere socialising itself was enough to create a needed sense of community, a spirit that the industry will now have to work that much harder to sustain.

Because the show was moved back by three weeks, it clashed with the stampede of animals who think that soccer playing is man's greatest achievement. And because the USA had no idea whatsoever that soccer (use the word 'football' and Yanks think only of their own be-helmeted, be-padded muscle-bound free-for-all) is the biggest sport on earth, the city couldn't quite cope. Hotel

rooms were at a premium, flights were hard to come by, restaurants overbooked. It made the diminished specialist hi-fi crowd (a mere 64 exhibition rooms instead of typically five times that amount) too depressed to get worked up about any celebratory aspects of this final show. We were all too miserable for a final toast at the Wake By the Lake. There was no communal version of 'Auld Lang Syne'.

To put it into context, The Hi-Fi Show at Heathrow in September always tops 100+ rooms. Now, we can boast that The Hi-Fi Show is larger than the specialist hi-fi section at CES. If there was a sunny side to all of this, it's that the CES-goers seemed positively suave compared with the World Cup followers. Still, your intrepid reporter managed to find enough new items to make the visit worthwhile. The stack of brochures may have been smaller than in the past, but it speaks volumes for the CES stalwarts who did exhibit that the new products were interesting ones. Oh, and the British were there in force. Typically, as at every CES I've ever attended, there was a preponderance of new loudspeakers, even entirely new brands.

Brentworth Sound Lab showed a range of models noteworthy for two hallmarks rather than one. For starters, the complicated enclosures are finished in and damped by one of those granite-like substances, Gibraltar Solid Surfacing, while the active bit itself is a full-range driver. The 6.5in transducer is aided by a mains-powered bass contour module, but the bottom line is that the BSL Type One (containing only one of the full-range drivers) and the BSL Type Three (with a pair of matched full range units) have no crossovers and a permanent form of dynamic loading. **DGX Audio** also uses signal shaping for its \$3000 Digital Deconvolution Audio System, a complete package consisting of the DDL-1 loudspeaker and the patented Digital Deconvolution Processor built into the 100W/channel DDA-1 integrated amplifier. The circuitry provides 'tuned digital filtering' to approximate zero phase angle and linear phase behaviour above 100Hz. The speaker itself is a conventionally styled, three-way, floor-standing system with 1in ferrofluid cooled tweeter, 2in ferrofluid cooled soft dome mid-range and 12in mica/polypropylene coned woofer housed in an MDF cabinet. Additionally, the amplifier will accept digital sources via coaxial and optical digital inputs as well as analogue signals.

Curiously, it was a show rich in tiny speakers, not really something

*From Italy, ART
Dionisio (left), a 2m
tall horn based on
heavily modified
Lowther PM4 driver,
is a high sensitivity
speaker priced in
mid-size Mercedes
territory.*



*The Mirsch Rondo
(right) is available
with five or seven in
woofer*



which appeals to my sizeist countrymen who regard any woofer under 12in as a tweeter. **Monitor Audio**'s latest toddler is the Studio 2, an upscale miniature bearing MA's trademark gold dome tweeter, a metal cone woofer and internal shielding to make it video-safe. **ELAC** showed the cute Merlin, measuring a mere 208x123x282mm (hwd). The bass reflex enclosure, made from a well-damped, aluminium extrusion, houses a 19mm dome tweeter and a 115mm cone woofer. The company also launched a couple of radical tweeter modules, including the 4πPlus II omni-radiating ribbon which can be added to most passive systems, and the ARES JET 'jet emission tweeter'. This driver contains a cone made of folded foils which open and close according to the electrical input, '...inhaling and exhaling the air'.

Rogers' new LS1 is a compact 300x195x195mm (hwd) two-way speaker. Its paper-coned woofer and polymer dome tweeter share the front baffle with a port. Could this imply that near-wall placement is permitted? Price is targeted at under £200 per pair. **Harbeth** showed the production-ready version of the BBC LS5/12A [reviewed in this issue, page 48]. A speaker boasting possibly the most confused birth in hi-fi history, it redefines bastardy. One notable mod is a new grille over the tweeter, and the other refinements involve fine-tuning rather than gross redesigning. **System Audio** introduced the Signature, a two-way mini with proprietary drivers made for the company by VIFA. Selling for around £800 per pair in the UK, the LS3/5A-sized monitor wears its woofer above the tweeter. **Totem** of Canada, maker of a highly regarded mini which competes in the LS3/5A arena, has added the slightly larger but still petite Rokk two-way system to its catalogue. **Celestion's** range now features a number of highly versatile, inexpensive mini speakers with pointed-at-the-back enclosures and multi-purpose mounting hardware rendering them suitable for home theatre, straight hi-fi, desk-top positioning, stand- or wall-mounting and more. The series of interrelated speakers, which also features centre channel, rear-channel and subwoofer models, is called the 'MP Project'; it's primed for a head-on battle with Rock Solids and Bose AM5s.

Mini of the show? No question: **KEF's** 'Raymond Cooke Signature Series' edition of the LS3/5A. At last, the LS3/5A driver manufacturer is producing its own version of the classic BBC monitor. Neat touches to attract the luxu-customer include an engraved plaque at the

back filled with anachrophilic blurb, not a zillion miles removed from the LS3/5A 'Classic' produced by Harbeth for the Far Eastern market a couple of years ago. To follow? Place your bets on a Siggie version of the legendary KEF 104AB.

ProAc unveiled the Response Three Point Five. Slightly larger than the Three, it also has new drivers and a radically reworked cabinet. **Thiel** had a serious hit on its hands with the CS7, a tall floorstander one model from the top of the range. Among the details are a cast concrete baffle weighing 65lb, a newly-designed 12in woofer with aluminium cone and a hernia-inducing weight of 180lb per channel. **Amrita** launched the daftly named Jovian Pillars, hefty floorstanders selling for just under \$3000 per pair, and **Vandersteen** produced the Model Five with built-in 400W bass amp. Most novel is the special circuitry built into the 'Five, to enable the retailer to tune the system's 'Q' on-site to match the speaker to different room characteristics. The styling is a slight departure from familiar Vandersteen territory, with slopes and angles replacing the straight verticals of yore.

Epos introduced the ES25, £1485's worth of smallish floorstander, the drivers consisting of a 25mm dome tweeter, 165mm midrange and a new 200mm woofer designed especially for this model. The cone is made of thermoformed Cobex, there's an integral dust cap and the speaker features a dual rear suspension system to ensure that the excursions front and back are identical. Cable-fetishists should note that the ES25 may be tri-amped or tri-wired.

Mission showed the 752 with refined cosmetic details, the relatively compact floor-standing speaker looking much tidier though the changes are subtle. It's a two-way reflex design, bi-wirable, and the woofer uses new patented membrane technology dubbed 'Aerogel'. The company also added a subwoofer to reinforce its commitment to home theatre. Sister company **Wharfedale**, by the way, is said to be kicking butt in the budget sector in the USA with its Modus Vivendi modules, the company having achieved that most desirable of situations for mass-market brands: acceptance by some of the big Yankee multiples. Is a Queen's Award for Export in the offing?

More floor-standers (*de rigueur* in the USA where small is synonymous with bad) included the **Focus Audio** Reference and Signature Series systems from Canada, the five-drivered **Dzurko Acoustics**



One of Celestion's new multi-purpose, lifestyle loudspeakers, the MP1 (left) has a distinctive enclosure made from moulded polypropylene

Despite recent operational changes, Acoustic Research has resurrected its classic, 1960s design, the AR3a (right)



KEF's Raymond Cooke Signature Series edition of the LS3/5A (left and below) is supplied with engraved plaque

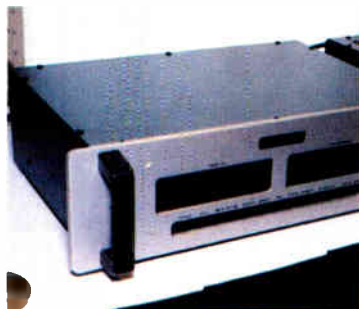


Thiel CS7 (right) has a 65lb cast concrete baffle on which the drivers, including a 12 in aluminium cone woofer are robustly mounted



Component parts of one of ELAC's pair of newly developed ribbon-based tweeters





Krell KPS-20i CD transport with its star-shaped CD clamp (above); and the Audio Research CDT1 CD transport and CD1 CD player (right), both of which are now being shipped



Sonographe SC25 line stage pre-amp from Conrad-Johnson



Counterpoint's new HC-818A surround processor (above)



The DSPro Basic III DAC has Theta's own optical input

Shadow looking great in cherry (and proving to be another back-breaker at 180lb per speaker), a trio of new floor-mounted speakers from KEF and a refreshingly-styled offering from **Merlin** (not to be confused with ELAC's Merlin) notable for thin white stripes on the black baffle. **Audio Physic** of Germany arrived with the 1110mm tall Caldera, which has two woofers on the outside-facing panel, two on the inner-facing panel and one of the front, below an angled tweeter aimed at the ceiling. Tri-wiring is recommended.

Concentric Speaker Technology makes cylindrical speakers too *outré* by half: the Monitor consists of a stand supporting a horizontal cylinder with a mid/bass driver at the front, on top of which is a mini-cylinder bearing a dome tweeter. The Super Bass Monitor is a trash-bin-sized, vertical cylinder. And both are covered entirely in leather. No, make that 'upholstered', because they look positively inviting in the comfy tushy sense, more like big footrests than hi-fi equipment (probably a virtue in the eyes of those who hate boxes). I thought I heard that the set-up cost \$12,000, but the figure just wouldn't register in a brain being forced to embrace the affordable.

Yet another speaker benefitting from an unusual combination of material and shape was the spherical, wooden **Mirsch Rondo**, made in Sweden. It reminded me of the Well-Tempered prototype speaker of a couple of years back, except that the Rondo isn't finished in white. Instead it looks like the deck of a yacht morphed into a wrecking ball. There are two models, both wearing their drivers on the front, behind black grilles, the AF2-42 containing a 7in woofer and 1in dome tweeter, the AF2-32 using the same tweeter but a 5in bass unit. Mirsch also has a more conventional system, the NG18, a cube with a front corner sliced off at an angle.

Speaking of angles, **Meridian** modified the sloping mid/treble modules of the D6000 digital speaker to create a true, floor-standing centre channel speaker designed rather more for audiophiles than for centre channel A/V usage. Meridian first showed three-channel stereo at the last CES, playing music-only material with D6000s and its home theatre-ish subwoofer/centre speaker system. The new one uses the bottom section of a D6000 but with the top module symmetrically shaped instead of sloping to either the right or left as in standard form. This places the drivers in a true vertical array and works better than using one of the

asymmetrical upper modules. Meridian's Bob Stuart pointed out that you could buy a brace of the centre speakers instead of a regular pair of D6000s and use them as left and right speakers if you prefer the look...like a tall WATT/Puppy combo after a strict diet.

Spheric Audio Laboratories' name gives away the game on this line, a series with a basic model consisting of a slim, cylindrical tower with a ball on the top. Actually it's a tweeter inside a glass globe plus a subwoofer and a range of larger cylindrical models without the ball-mounted tweeters. Accents include chrome rings and this styling touch makes them look like 1930s, floor-standing ashtrays, but, hey, retro always sells. The presentation is slick, though, and they score highly for originality, probably setting hearts aflutter in interior designer offices. The company also makes conventional, parallel-sided speakers for the less adventurous.

Genuine retro (and one of the biggest surprises of the show) came in the form of **Acoustic Research's** new AR3a. Yes, the new owners of that most revered name have at last relented and reissued an updated version of one of the original company's greatest models. Anyone over the age of 35 who went into the room and saw that three-way with offset drivers knew immediately what was happening. I wonder how the AR3a will sound with the reissued McIntosh 275? And will there be a 4xa or 2ax to follow?

But all this novelty pales by comparison to Bé Yamamura's latest statement, a 2m tall speaker system dubbed the **ART Dionisio**. Each enclosure is a gigantic cork-sheet-covered horn, the business end containing a Lowther PM4 driver heavily-modified by Yamamura. The PM4 sits in the middle, the throat behind it going up, back and down, eventually terminating in a forward-facing, square opening. As you'd expect, they're sensitive, while the price is up in mid-sized Mercedes territory. The Dionisio also signalled a change in approach for the formerly tube-loyal designer: at CES, the Dionisio being driven by his new solid-state electronics, sporting blond wooden faceplates. Apparently Bé feels he's gone as far as he can with valves. Other ART news is the announcement of a dedicated demonstration facility at Wardour Castle in Wiltshire, opening this month.

Which segues nicely into the valve launches at CES, eh? **Audio Sculpture** of France showed the Paraphrase pre-amp, its perspex lid bearing air vents cut in the shape of the

model's name. The unit uses a monstrous power supply and eight easy-to-find valves. In keeping with the brand image, the units have a granite-look front panel and a wooden enclosure. The company is also boasting a new design approach for its power amps called Enlarged Class A Impulse Amplification, which consists of a triode wired in parallel to a pentode. One works all the time, the other kicking in when extra power is needed. God bless the French...

Nottingham's **Art Audio** introduced a monoblock version of its Quintet, but I didn't catch the rating. The stereo version delivers 15W/channel in triode mode, 25W/channel in pentode, so take it from there. **Melos** unleashed the SHA-GOLD six-input line pre-amp with the Porzilli pot mentioned before in these pages, and the MAX-3D Gold Series processor. It's a single-bit design with an all-tube analogue stage, three digital inputs (one optical and two coaxial) and a volume control for direct driving your power amps.

A brand I seem to be following all over the place, **AudioPrism**, at last introduced a pre-amp to match the gorgeous, gold-finished Debut power amp I've seen at the last few shows. The Mantissa line level pre-amp contains two 6DJ8s and two 12AU7s, fully (FET) regulated power supply, dual stepped volume controls and eye-popping styling. A phono pre-amp is available, too, all-tube and offering RIAA trimming for vintage recordings. **Lamm** launched its own all-tube pre-amp to match the M1.1 and M2.1 power amps (which Trivial Pursuers will recall were once known as Madison Fielding products). The L1, which accepts five sources and two tape decks, provides balanced and single-ended output and employs no feedback. The unit also includes built-in remote on/off switching for LAMM power amps.

Looking good was the **Joule Electra LA-100** all-tube line pre-amp, containing goodies like Cardas internal wiring, MIT caps and Holco resistors. The tube complement consists of a pair each of 5751s, OA2s and 6EM7s, the unit accepts four line sources plus tape and a muting circuit ensures an absence of unwanted thumps. The finish is gold and black 'graphite'. The **Valve Amplification Company** continues to astound me with its prolificacy, this time unveiling the PA 80/80 stereo power amp offering 80W/channel from Golden Dragon KT88s (EL34s or KT66s are options), the PA160 'Universal' monoblock power amp producing

ACCESSORIES, ODDITIES, GOSSIP AND THINGS WHICH FIT IN YOUR POCKET

Audio companies' capacity to overload the bandwagon has been reconfirmed by the appearance of the third CD said to effect some form of system clean-up. **Densen**, the Scandinavian amplifier producer, has issued DeMagic, a CD demagnetising disc with a three-minute track which 'cleans the entire signal path of magnetism which has been built up during playback due to AC leakage...', and you just play it like a normal CD. Perhaps more clever than the disc's duty as demagnetiser is that the CD's booklet serves as the company's 32-page catalogue.

Do books qualify as accessories? Dunno, but I had to find somewhere to plug Robert Harley's *The Complete Guide To High End Audio*, the first decent book on the subject since Laura Dearborn's groundbreaking work. Harley, Consulting Technical Editor of *Stereophile*, has produced a massive, 450-page work dealing with every aspect of hi-fi selection, installation and use. Tips include information on how to read reviews, choose a digital front end, avoid mistakes in home theatre, improve your speakers' performance by 50% in 10 minutes at no cost and much, much more. Expect to see this in the Accessories Club in time for Christmas.

George Kay Audio Labs is now shipping the Small Signal Tube Checker, a nifty portable device which can perform tests on the vast majority of small valves. Mains-driven and supplied in a wooden carrying case, the 'Checker is said to be easy to use and is completely self-contained. I've placed an order for one and will report on it in due course. Suffice to say, it looks like the ultimate tool for optimising the performance of your tube electronics.

Much though I'd love to have included a section on analogue source products, the show yielded too little to justify it. But there were two goodies to which impoverished LP lovers must be alerted: a brace of cheapo phono amps. With more and more pre-amps appearing as line-level-only devices and fewer companies offering phono stages as an option, these could prove to be sanity-savers. **Creek** has issued the nifty little plug-in phono module for its pre-amp as a stand-alone device in its own wee enclosure. It made me think of Rega's headphone adaptor, tiny and befuddled. You want to pick up a couple because they're so cute. The price of this moving magnet phono amp has not yet been established, but expect it to sell for under £100. The other comes from **Audio Alchemy**, best known for its digital wares. Following the overwhelmingly successful DAC-In-The-Box comes the similarly styled and cased VITB. Yep, that's VAC-In-The-Box. And what does VAC signify? 'Vinyl/Analogue Converter', Mark Schifter's 1990s term for a phono stage. This nicely-made unit offers selectable gain and loading and it will sit nicely next to its digital sibling. Price? Let's just say you won't need a mortgage.

Finally, the USA has a new beverage with hi-fi links based on a TV skit about 'gay beer'. Aptly-named Mike Beery approached a brewer to produce the drink, created a marketing concept and promised to make a \$1 to \$1.50 per case donation to various AIDS charities. It appears to be a hit. The name of the beer? Pink Triangle. Which makes it the first brew named after a turntable.

160W from a choice of six types of valves (your option: KT88, KT77, KT66, 6550, EL34 or 6L6GC) and the flagship Renaissance One-Forty Triode Monoblock. The latter will set you back \$19,500 per pair, but you do get pure class A operation from 300Bs, eight transformers feeding 13 power supplies, hard-wiring throughout and the kind of Jules Verne-ish, steam-punk styling that makes a 1930s Rolex look like a Swatch.

There were plenty of solid-state surprises, too, like...**Rogers'** return to amp manufacture! No kidding:



Robert Harley with his *Complete Guide to High End Audio* (above); and Audio Alchemy's VAC-In-The-Box add-on Vinyl/Analogue converter (below)



Creek Audio's OBH-8 phono stage is a spin-off from the P42 pre-amplifier



Rogers is re-entering the amplifier market with the 70W/channel RS4 integrated seen here, as well as a larger pre-power combination



The Resolution Reference 20 D/A converter contains Kimber and Ultra-Analog components



Joule's Electra LA-100 (above), a valve line pre-amp, contains MIT caps and Cardas wiring

Encore's DL-1 system controller (right), complements the Pyramid 1 System in which D/A conversion is carried out as close as possible to the power amplification stage



the stuff even resembles the Rogers electronics of yore, but suitably modernised. I can't wait to get my hands on production units, those at the show being late-stage pre-production samples not yet assessed by Rogers's staff as they were so new. The integrated unit is the 70W/channel RS4, probably selling in the UK for a shade under £600, while the pre/power combination or RS2 pre and RS6 power amp (120W/channel) is targetted at under £2000 for the set. Clean black faceplates with legends, subtle details and a revered British name. Whatever next? Avantic Redux? [Yes! It's coming - Ed] Also on the Rogers stand were the uniquely styled **Higher Fidelity** pre-amps and power amps which I swear I've seen before in my travels. These chunky solid-staters include the 200W/channel Model 228, the monoblock 257W Model 138 and a slew of pre-amps in various configurations. The construction is awe-inspiring, and the products exude a juggernaut presence despite relatively compact dimensions.

Creek, its namesake firmly back in control, showed plenty of equipment including the standalone phono stage described elsewhere (see Accessories' box). That's a by-product of the new P42 pre-amp, which accepts four line sources and two tape decks, offers record-out facility and can be ordered as a self-powered unit or in a form where it derives its mains power from the 50W/channel A42 stereo power amp. Three add-on modules are available for the P42, including the aforementioned m-m phono stage, a supplemental gain stage to provide output for multi-room or bi/tri-amp installations (up to three can be accommodated simultaneously) and a headphone stage, all plugging in computer-card style. And then there's the bridging output module which converts two A42 power amps into 150W monoblocks. The 4240 integrated amp, rated at 40W/channel, also accepts the phono module and connection to an A42 power amp for bi-amping set-ups.

Oritron, which makes a whole range of affordable electronics, showed the existing line-up while taking the brave step of displaying the mock-up front panels of the upcoming units, probably ready for the autumn season. The new look is drop-dead gorgeous, champagne-coloured and cleanly styled, with LED panels displaying functions and providing the aesthetic contrasts. The C-2R (\$995) is a fully remote-controllable, balanced output pre-amp, the D-2 (\$995) a dual 20-bit fully balanced digital processor, the CD-F2 (\$1095) a 20-bit CD player

(with the \$895 CD-F2T transport-only version) and the P-10.2 (\$1195) 100W/channel stereo power amp. There will also be a matching tuner, the TU-F2 (\$495).

Arcam's latest amp isn't some chunk of British minimalism but a full-blown A/V centre, the Theta One Home Cinema Amplifier. This tidy unit provides 4/5 channel Dolby Pro Logic capability, with 3x60W across the front (using Delta 290 power amps) and 2x20W at the rear. All channels can be upgraded with external amps, there's full remote control, on-screen graphics, eight analogue inputs, four composite video inputs and two for S-VHS. **Sim Audio** released the pretty Celeste P-4001 pre-amp, matching its familiar power amp sibling with rounded ends on the case and fascia. It's minimalist, with only balance, volume and record/play source selection, while inside it's IC-free. Options include a phono section and balanced output. **Densen**, the Danish maker of supremely clean-looking electronics also noted for minimalism, build quality and 'big knobs', showed the prototype of the Beat integrated amp. It's rated at 60W/ch, should sell for only £600 in the UK (distributed here by the Chord Company of cable fame) and the official launch is at our show at the Heathrow Ramada Hotel. It's as handsome as its bigger brothers and even in pre-production form looked like it was carved from solid.

Conrad-Johnson's Sonographe line now looks a lot like the dearer tube products, with nearly-identical champagne gold front panels. New models include the SC25 line stage (\$795), the company's first FET switching product, using a J-FET circuit. The unit has five line inputs, and there's an optional \$200 phono stage. The matching power amp is the 125W/channel SA250 (\$995), using bi-polar output devices. **AudioQuest's** Rich Colburn pointed out that if the company's valve products were fitted with Russian tubes, they could change their name to 'Comrade Johnson'.

Remember the confusion which reigned after Mark Levinson left the company which bore his name to start Cello? Here we go again: **Carver** is now a Bob Carver-free zone, while Bob himself has started **The Zeus Project**, with the new Sunfire power amp. Frequency response is said to be DC-to->250kHz, its 300W/channel into 8 ohms becomes 2400W/channel into 1 ohm, and it looks pretty smart with, you guessed it, a meter in the middle of the fascia. The Sunfire name is permanent while Zeus is the name of Bob's dog and therefore

temporary (there's a competition to find a new moniker). And still he used Zeus, probably knowing that the press will apply canine attributes to the amp should it fail to excite. The company he left behind continues with its Lightstar project, the amps featuring, no fooling, a chassis made from extrusions which are then bent to produce the curved corners. As appears to be a company trademark, this unit also sports meters, but they're as low-profile as it gets...like a centimeter high, viewed through wide but shallow windows. As Butthead would say, 'Whoa, cool.'

In the digital domain, **Theta** showed a couple of new converters, including the DS Pro Progeny, entry-level treasure at only \$995 but still containing a programmable filter. Apparently, it's a money-saving version of the Prime II, the same unit but minus the balanced output. At \$2600, there's the new DS Pro Basic III, which offers as an option the single mode input receiver which is, in lay terms, Theta's state-of-the-art, proprietary optical input.

Krell is now shipping the KPS-20i playback system, the company's new top-loading deck with slide-back door, star-shaped clamp, internal suspension, software-based processor, 16-times oversampling /24-bit resolution, plus a whole lot more. It's the first of a series which will also include a transport-only version as well as one with a full-function on-board pre-amp. The unit on show was a stage further along from the sample seen and heard in Miami. Krell also announced its first home theatre products, starting with a five-channel amplifier and to be followed next year by a new pre-amp so mindbogglingly advanced that it will offer every function needed for all types of theatre processing as well as pure audio, via remote. The mock-up looked incredible, but I was told that if I sneaked a photo I'd better stay out of Connecticut. No, make that, 'Don't you even dare fly over Connecticut.' Whew! Let's just say it has the biggest volume knob I've ever seen, a display indicating every function, rows of multi-purpose buttons and styling touches which redefine black-and-grey Krellness...plus a new logo for a newly-named division within the D'Agostino empire. (Which reminds me of another new moniker: **AAHEA**, the Academy For The Advancement of High End Audio, has at last changed its name to something sensible. Think of it now as **AAAT** — the Academy of Audio Arts and Technologies.)

Arcam produced a new entry-level CD player, the Alpha One with



The Valve Amplification Company's Renaissance One-Forty amplifier (top); Art Audic's monoblock Quintet (above); David Chesky (right) whose label has a new test CD; Jörn Thiel (below) speaks to the Academy of Audio Arts and Technologies, formerly AAHEA



a sub £300 price tag, and the Delta Black Box 500 Digital Audio Control Centre. Unwieldy name aside, it sports an on-board DAC, accepts seven digital inputs (two gold-plated BNC, two via RCA coaxials, one AES-EBU and two Toslinks), has remote control operation of volume and source selection and it manages this without looking like some button-festooned nightmare. Also announced is the Delta 290P power amp based on the power amp section of the Delta 290 integrated amp. **Creek**, too, launched an affordable CD spinner, the CD42

SOFTWARE ROUND-UP

Despite the dearth of exhibitors, a few of those who did attend were software vendors. The diminished — by CES standards — stack of promo CDs, though, features some interesting items, especially the latest **Chesky Records** compilation, *Best of Chesky Classics & Jazz and Audiophile Test CD, Vol 3* (JD111). This long-winded title identifies it as containing 11 all-music tracks from artists such as Livingstone Taylor, Ana Caram and Sara K, as well as 34 test items dealing with microphone technique, instrument placement, imaging, dynamics and more. The Cheskys love a party piece; this CD features demonstrations comparing 'dirty' vs clean power and digital vs analogue tape. Special notice goes to the label for managing to get label artist Rebecca Pigeon on network TV during the CES, and for having her CD *The Raven* (JD113) emerge as THE demo disc of the show.

MA Recordings issued two new CD titles in 'digipack'-type cases, Micho Leviev's solo piano work *Man From Plovdiv* (M018A) and *Keys To Talk By* (M019A), featuring Dusan Bogadanovic on acoustic guitar.

Both are issued as MA Recordings 'One Point' discs.

Sheffield Labs' new title at CES was the first of a two-volume set of the Sheffield/Leinsdorf Sessions (10043-2-G) presenting completely remastered editions of his Sheffield Lab recordings with the Los Angeles Philharmonic, on gold CD and using the label's 20+(16 Ultra Matrix Processing.

Audioquest's trio of new titles includes Mokave's *Afrique* (AQ-CD1024), the Edward Simon Group's *Beauty Within* (AQ-CD1025) and the Bruce Katz Band's *Transformation* (AQ-CD1026).

Sadly there was just one sign of continued interest in vinyl at CES. There's no doubt that Classic Records' 'RCA Living Stereo' reissues reported on recently have been embraced by the hi-fi community, living up to Chris Breunig's assurances in 'Classical' [HFN/RR, July '94] that they're worth every penny.

'LIVING STEREO'

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Reiner CSO
- LSC 2222 DEBUSSY Iberia, Reiner CSO
- LSC 1817 OFFENBACH Gaité Parisienne
Fiedler BPO
- LSC 1900 BERLIOZ Symphonie Fantastique
Munch, BSO
- LSC 2201 MUSSORGSKY/RAVEL Pictures at
an Exhibition, Reiner CSO
- LSC 2398 KABALEVSKY The Comedians
Kondrashin RCAVSO
- LSC 2456 LALO Symphonie Espagnole
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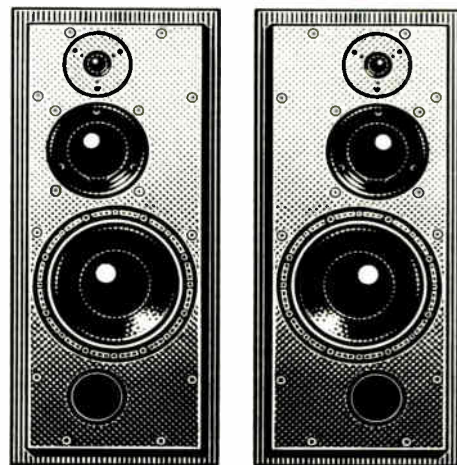
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using a Philips CDM12.4 laser/loader assembly and the Burr-Brown PCM-69, which 'combines the best of' 1-bit and multi-bit technology. **Resolution Audio** introduced the Quantum and Reference 20 Digital Processors, both featuring the UltraAnalog DAC D20400A, Kimber, Wima and Roederstein parts. **Audio Research** is now supplying both the CDT1 transport and the CD1 single-chassis player, while **Camelot** has introduced the Merlin transport and Sir Percival AC power cord...hey, I don't make up these names. (That's three products at one show named after the famed magician; do the words 'dearth' and 'imagination' spring to mind?)

Counterpoint, well into home theatre and now multi-room, unveiled the HC-818 Audio Controller, which provides full control over a main zone, a remote zone, a home theatre set-up, re-routing signals to bypass processors if needed. It can be programmed to remember volume settings, cope with six line sources and two tape decks, interface with custom installations, provide remote switching for local and remote power amps and more. And yet the thing is only one 'U' tall...

Enlightened Audio Designs, known for transports and DACs, introduced its debut home theatre product, the TheatreMaster DAC & Surround Sound Processor. This unit, in addition to accepting digital, analogue and video signals for straight digital conversion or Dolby Pro-Logic processing, can also perform all primary pre-amp functions via infrared remote control. Future compatibility is assured through easy upgrades to 5.1 channel surround, Dolby AC-3 and DTS.

Perhaps the most visually arresting digital product was **Encore's** Pyramid 1 System, which does actually consist of a brace of pyramids capped with lights which change colour according to function. The system utilises something called Split Data Interface technology, allowing D-to-A conversion as close as possible to the amplifiers (in a monoblock set-up). Digital data is fed directly to each pyramid unit located at each amplifier, thus reducing analogue interconnect lengths at the amp input. The system consists of the two remotely located pyramids and the DL1 central controller, which can accommodate all manner of digital inputs (AES/EBU, Toslink, coax, etc), routing the digital signals to the pyramids via balanced coax or glass. (Analogue signals can also be fed to the controller, bypassing the pyramids.) Among the system's features are ultra-low jitter using UltraAnalog, NPC and Scientific

Conversions devices, auto-balance reset, automatic adjustment of the intensity of the LED indicators according to ambient light in the listening area, 32 steps of volume control per channel, interfacing for special features with future Encore products, auto mute circuitry, custom configuration of input types and more. And I thought Encore made tube gear...

Marantz wowed me with a truly watchable pocket-sized LCD TV and a clever CD-based mini-system called 'The Arch'. This spacey package looks like something Conran might have commissioned for Quaglino's, its curved centre section (the arch of the name) bearing no visible controls, California walnut accents, a motorized hatch exposing a 6-CD multi-disc player, AM/FM tuner and 'mood lamps' underneath the central unit. OK, OK, so it reeks of B&O-ness, but it was still pretty refreshing for a secondary system. But the most truly mouthwatering new product of all wasn't even at the show, except as a computer-generated image.

Bo Christensen, late of Primare, has formed a new company called **Zapp Zero Corporation**. I can only assume the company name doesn't sound quite so daft to the Danes. Anyway, Bo handed me a pair of colour transparencies, one with an impression of the forthcoming ZZ One Reference Integrated Amplifier, the other of the ZZ Two Reference CD Transport. The styling is as far in advance of the rest of the industry, as was the original Primare stuff of a few years back, while the prices are in the 'Under £3000' area. The integrated amp features only source select and volume rotaries, plus tiny toggles for functions like monitor, mute and standby, while the heat sinks are chimney-like holes along the sides. The CD transport is a top-loader with visible puck (like the Primare 204), and top-mounted toggle switches. A DAC will follow, with separate pre- and power amps mooted for the future. Good luck, Bo!

The last thoughts from Chicago come from a cabbie, not a show-goer. On the way to dinner, I asked the driver what he thought about the end of CES in Chicago and the arrival of soccer. He said that football supporters were tight-fisted, dull, walked everywhere and stayed in their hotel rooms. So at least one Chicagoan will miss us. ♣



Bob Carver is no longer associated with the company whose amps (above) bear his name

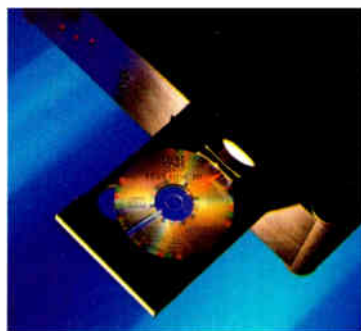


Marantz showed an LCD TV (above) and a CD-based mini-system, The Arch, whose name describes its shape



Zapp Zero Two Reference CD transport (above, left); and ZZ Reference Integrated amplifier (below, left)





SIMPLY THE BEST

*The world's greatest
single box CD player?
Wadia 16 may be even
better, since it's also a
digital pre-amp*

by MARTIN COLLOMS

It's only by surveying the array of buttons on the infra red linked remote control handset that the extent of this machine's capabilities can be gauged

The US home market has such strength in depth that it can easily support a burgeoning digital audio sector. Any competently run company is capable of sustained expansion founded on a solid infrastructure in which both advanced research, and the development of exciting, often high technology products play a crucial role.

The Wadia Digital Corporation is one such company. Wadia digital products are distinguished by the nature of their digital filter software or programme code, which is executed by DSP (digital signal processor or computer), in contrast to the off-the-shelf, one chip digital filters used by the bulk of the industry. That is not to say that excellent results cannot be achieved with a standard filter, as the Levinson Model 30 decoder exemplifies. But Wadia's ability to write its own filter software gives it the freedom to fine tune the balance between filter rates, the placement and degree of spurious signals beyond the audible range and the transient response at the edge of audibility. Digital audio requires a filter to block out signals above 20kHz, and just how that block is achieved affects many

aspects of the reproduced sound in the audible range below.

In the case of Wadia, the current filter software, called Digimaster, is held on EPROM IC chips which may be exchanged as and when superior filter designs emerge. This is rather like exchanging the engine's electronic management chip in a car to alter or improve its performance. In digital audio terms the DSP core is the 'engine'.

A recent advance in DSP has been the development of a high quality, remote volume control operating in the digital domain, the advantage of which is that digital source components can be connected directly to a power amplifier, bypassing the pre-amp, thereby eliminating a potential source of fidelity loss. The Accuphase DP-70-V was a fairly primitive example. More recently the PS Audio Reference Link digital decoder/pre-amp [HFN/RR, March 1994] and Wadia 7/9 CD transport/DAC [HFN/RR, November 1993] show how far this technology has progressed.

Now, with the Wadia 16, we have a one-box CD player/digital pre-amp. This large bluff unit is presented in the characteristic Wadia brushed satin black anodised alloy finish and looks deceptively simple. The fascia carries only two controls: drawer 'open/close' and 'play'. Only by surveying the array of buttons on the infra red linked remote control handset can the extent of this machine's capabilities be gauged. Apart from allowing selection of 'open-close', 'programmed play', 'normal' and 'A/B phase repeat', the control has time display, indexing, and 'auto space' options, the latter an aid to cassette dubbing and a ten key numeric pad for track selection and programming. None of these controls is out of the ordinary for a full function CD player.

But then we come to the digital system controls. These comprise 'input', which controls selection of the chosen digital source; 'mute', which instantly reduces level to inaudibility; 'absolute phase invert' and 'display on/off', two options for golden-eared audiophiles; and finally the digital volume control. No balance control is included.

Although the 16 is a fully fledged CD player, it can be used purely as a high performance CD transport. It is equipped with four outputs: glass and plastic optical; and coax and AES/EBU balanced electrical. On the digital receive side, the same

four input options supplement the internal CD transport itself.

An outboard ADC for existing analogue signals may be connected, for example via the AT & T glass optical input. A suitable ADC would be the new Wadia 17, encoding at a specified 20-bit resolution and accepting up to four analogue inputs. A DCC or satellite signal can be linked via the Toslink terminal. A professional DAT machine can be hooked in via the 16's AES balanced terminal.

The digital input switching facility means that the 16 is more than a CD player. It's also a digital 'pre-amp'. In this context the volume control is crucial. Indeed it is likely to be the most used facility. Covering a 50dB range in 100, 0.5dB steps, the control effectively adjusts output level in 6dB steps from a 4V maximum in balanced or unbalanced mode. A crude visual display of volume setting is given by a vertical row of LEDs. (On Wadia's next version I would like to see a large numeric read out, perhaps temporarily accessing the main transport display during volume setting.)

The 16 is heavy and inert, thanks to its semi-solid alloy case. To get the best sound, metal cone feet are supplied and for ultra hard surfaces, softer facings are provided. Attention to system matching and installation detail pays handsome dividends with any equipment of this calibre. The power switch is on the rear panel, which encourages users to leave the unit powered up for optimum performance, as Wadia intended, except where long periods of inactivity are envisaged.

TECHNOLOGY

The Wadia 16 contains a customised TEAC VRDS-C Mk3 transport at the heart of the machine. It's the latest in a series which Wadia has used successfully from this source. On performance grounds it is classed between the P25 and P500 TEAC players. A low resonance bridge marks the transport apart from other designs. Recent revisions to the clamp include a cast resin structure replacing the older, formed sheet metal type. The 16's transport quality is approaching that of the top of the line P2S fitted to the reference Wadia 7.

The ultra rigid, casework and conical feet couplers of the 16 provide a clean, high inertia platform for the transport. The laser pickup is a three beam design mounted on a noiseless linear motor sled drive.

Two, well sized toroidal transformers are fitted, one for the transport and less critical digital section, the other for the digital audio and

CD PLAYERS





Wadia fans will not be disappointed by the 16's transparency which is truly state-of-the-art. I swear it compares with the reference standard set by the 7/9

analogue related circuitry. As might be expected in this class of equipment, extensive local regulation is used throughout.

A powerful series of digital buffers provides clean SPDIF data at the four output terminals (both optical and electrical).

As regards the signal processing, the core DSP is the STAR SPROC, a new generation, high speed 24-bit computing engine. The proprietary 'Digimaster' filter software is held in two upgradeable EPROMs.

An oversampling rate of 2x is present in the hardware section plus the equivalent of 16x oversampling in the software, giving an overall output rate of 32x. Such a high rate enables the use of simplified analogue output filters and can thus contribute to signal transparency.

Four Burr-Brown PCM1702 DACs are used in current output mode, two per channel in a differential arrangement providing close on 21-bit replay resolution. Current to voltage conversion is carried out by the Burr Brown OPA606 IC, while the quarter ampere power buffers Wadia has chosen to use in the 16 are zero feedback BUF 634 monolithics. The balanced outputs are the 'direct' mode with a simple LC filter present at the output. For the unbalanced outputs the main signals are summed in a further OPA606 for full data resolution, feedback connected to another power buffer. These 'follower' type buffers have an extraordinary 2,000V/usec slew rate, for what it's worth. For computer buffs the internal processing rate is equivalent to a very high 80 mips; the main digital audio highway, which includes SPDIF, is 24-bit rated, while the math is computed to 56-bit resolution, in specific a processing headroom of 336dB.

SOUND QUALITY

The Wadia 16 was plugged directly into power amplifiers via balanced van den Hul 'The Second' cables. A Krell KSA200-S and Meridian 605 were both used to drive Wilson WATT 3/Puppy 2 speakers. Auxiliary speakers included the Quad ESL63 and the Monitor Audio Studio 50s. The 16 was also used via an ARC LS7 pre-amplifier in balanced mode, a combination I found to be very effective.

CD sources available for comparison included the Accuphase DP-70V, the Sonic Frontiers SFD2 and the Orelle DA180. I also made reference to the Levinson 30/31, Wadia 7/9 and Krell MD10-64x high end, audiophile quality two-box CD players.

I first heard the Wadia 16 briefly before its official UK trade launch. Initial results were favourable. This review concentrates on a unit drawn from the first serial production run. A heat sink fitted to the production processor protected it from overheating, the cause of audible clipping in the early sample which I used it at the outset of the review. The production 16 sounded as good as the first time I'd heard the early sample.

I have, however, one word of caution. In unbalanced mode, the 16 generated a mighty bang if switched off, or if the power cord was pulled; there is no hard muting on the output for switch off, which seems a surprising omission at this price level. In balanced output mode the turn off transient was itself balanced and the effect less severe.

While on this subject, listening tests did establish that the balanced and unbalanced outputs sounded significantly different. The unbalanced signal had a touch of hardness and digital 'brightness' when judged in this elevated territory while the balanced output had an excellent tonal quality, and a very good dynamic quality, something of a Wadia trademark, I've found.

Wadia fans will not be disappointed by the 16's transparency which is truly state-of-the-art. I swear it compares directly with the reference standard set by the 7/9 combination! When you first hear such sound stage depth and crystalline clarity it makes you think again about the entire performance boundaries of the CD medium. That superb clarity and resolution was a continuing reward throughout all the time I was working with the Wadia 16. Sound stage width was also first rate, with excellent focus and very, very good perspectives. The stereo image was highly stable, and undisturbed by inharmonic noises, audi-

ble distortion or spectral imbalances.

The sound was very pure and this quality together with an 'open' neutrality, was evident throughout the frequency range. Resolution was also very good, so much so that some references appeared, by comparison, to sound 'foggy' in the bass and 'muzzy' in the treble. The Wadia 16 enabled sparkling, articulate and highly resolved treble, revealing unsuspected textures and detail at high frequencies.

Firm and well extended, the bass showed very good slam and speed. In absolute terms there was some restraint to rhythm and timing aspects, but it nonetheless compared very well with the audiophile references in this area. Fine dynamics, clarity and grip enhanced the sense of listener involvement. Indeed the 16 drew ahead of the two-box references in terms of its portrayal of pace and timing.

In addition the 16 had excellent low level resolution where sustained notes, open guitar strings and the like showed an uncanny accuracy. The sense of atmosphere engendered by precise detailing of note decay, the preservation of harmonic detail, and good timing was remarkable.

Time and again it was during the quiet passages that it showed its true strength: a level of refinement and clarity which will bring more out of your favourite recordings.

The long-term HFN/RR comparison one box player is the Accuphase DP-70V has a score of 30 to 34 depending on how it is used. The Wadia 16 exceeded this handsomely, achieving a score of 46 points in balanced mode and 43 points in unbalanced mode.

It was abundantly clear that after several years, the Accuphase DP-70V has at last been displaced as Reference one box CDP, and not by a small margin.

The above assessment refers predominantly to the 16 used in 'balanced' output mode as a CD player. But tests were also carried out on the 16's other functions - as a digital CD transport; as a digital control unit and decoder processor; and finally as the vital digital volume control. Taking the last first, the 16 was found to be similar to the Wadia 9 decoder despite its somewhat smaller control range of 50dB in 100 x 0.5dB high resolution steps; the range augmented by the user control of output gain setting to help level match the power amp and system. Most importantly, there was little variation in sound quality or noise floor with level setting, confirming its excellent technical design. It was transparent throughout its range, unlike the digital volume con-

trol of the Accuphase DP70-V.

As a DAC, the 16 was effective when fed a wide range of digital signals, delivering the highest quality I have as yet heard from DAT and satellite sources. You could connect a budget CD player and still enjoy much of the 16's replay quality.

Finally I found it set a very high standard as a digital transport, close to the top references including the Wadia 7. It was characterised by clean clarity, strong and open extended bass and transparent, high definition treble. The sound was strong and dynamic. Clearly the transport provides a solid foundation for the 16 as a CD player.

CONCLUSION

The Wadia 16 justly takes the title Reference Single Box CDP. Its performance is absolutely first rate. As for an assessment of the 16 in value for money terms, its considerable versatility as a digital control centre must be taken into account. It has four input and output selections including two in the costly glass optical format. As a digital source it is clearly a high grade transport and likewise, its digital decoding function is extremely good. And then there is the high resolution digital volume control which makes the 16 a digital pre-amp, allowing direct, low loss connection to power amps.

The 16's sound quality places it at the leading edge, beyond which only small improvements can be expected, even for very large additional expenditure. If you heard the 16 you might wonder how more expensive flagships can be justified.

On the debit side the remote handset buttons could have been laid out much better and I feel that the remote infra red signal should be more powerful. The handset could also be more substantially built considering the price. While I'm on this subject, a better display of volume settings would be welcome, plus a couple more front panel controls, say for volume and input selection. After all, these are major facilities! And then there is that switch off thump!

The 16's lab performance was exemplary: accuracy was high, resolution and dynamic range, excellent. Very powerful audio output buffers ensure excellent system compatibility. One minor concern was a moderate level of low order 'analogue' distortion near full output.

The 16's very fine sound quality is both memorable and unmistakable. In the context of high end two-box models the 16 is something of an audiophile bargain. Indeed in the 16's sense of ease, purity and coherence it actually outperforms the bigger flagships. ✓

WADIA 16

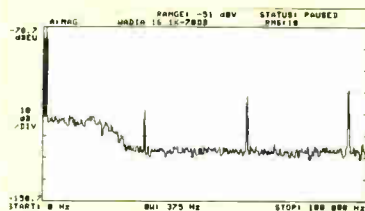


Fig 1. Wadia 16: spuriæ up to 100kHz associated with 1kHz tone at -70dB

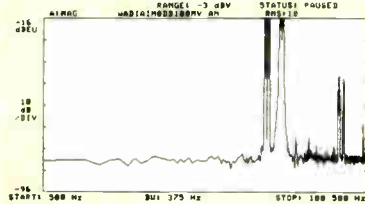


Fig 2. Wadia 16: intermodulation spuriæ, 19kHz 20kHz tones at 100mV

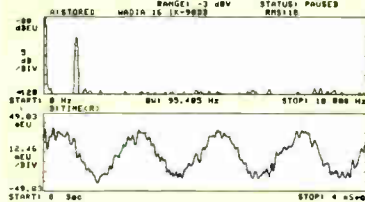


Fig 3. Wadia 16: dithered 1kHz sinewave at -90dB, with distortion spectrum above

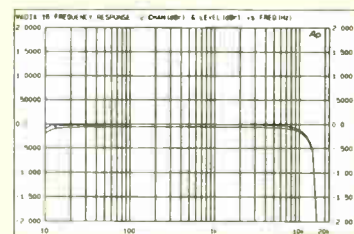


Fig 4. Wadia 16: frequency response (vertical scale 0.5dB/div). Note the characteristic, slightly early treble rolloff

Test results	Wadia 16		
	20Hz	1kHz	20kHz
Channel balance (dB)	0.05	0.04	0.04
Stereo separation (dB)	97	133/139	118
Channel phase Difference (dB)	0°	0°	0°
THD at 0dB	-50.5	-50.5	-50
THD at -10dB		-56	
THD at -70dB		-52	
Intermod 19/20kHz 0dB		-75	
Intermod 19/20kHz -10dB		-76	
Frequency response L/R (dB)	-0.01/-0.02	-2.66/2.70	
Signal to noise (dB)			
Distortion & Noise De-emphasis (error in dB)*	0.05	0.06	1.92
Output level,0dB	4.06V (6.15dB)		
Output impedance	10hm(unbalanced); 18ohm(balanced)		
Spuriae to 100kHz (dB)*	-99		
Linearity error at -90dB, L/R	0.6/0.6		
Track access time (to track 15)	2secs		
Error correction	2secs capability 0.6mm gap		
Mechanical noise	very low		
Dimensions (whd, mm)	430 x 140 x 406		
Typical price (inc VAT)	£7375		
* worse channel			

LAB REPORT

Both balanced and unbalanced output level measured exactly 4V, which is +6dB above the nominal reference level. An internal adjustment allowed the outputs to be set to a lower 2V level if desired (even greater reduction is in fact possible). The unbalanced output impedance was amazingly low at 1 ohm, and headphones could be driven easily! Channel separation was very high, measuring better than 97dB in the bass, 135dB plus at 1kHz and 118dB at 10kHz. No interchannel phase difference was present and the output was essentially linear phase with low levels of ringing or overshoot.

Full modulation white noise showed no signs of overflow or premature digital processor clipping.

De-emphasis was accurate within 0.08dB of the main response. As usual, that was very uniform, virtually DC to 15kHz, above which the alias filter came in, a little earlier than the usual 20.5kHz, in this case, -3dB at 10.5kHz and -0.5dB at 14.5kHz, [Fig 4].

Very good signal to noise ratios were achieved, with 106dB unweighted, 103dB CCIR (1kHz) weighted. Track access was fast at 2 seconds to 'test track 15', and the unit was well protected against shock and vibration. Mechanical noise and hum levels were very low. The error gap protection was barely average at 0.6mm which, while well above the official specification,

was poorer than for many modern examples. In practice, however, semi-damaged records were played without problems. Overall 'playability' was considered fine.

At full level, 4V, the total harmonic distortion was higher than expected at 0.33%, -50dB. (Whether it matters or not is debatable, the usual result is nearer -90dB or 0.0033%.) In this case, the distortion reduced progressively with level.

With a full modulation digital signal, the noise and distortion could reach as low as -105dB at 0.05V audio output. The distortion was low order and of a relatively innocuous analogue type, rising smoothly with increasing level, the sort of thing you would expect from a high power, zero feedback output buffer. At 1.0V output the distortion was 0.15% or so at normal listening levels this distortion was considered inconsequential.

(Remember that the buffers concerned follow the volume control.) The full level high frequency intermodulation results were only 'good' on paper at -76dB for the two levels. This turned out to be an insignificant analogue effect since, with the digital volume reset to a 100mV output the 16 did not exhibit the expected loss in resolution. Instead the result was a fine -90dB of difference tone [Fig 2]. Note the upper 'IM' spuriæ around 24kHz which were rather poorer than usual at -14dB. Such signals can

react unpredictably with some power amplifiers.

At lower signal levels the distortion was extremely low with the spectrogram for -70dB 1kHz dithered showing no harmonic distortion whatsoever [Fig 1]. The high frequency rolloff was gradual at -10dB, 25kHz, a feature of the zero overshoot filtering.

Low level linearity was excellent, within 0.65dB at -90dB, well matched between channels and the excellent dynamic range allowed for a near textbook recovery of the -90dB low level dithered sine wave. A measure of the overall low level linearity can be seen from the zero visible distortion for the -90dB tone right down to the -120dB analysed noise floor [Fig 3].

A practical dynamic range of 110dB is possible, just right for direct connection to your power amplifier.

The 16's linearity performance was excellent, within +/-0.8dB, all the way down to -115dB below which measurement noise intruded.

RF products were controlled pretty well, but there was some chassis leakage due to EMC counter measures, and good audio system grounding was necessary to obtain the quietest result for listening and measurement. No significant DC offset was present at any audio output.

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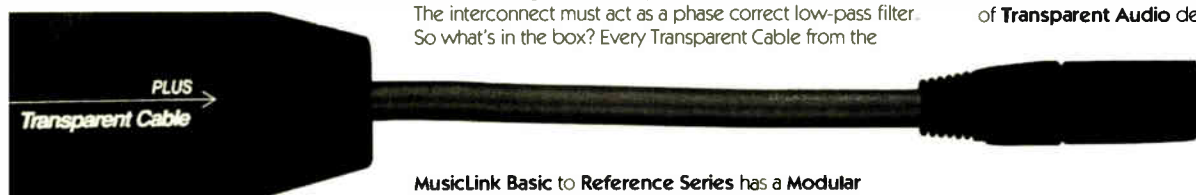
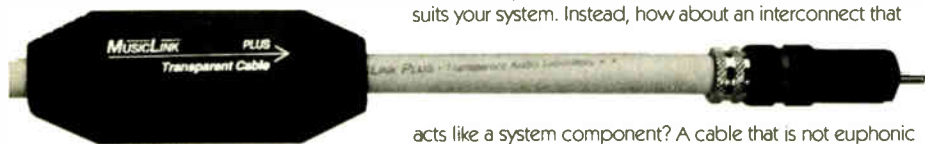
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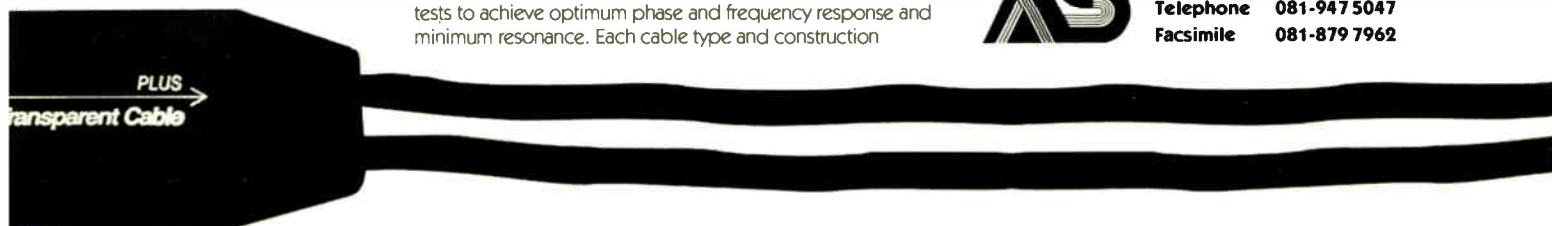
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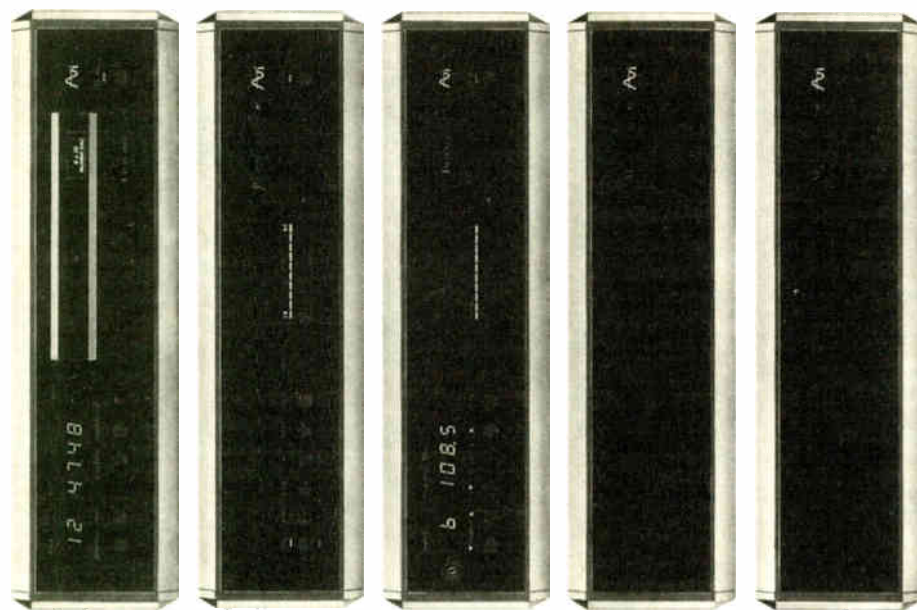
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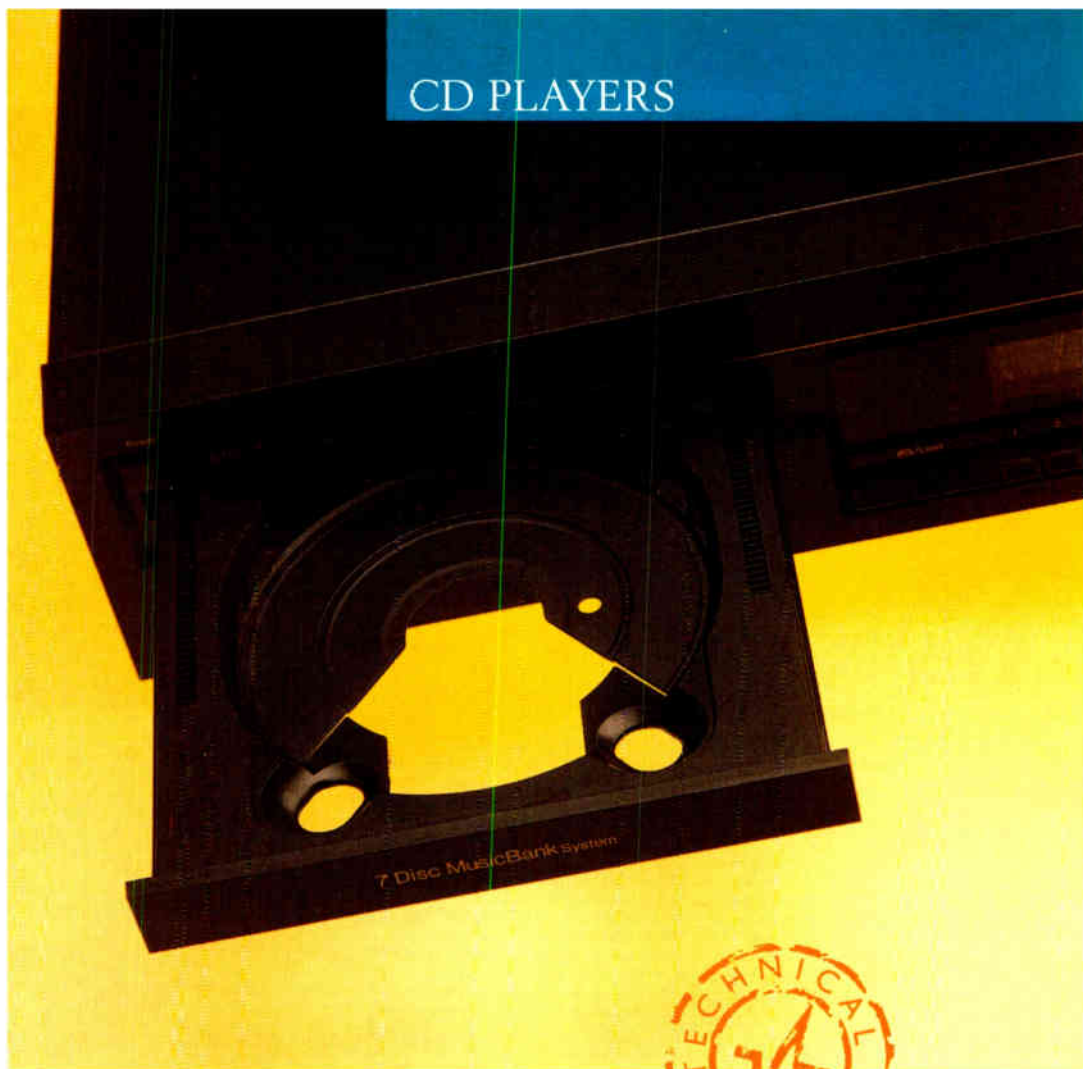


This smarter-than-average multi-player can swallow seven discs at a sitting, while promising better-than-average sound

by PETER J COMEAU

Multi-changer CD players from the Far East are deluging the UK. Although most seem destined for use in the midi- or stack systems there are a few that will make their way into separates systems.

Originally it was thought that the three-disc player (like Kodak's PCD5865 PhotoCD player, reviewed in *HFN/RR*, March '93, 'Home Theatre') would satisfy the market. Surely, close on four hours of continuous music is enough for one sitting! But it seems that the consumer would like to make a selection across the tracks of half a dozen discs, and this Nakamichi can



NAKAMICHI MB-4S

swallow seven CDs at once. The MusicBank idea has been around for a while (the Nakamichi CD Player 2 was reviewed by SH in February 1991), but with this new model it is claimed that, at last, you can combine multi-play facilities with good sound quality.

Compared with the revolving-tray type of disc changer, Nakamichi's MusicBank mechanism seems like a conjuring trick. Press the Load button and a standard drawer flies open. Press Load again and the disc is swallowed. To load a disc in another slot, you press one of the seven numbered buttons under the display followed by the Load button, and the empty tray opens to accept the disc. Carry on with this routine until all discs are loaded. To replace any one disc, just select its number and eject and load.

If you use the shorter-play 3in CD singles, note that these can only be loaded into the first slot. Try to load one elsewhere in the disc bank, and the CD may become stuck: it certainly won't play. As well as the usual transport functions, two fur-

ther keys are provided to move up and down between discs. You can program up to 50 tracks from among the discs; switching between tracks on different discs takes just 10 seconds. Changing discs in the mechanism causes some mild slotting in and out noises, but otherwise there is little clue as to the complex internal juggling that is going on.

The MB-4s is ideal for use at dinner parties. As well as the obvious lengthy extension and changes of musical diet that the player can offer throughout the evening, with a random selection from a possible eight and a half hours of playing time, you can break the ice with the Nakamichi's party trick of producing one disc after another from its loading tray. Those not in the know will consider this impressive technological magic!

TECHNOLOGY

At the heart of the MB-4s is a large, black, plastic box containing the MusicBank. After a disc has been loaded from the tray it is slotted into its allotted place in the MusicBank

where it remains until called for. Pressing play shoots the disc horizontally into the player mechanism where the chassis containing the rack and pinion laser head sled and drive motor hinges upwards. An extension to the drive motor spindle locates the CD centre hole and joggles the disc into position. From there on the mechanism behaves just like any other CD player.

Each disc is allocated a number based upon the key you press when loading, and a square surrounds this number on the bright orange display to show a disc is occupying that slot. Other than this there is no indication as to what you have inside the MusicBank. It would be really helpful if an adaptation of Philips FTS system could have been installed which 'recognised' discs as you slotted them in and allowed you to enter an alphanumeric identifier. As it is I had to leave the jewel cases on top of the machine in the one to seven order just so I could recollect what was in there!

Other parts of the display show the disc number that is ready for

The player exhibited an excellent sense of timing, tempting listeners to strum imaginary guitars or indulge in fits of bogus baton waving in front of invisible orchestras

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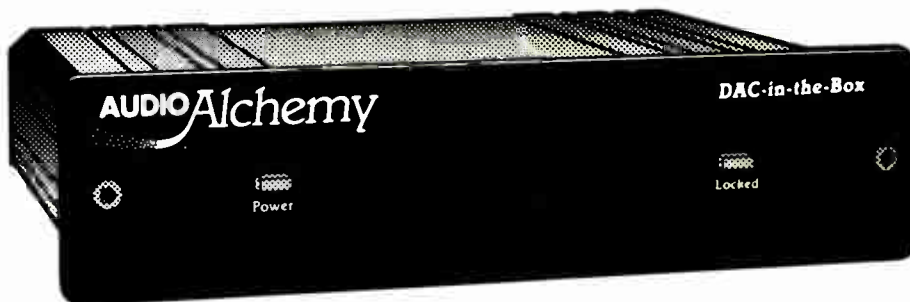
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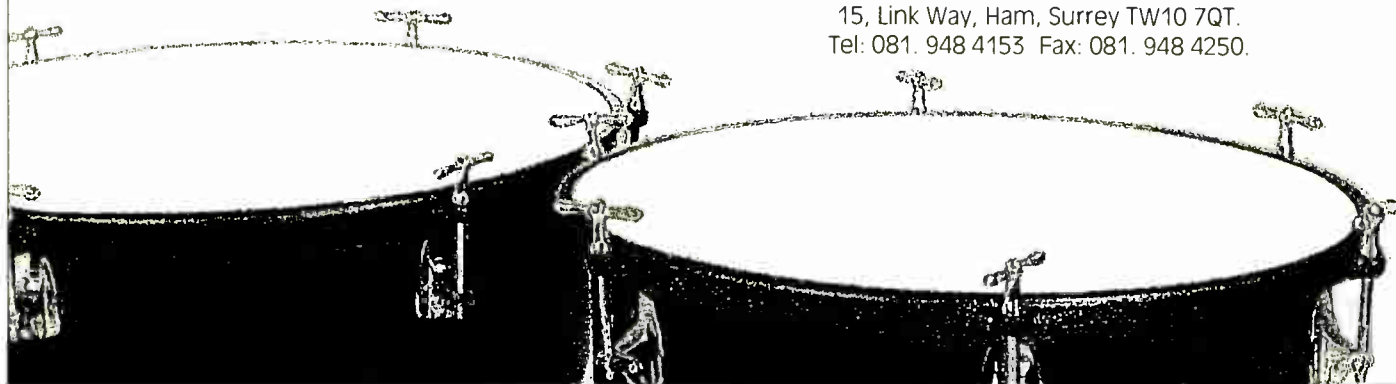
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access, and the usual track number and time figures. Enter a track number on the remote handset and the machine waits for a command such as Play or Memory. Thankfully the Nakamichi accepts two digit direct entry for track numbers greater than nine, and programming is a cinch. The only way of entering track allocation for different discs is by pressing the up and down Disc buttons; it is a pity that the 1-7 disc numbers are not repeated on the remote handset. Random selects tracks in random order across all the loaded discs which can be a bit of a shock if the CDs are not all of similar musical styles!

Electronically, the Nakamichi is populated with Sony support chips, filter and 16-bit 4x oversampling dual DACs followed by a Philips TDA1311 16-bit current to voltage converter with JRC op amps for the sole audio output. The complete board and mechanism is driven from a single frame transformer and power supply.

SOUND QUALITY

To be honest, I was hoping that the MB-4s would break the mould by combining high quality audio performance with multi-change capability. With the benefit of hindsight, this was expecting too much. After all the MB-4s is the cheapest in the range and, adopting the adage that you don't get something for nothing, a certain amount set aside from Nakamichi's production budget for the MusicBank mechanism will have left little for electronic refinement. One must also call into question the effect of the transport on the audio performance.

This player doesn't advance the state-of-the-art within its price range, but does offer a comfortably musical performance. Taking the bad

points first, the bass sounded stodgy and overblown in the 100 to 200 Hz region and was not particularly extended below this. The midrange was rather 'obvious' in a stringy sort of way, bringing violins and other upper range string instruments into sharp relief. Thankfully, the treble range, while not exactly sparkling with detail, was controlled and warm, offsetting the brightness of the upper midrange.

On the good side, one could point out the pervasive warmth that brought left-hand relief to the right-hand coldness of piano, and added humanity to singers. After the player had warmed up for about an hour the music began to swing beguilingly, and fast paced sequences jogged along well. Switching to a Marantz CD63 showed that further expressiveness and emotion could be wrought from the music, though the Nakamichi was not too far behind. The main difference between the MB-4s and the best of the competition lies in the way it portrays music transients. The Nakamichi had a tendency to round off the initial impulse.

The transient softness may have had a deleterious effect on unravelling more complex and outlandish jazz and contemporary classical time signatures, but it didn't harm the sheer foot tapping catchiness of more regular dance rhythms.

For those who need the extended play capacity, or just want to enjoy uninterrupted music without the bother of changing discs, the Nakamichi offers excellent musical accompaniment to either a romantic evening or a swinging party. Even if the MB-4s isn't accurate enough to allow listeners to sit down and concentrate on the finer points of a performance, it fits its designated function superbly. ✓

LAB REPORT

Nakamichi's decision to compromise the MB-4s's electronics for the sake of including the MusicBank mechanism without incurring price penalties, is reflected in the measurements. Neither noise nor distortion are particularly low by modern standards, but judged using traditional criteria, these results are still satisfactory. Distortions are all even harmonic, with a smattering of second, fourth, sixth and eighth showing up along with the noise. The -90dB recovery of a dithered sinewave also exhibits a trace of noise, but ultrasonic spurious are held to a low level from both -70 and -90dB test waveforms which augers well for compatibility with a wide range of amplifiers.

Intermodulation distortion is not so well handled, with the 1kHz difference tone appearing at -72dB reference to full signal level. The transport is also slow at reaching test track 99, but this is only to be expected from the complicated MusicBank system. In practice track to track access between different discs is splendidly fast compared with reloading a single disc player.

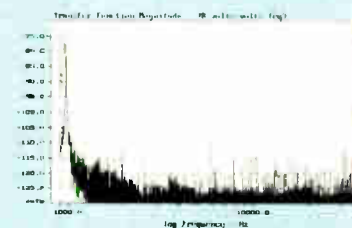


Fig1. Nakamichi MB-4s: spurious up to 100kHz associated with 1kHz tone at -70dB

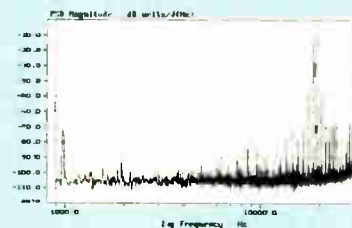


Fig2. Nakamichi MB-4s: intermodulation spurious from 19kHz/20kHz tones at 0dB

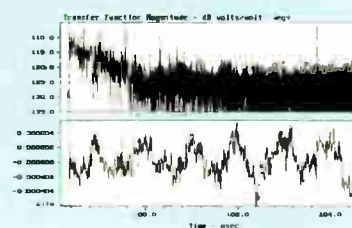


Fig 3. Nakamichi MB-4s: dithered 1kHz sinewave at -90dB, with distortion spectrum above

Test results		Nakamichi MB-4s		
Relative output level		-0.77dB		
Output impedance		40 Ohms		
Signal to noise ratio A wtd		91dB		
THD vs Level (dB)	200Hz	1kHz	10kHz	
0dB	-96	-97	-78	
-30dB	-69	-70dB	-87	
Channel separation				
Resolution at	-60dB	+0.04		
	-70dB	0.15		
	-80dB	1.03		
	-90dB	1.13		
Track access (to 99)		8.77secs		
Size (w/h/d)mm		428 x 96 x 270		
Price (inc VAT)		£300		

Supplier:
B&W/Nakamichi
Marlborough
Road Industrial
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AUDIO RESEARCH LS7

Some Audio Research enthusiasts have more or less achieved their Valhalla by hot-rodding older all-tube models like the SP8. I suppose the LS7 could be regarded as the first official hot-rod triode design

Recent years have seen an increasing use of solid-state active devices in Audio Research products. And no-one can dispute the obvious march forward in sound quality, at a competitive price, achieved by units such as the LS3 line pre-amplifier, whose essential audiophile qualities allow it to be compared with some of the finest available.

And yet... Audio Research reports that its markets are again asking for a classic, all triode pre-amplifier. Some enthusiasts have been pleading for a purist straight line unit, with no frills, even lacking a balance control; and some have more or less achieved their Valhalla (on a strictly on-off basis) by hot-rodding older all-tube models like the SP8.

I suppose the LS7 could be regarded as the first official hot-rod triode design. Here, high-end quality is the objective, and absolute simplicity brings its own rewards, not least in terms of retail price which is quoted as £1,520. The LS7 has no mode selector, balance control or tape monitor loop. The signal path is as short as possible, running from the gold plated sockets to the adjacent selector switch, then to the volume control and on right into the input guide of the line amplifiers.

There are five line inputs (unbalanced, phono sockets) with two sets of outputs (unbalanced), power on/off, and a separate manual mute. The rotary controls cover source selection and volume.

Valve life is estimated at 5,000 hours. If used an average of two hours a day, five days a week, that means around 10 years between tube replacements. As it runs quite

A return to all-tube circuitry and relatively affordable price make this new line pre-amp a pleasant surprise

by **MARTIN COLLOMS**

warm, the LS7 should not be left on for long periods; fortunately, it is ready for use within a minute of switch on, although a five minute warm-up is good practice before serious listening begins, and some more subtle improvement will occur over the next half an hour or so. For an evening's listening, switch it on when mixing your G and T, and the LS7 will be ready and waiting for you after supper.

The appearance is distinctively Audio Research, a cleanly laid out, well-lettered satin alloy panel with rack handles fronting a black anodised main case

TECHNOLOGY

Though keenly priced for an all-tube line controller from Audio Research, there is no evidence of any short changing in the quality of parts, build or finish. As usual these are all excellent, right from the Teflon dielectric used in the heavy-duty phono sockets to the popular 'blue' Alps precision film type volume control.

Coupling capacitors are bypassed Rel Cap polypropylenes, this type

also used for power supply decoupling. The power transformer has a laminated construction and is mounted directly on the double-sided epoxy glass fibre printed circuit board.

Two precision electronic power regulators are used, one for the high-tension or anode voltage supply and the other for the low voltage constant current supply. Integrated circuits are used here as control elements for the heatsinked pass transistors. A total of four 6922 (E88C special quality) double triodes are used, the last two in stereo mode. The final valve is the usual cathode follower. The individual tubes for each channel are used for the long tailed pair or input differential,

its performance enhanced by a FET constant-current source for the tail. This choice of classic input stage allows for DC coupling of both input and feedback allowing Audio Research to continue with its established practice of including the one necessary output capacitor within the feedback loop. Between input and output there is a DC coupled triode stage providing some in-phase signal derived from the output follower to improve local gain. Thus positive and negative feedback is used in this unusual design. The signature of the output capacitor is effectively removed from the equation. Non-invasive relay muting completes this single ended design which runs on 225V rails and is thus endowed with considerable headroom.

SOUND QUALITY

I began the listening tests expecting a performance at least to traditional Audio Research standards, and employed an appropriate system. Primarily the speakers were Wilson WATT 3/Puppy 2, fed by Krell KSA200S, NVA Statement or Meridian 605 amplification. Comparison pre-amplifiers included Krell KRC2-S, Conrad-Johnson PF2 and the soon-to-be-reviewed Conrad-Johnson PV10AL, the old Musical Fidelity MVX and last but by no means least the Audio Synthesis Passion Vishayed passive. Digital sources ranged from the Wadia 16 and Accuphase DP70-V CD players to the NVA Statement. Cables comprised Siltech and custom silver designs plus van den Hul 'The Second.'

A high standard was reached after

five minutes but its true calibre was only apparent after 15 to 20 minutes. As you settle in to a longer listening session the LS7 grows on you, almost imperceptibly at first.

I have had great times with some of the recent middle priced Audio Research pre-amps (for example, the LS2 and especially the highly competitive LS3) but I didn't get on so well with the all-balanced, all valve LS5 flagship last year. However I have to report that the good times are back with a vengeance. I had no such troubles with the LS7, in fact I believe this is Audio Research's best sounding to date and what is so great is the fact that it's also the cheapest! [Watch out for the LS2 MkII - Ed.]

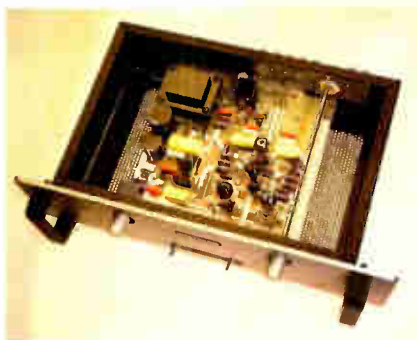
First impressions were of a clear, well-focused sound, wide in frequency range and of excellent neutrality, attributes reinforced by further listening. The LS7 was not as 'obvious' as the LS3 which is lively, almost exuberant by comparison; the '7 showed a touch of restraint, a better sense of proportion, a calmer, less forward sound and yet one where dynamic contrasts were still as excellently portrayed as they are in the LS3.

Perhaps this is the difference between vacuum tubes (triodes) and solid state. At their best both can be very accurate and expressive: but while the triode offers a more natural, unforced perspective and tonal quality, the solid state tends to be a touch sharper in tone and its sound stage is also presented a little nearer.

One factor which is hard to pin down was the sense of ease, apparent with good triode designs such as the LS7. With extended listening, one became more aware that it was actually the music and not the fidelity that had contributed most to one's enjoyment.

In the bass, it was simply excellent - what a result for a tube design! Extending deep with no softness or coloration, the bass was also fast and articulate, better than many all DC coupled, all solid state references. In the midrange, it was beautifully balanced with rich yet superbly-defined vocals. That clarity and excellent focus was achieved without any perceptible forcing or hardening of tone. Once again, new standards were set in the treble. Open, sparkling and airy, it was also beautifully controlled, free from edge, grain or sibilant emphasis and above all, transparent. This pre-amplifier was transparent throughout the frequency range, in fact strikingly so.

A passive controller can provide a point of reference for absolute neutrality (a test which the LS7 passed very well), but an active line pre-amp has the advantage of a much better input and output matching plus gain where required



59 ►

LAB REPORT

Audio Research's design team puts a lot of effort into the sound of its designs but also strives for technical accuracy. Regardless of its valve content the LS7 held true to that Audio Research ideal.

At a nominal 0.5V IHF output, distortion (THD) was very low at better than 0.01%, 20Hz to 20kHz, falling to almost -90dB 0.0033% mid band. Twin high frequency tones caused it no worries [Fig 1] with a first rate IHF result, 88dB.

Distortion was explored at several frequencies and found to be wholly negligible. At 10kHz it was mainly second harmonic [Fig 2]; at 200Hz, second harmonic was also dominant here and at very low levels [Fig 3]. This is a very nice result in terms of the audibility of distortion products.

With a low output impedance of 200 ohms, the LS7 proved quite load tolerant. 50k or more was pre-

ferred but even 20k-ohms was driven with authority. The maximum output was a massive 31.1V rms, so there is bags of headroom.

Input overload was essentially infinite; the input impedance a simple 100k-ohms, an easy load for a variety of sources. The design is non-inverting of absolute phase.

Stereo separation was more than satisfactory, measuring 116dB at 20Hz, 79dB at 1kHz, and still a fairly good 52dB at 20kHz.

Noise levels were -82 to -85dB, and there was just a trace of hum in the output. Very slight hiss will be audible if you are close to sensitive speakers when used with powerful high gain amplifiers. Channel balance and volume/balance tracking were fine.

For an 0.5V IHF output, the input sensitivity was 111mV, showing a line gain of 4.5-times, or 13dB, a sensible value.

Frequency response extended almost from DC to 93kHz, with the lower -0.5dB limit below 0.1Hz. Even when loaded by 75 ohms, which would normally 'kill' a capacitor-output pre-amp, the LS7 managed 20Hz, -0.5dB.

Valves or not, this design was technically close to a the ideal of a straight wire with a volume control.

AUDIO RESEARCH LS7



Fig 1. Audio Research LS7: high-frequency intermodulation, 19kHz/20kHz tones

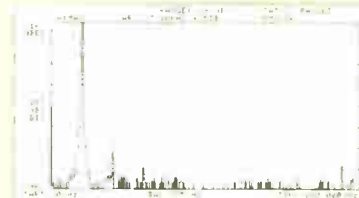


Fig 2. Audio Research LS7: distortion spectrum, 10kHz tone



Fig 3. Audio Research LS7: distortion spectrum, 200Hz tone

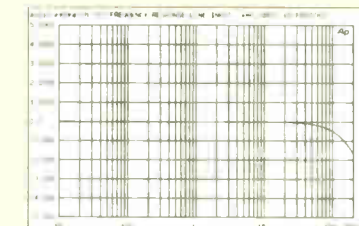
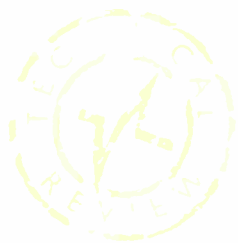


Fig 4. Audio Research LS7: frequency response, line input

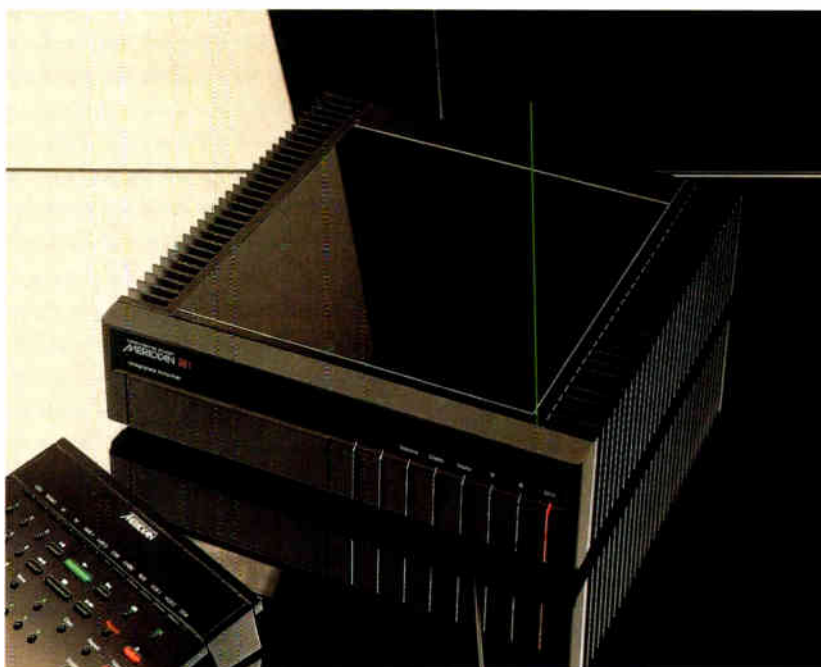
Test results	Audio Research LS7		
	20Hz	1kHz	20kHz
Distortion (dB)			
Total harmonic distortion, aux/CD, 0.5V	80	-88	82
Intermodulation, 19kHz/20kHz, 0.5V		-88	
Noise (dB)			
Aux input (IHF, CCIR wtd)		-82	
DC offset, left/right		0mV	0mV
Input overload (dB)	20Hz	1kHz	20kHz
Aux/CD input (IHF)	>28	>28	>28
Stereo separation (dB)			
Aux/CD input	110	79	52
Volume/balance tracking	0dB	-20dB	60dB
ALX input (dB)	+0.02	+0.17	+0.56
Input data			
Socket type		phono	
Sensitivity		111mV	
Loading		100k-ohms	<100pF
Output			
Max level		31.1V	
Impedance		200ohms	
Dimensions (whd)	430 x 134 x 300mm		
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by PETER J COMEAU



MERIDIAN 551

The 551 was quick to latch on to rock or jazz rhythms, a characteristic which has not previously been noted as a typical Meridian virtue, but which is gradually creeping into some of the 500 series designs

Choices, choices...With the alternative of investing in a separate pre- and power amplifier, is there any reason to consider an integrated amplifier if you are thinking of spending £700-800?

It depends what matters to you most. The 551 is Meridian's cheapest amplifier, so if you want Meridian quality, here's your starting point. If you already own Meridian components, perhaps from the 500, 600 or 200 series, and like the idea of full remote control integration, you have to choose the 551. And if elegance is your top priority, the 551 is the neatest, slimmest addition to the system, capable of providing nigh on 60W of power to your speakers and able to accept every audio source imaginable.

Like all modern Meridian components, the 551 gives you more than just input switching and a volume control. And instead of the conventional control knobs, there's an array of vertical push buttons linked to a fascia display to show what's going on. These are part of a totally flexible, user-configurable array of input and output options including individual level adjustment for each input, separate Listen and Record source selection, headphone output and speaker mute, pre-amplifier output and digital communications for other 500 or 200 series components.

There are no individual input switches on the front panel. Instead, a Source button cycles through each of the six inputs, and you can choose

which label you want the display to show for each source. This may seem a lengthy way to find your required signal input, but if you are using other Meridian components then it makes sense to buy the relatively cheap and well laid out MSR System Remote controller which transfers input and control to one of twelve sources selected via its own labelled button. Adjusting input gain for each source also means that you can switch inputs without sudden jumps in listening level.

Confused by all these options? You needn't be. Even if your dealer doesn't set it all up for you, which he probably will, there are six default Types you can choose between to configure the settings automatically to match the requirements of your associated equipment.

TECHNOLOGY

Meridian's aluminium, plastic and glass casework looks particularly clean and self effacing in domestic surroundings. A small, yellow, alphanumeric display above the control buttons shows two letters to denote the selected input, followed by two numbers for the volume level. The factory default settings for input gain enable full output from a CD source with the volume advanced to 99, but you can adjust input sensitivity over a 15dB range for all inputs. The Off button switches the unit to standby, from which mode the volume is recovered at 65 so as not to blow your ears off by mistake. A Copy button selects the

source to be sent to the single tape output independently of your listening mode. Speakers can be switched off via their own button while the headphone output, unfortunately located on the rear panel, is permanently powered. In addition the whole system can be muted to silence from the front panel or system remote.

Four circuit boards carry the pre-amplifier section, based just inside the rear panel for the shortest signal path, two power amplifier channels, mounted on the side heatsinks, and the front panel switching and logic. These surround a 300VA toroidal transformer with multiple secondary windings for each power amplifier channel and the pre-amp, so each section has its own power supply. Individual bridge rectifiers are placed directly on the power amp boards along with 6,600uF of reservoir capacitance feeding complementary bi-polar output devices; van den Hul cabling then takes the output to in-line protection fuses included in the feedback loop and then to output chokes.

The pre-amplifier section is largely IC-based, with surface mount CMOS input switching. Space is allocated on the main circuit board for an optional plug-in module which provides m-m or m-c cartridge matching on the first input, but as standard reverts to a line input (labelled LaserDisc on the system remote). All inputs and outputs are gold-plated; the sturdy speaker sockets will accept 4mm plugs as well as bare wires.

For the main listening sessions, the 551 was hitched up to ATC SCM20T speakers using Audioquest cable, and source signals taken from

Meridian's 500/563 CD transport/DAC combination via vdH The Second interconnects and a Pioneer PD-S802 CD player with Chord Chameleon cables.

SOUND QUALITY

There Is Sweet Music (Collegium COLCD104), sung by John Rutter's Cambridge Singers, was the first album to show the 551's attributes to great advantage. Every word was clearly enunciated, and the complete vocal range was rendered with an entirely natural quality. Sibilance, too, was held in check and brilliantly associated with each voice, all this being part and parcel of a well laid out and highly stable soundstage. Particularly noticeable were the silences between lines and verses, a feature which helped define the flow and tempi of these finely-structured choral pieces. (If this sounds stupid to you, consider only that music is made up of notes, bars and rests, and that these last are crucial to musical expression. All too often in hi-fi reproduction the silence is disturbed by noise, so an amplifier which can stay clean after the passing of a transient and show the decay of a tone accurately will better communicate the performance to the listener.)

Orchestral favourites showed the 551 to have both a wide bandwidth and dynamic range, driving the ATCs with ease and providing an

neutrality. Turning to non-classical music, I found that the 551 was quick to latch on to rock or jazz rhythms, a characteristic which has not previously been noted as a typical Meridian virtue, but which is gradually creeping into some of the 500 series designs. Its even-handed approach allowed a wide variety of musical styles to be greatly enjoyed and, though its transparency was severely critical of the overdone treble of older recordings this was countered by good bass attack and weight. Much of the good rhythmic control is a function of the amplifier's transient attack which, considering the available dynamic range, is excellent.

For comparison I bracketed the Meridian between the more expensive Musical Fidelity A1000 and the much cheaper Rotel RA935BX, both of which are outstanding integrated amplifiers in their class. The A1000 allowed greater depth to the soundstage and brought a warmer outlook to the music. Although it was also capable of marginally greater dynamic swings, thus justifying its higher cost, the A1000 didn't exactly trounce the Meridian, which held its own well. Most noticeable was that the A1000 was uncommonly good at removing the typical glare associated with much CD output, while the Meridian was less interested in hiding such artefacts. The Rotel's merits (which are attributable to its minimalist circuit layout) are a forward and crystal clear presentation, characteristics which were at odds with the Meridian's controlled and more cultured approach to music-making. Better control of the speakers yielded a more transparent performance from the 551, with musical detail being highlighted in a most explicit fashion but without any tendency to thrust the listener into the front row of the stalls as the Rotel was wont to do. Thus the 551 vindicated both its price and its pedigree.

CONCLUSION

I have to say that greater musical thrills and a higher degree of rhythmic bounce could be evinced by the Naim NAIT 3, compared with which the 551 appears more staid and refined. The traditional values of transparency and neutrality are the great strengths of the Meridian 551, which also has the not-to-be-dismissed advantages of system remote control.

As always you have to weigh up your requirements and then base your decision on your own listening trials. The 551 would definitely be on my shopping list of amplifiers to audition. ✎



Meridian's matching 500 series includes CD transport, tuner and multi-room controller

admirably firm bass performance with excellent extension.

Listening to classical music generally, I found the 551 slightly dry, with a hint of brightness; transparency was fine, and there was a very coherent quality throughout the audible range, with no tendency to added warmth or midrange forwardness which might disturb its

AMPLIFIERS

LAB REPORT

The 551 is none too happy driving low impedance loads. However, ignoring the manufacturer's recommendation for 8 ohm loads we managed to coax it into producing 80W into 4 ohms, showing that nominally 6 ohm loudspeakers would be tolerated. But the impulse test for peak current into a load of 2.2 ohms plus 2uF capacitance proved too much for this amplifier, destroying one output channel.

For outputs up to full power, the distortion spectrogram [Fig 1] shows a smattering of odd harmonic distortion, mainly third and fifth, kept below -70dB relative to full output. Intermodulation results were excellent, with the 1kHz difference tone being almost lost in the noise floor [Fig 2].

Frequency response is flat to very low frequencies, while the power response shows some tailoring above 5kHz. The measurement [Fig 3] shows that output dipped slightly, to -0.5dB by 20kHz, and the overall result shows that sensible bandwidth control has been applied in this design.

Supplier:
Meridian Audio Ltd,
13 Clifton Road,
Huntingdon,
Cambs
PE18 7EJ.
Tel: 0480 434334

MERIDIAN 551

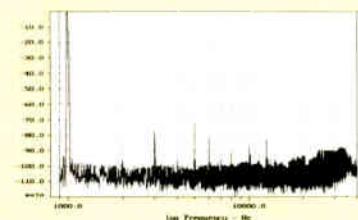


Fig1. Meridian 551: distortion, 1kHz tone full power

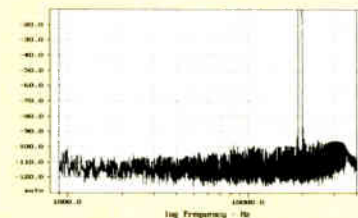


Fig2. Meridian 551: intermodulation 19kHz/20kHz full power

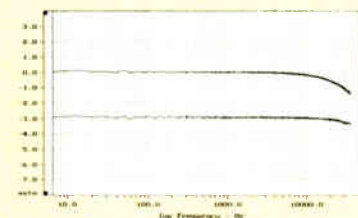


Fig3. Meridian 551: frequency response, one third power, and pre-amp output (lower trace)

Test results	Meridian 551		
Power output	55W(17.4dB)		
Rated power into 8 ohms			
	20Hz	1kHz	20kHz
One channel 8 ohms	17.8dB	18dB	17.5dB
Both channels 8 ohms	17.7d	17.7dB	17.5dB
One channel 4 ohms	16.2d	16.5dB	16.2dB
Distortion at rated power	73dB	-70dB	-74dB
Distortion and noise at 1W/8ohms	-94dB	-92dB	-89dB
Instantaneous peak current	N/A (see text)		
DC Offset D(L/R)	30mV 22mV		
Inputs: 6 Line inputs, optional Phono m-m or m-c input.			
Input impedance and sensitivity (adjustable)			
Line input	27	-150 mV	20 kOhms
Optional Disc			
m-m input	0.5 - 3 mV	47 kOhms	100pF
m-c input	38 - 210 uV	220 Ohms	10nF
Distortion & Noise	20Hz	1kHz	20kHz
CD input	-96dB	-94dB	-91dB
Input overload			
CD input:	>28dB		
Dimensions(wdh, mm):	321 x 332 x 88		
Price inc. VAT:	£695		

It was hardly surprising to learn that the engineers in Studio TC6 at Television centre, where a pair is used for monitoring the sound track of the Jools Holland show, have been seen leaping about and bopping beyond the glass for the first time in recorded history...



practice. The box, for example, is made not from damped birch-ply, but MDF: 'When we designed the early monitors,' says Whitehead, 'we used birch ply because MDF simply didn't exist, not for inherently structural reasons.'

Thanks to the cabinet designer Eric Beauchamp, who is a hi-fi buff, the 30mm thick front baffle is rebated for the drive units and fixed in position, while the back panel is screwed down: the reverse of the LS3/5A. Three layers of sound-deadening pad are used on internal surfaces (except the rear) with acoustic foam surrounding the main driver.

Compared with the LS3/5A, the LS5/12A uses a much simpler crossover. It may not look simpler, being packed with components, but the actual crossover network is a simple capacitor and inductor; the rest are there to ensure $\pm 0.25\text{dB}$ matching between the drivers regardless of manufacturing consistency, although units are expected to be within $\pm 0.5\text{dB}$ ex-factory. Construction is said to take a quarter of the time it takes to build an LS3/5A.

Component tolerances are specified by the BBC although, intriguingly, the sourcing is left to the licensee manufacturers. There is room for future partisanship here. Subtle differences between the Dynaudio Pro LS5/12A and Harbeth LS5/12A crossover boards exist. Not so subtle, at least visually, is an external difference: the Harbeth front baffle is machined square, with optional cloth grilles; the Dynaudio has no grille and rounded edges. Both offer the option of professional XLR connectors as well as gold-plated bi-wiring terminal posts (for single-wiring, Dynaudio offers wire links and an additional non-professional standard Neutrik connector, Harbeth flat gold-plated bars). Both also now sport a fine mesh grille over the tweeter, replacing the prototype's more convex dome with large holes.

Finally, in something of a departure, positioned opposite the tweeter a large-diameter flared port opens onto the rear panel. Supposedly, the odd vacuum-cleaner-filter-like inner termination is an aesthetic touch; but since this port is the subject of a patent application and, for a reflex port, is extraordinarily well-behaved, one suspects there is rather more to it. This port barked no more than Sherlock's dog in the night did; why this design delivers much cleaner, deeper, more dynamic bass than such a small box could be expected to permit will no doubt lead better men than I to long nights and stimulants. 'Theoretically', Whitehead divulged, 'the model suggests a port resonance of 55Hz: but the model

HARBETH'S BBC LS5/12A



In full production at last, the LS5/12A meets the BBC's standards as a Grade 1 Monitor

by ERIC BRAITHWAITE

It began as a phantasm, a mere idea; it appeared in the flesh (or rather, veneer and MDF) almost a year ago*, and is now in production on both sides of the North Sea. The LS5/12A is the latest and probably the last monitor speaker to be designed in-house at the BBC: by the time I received a Harbeth-made production pair for this review, the department which created the LS5/12A had been disbanded and its designer had collected his redundancy cheque. If an epitaph is required, then the BBC can simmer with satisfaction, for this new monitor is, simply, one of the best put on the market in years.

But to go back to the beginning. In 1992, supplies of KEF drive units for the BBC's small Grade 2

monitor, the LS3/5A, temporarily dried up due to the supplier's financial difficulties. While LS3/5A licensees such as Harbeth responded with new small monitors, the stark question for the BBC was: without the KEF drivers, whither the small Grade 2 monitor?

Developed without a specific budget allocation, the LS5/12 (models in development aren't 'A' suffixed) began life as an LS3/5A box with two other drivers pressed into service, to see if they would fit. There must have been a certain caution as to how the choice of 'foreign' drivers might be received. At best, it's a sad comment on the remaining British driver manufacturers. But the Danish company, which as the drive unit supplier is licensed to build the LS5/12A, has repaid the compliment: the Dynaudio Pro LS5/12A is available not only in black but also in British Racing Green.

Although the LS3/5A was always a Grade 2 (voice) monitor, it was felt that the new alternative, or successor, should be a Grade 1 (music) monitor. In fulfilling this aim, designer Graham Whitehead and his team have been consummately successful, though there were striking departures from what we have all come to view as established BBC

* When Ken Kessler assessed a prototype LS5/12A [HFN/RR, Dec '93], he was not alone in finding the treble rather too bright. As we reported at the time, Harbeth (which currently has an exclusive licence to manufacture the speaker in the UK) suggested a crossover change to soften the top end; this change was in fact implemented before production started - Ed.

doesn't understand the patent!

Without recourse to narcotics, the LS5/12A is certainly stimulating. This miniature certainly gets the adrenalin going, yet it does so without any suspicion of a false tonal balance or belying its primary function as a studio monitor. It is in its latter aspect that conflicts over its domesticity are likely to arise.

SOUND QUALITY

Compared to such previous small luminaries as Celestion's SL700, it is markedly 'bright' sounding in the manner of ATC's designs.

A slight but perceptible emphasis in the treble produces the studio monitor hallmark of extreme crispness and clarity in instrumental sounds like brushed cymbals and percussion; the faintest tinkling or the gentlest brush is clearly audible, precisely aligned in relationship to the drumkit and members of the band. In fact, the LS5/12A's lucidity is, for domestic purposes almost its biggest drawback. Older recordings, like Ashkenazy's Decca Tchaikovsky 6th, or Sir Colin Davis's *Petroushka* on Philips, laid down before engineers played editing tricks on hard disk, reproduce chair-creaking and music stand rattles with a definition that is almost as disconcerting as the surface noise of a well-used LP. Equally disconcerting, but a trait I value highly, was the LS5/12A's ability to distinguish clearly between the master-tape quality of a classic Blue Note jazz recording and a Castle re-release, with its tell-tale softened dynamics and rather gritty top-end, taken from a DAT copy.

The BBC team has produced one of the most dynamic small speakers around. Whereas the Celestion SL700 is a precise, almost pointillist imager, it needs much more power to unleash anything corresponding to real dynamics. The LS5/12A powered through Stravinsky, Haydn's symphonies (where the horns of Bruno Weil's *Tafelmusik* swelled and blared over the rest of the orchestra, while the other sections remained clearly distinguishable, just as they do in a live concert) and also coped well with the techno of Freaky Realistic and A Trick of Memory from ex-Jethro Tull's *Martin Barre*. Driving my normal ESL-63s with Chord SPM800 power amplifier, this last was somewhat disappointing, the all-too-common limiting (a Hit Factory trademark) all too audible. The LS5/12A made it sound much more lively and less dynamically restrained. So much so that it was hardly surprising to learn that the engineers in Studio TC6 at Television centre, 48 ►

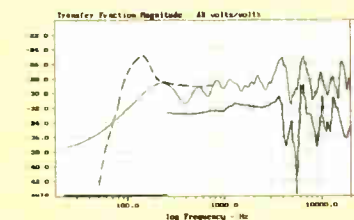
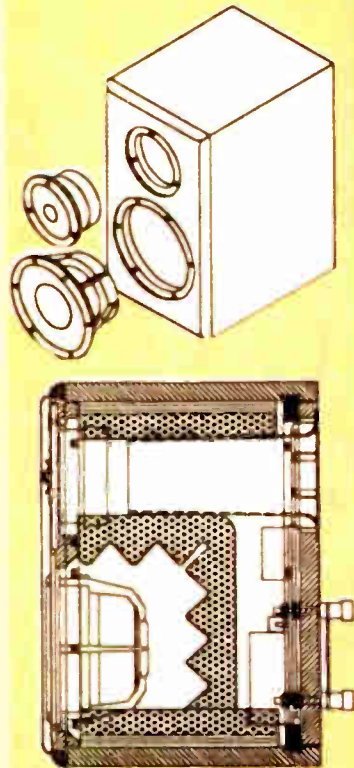


Fig 1. Harbeth LS5/12A: on-axis 1m response with LFC correction shown dashed. Lower trace (2dB/div) shows grille error

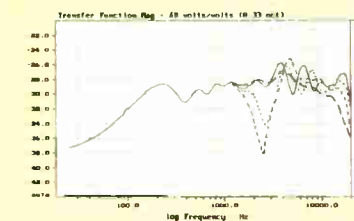


Fig 2. Harbeth LS5/12A: 1m response family with third-octave weighting: solid trace axial, dotted 15° above axis, short dashed 30°, long dashed 45° lateral

Test results	Harbeth LS5/12A
Dimensions (whd,mm)	184 x 295 x 213
Recommended amplifier power per channel	max 200W free space
Recommended placement	
Frequency response	80Hz - 20kHz
±3dB (2m)	70Hz
LF rolloff (6dB) at 1m	
Bass frequency extension (typical in room)	55Hz
Voltage sensitivity (ref 2.83V) at 1m	80dB/W
Approximate maximum sound level (pair at 2m, maker's claim)	100dBA
Impedance drive characteristics	very good (see text)
Forward response uniformity	good
Typical price per pair (inc VAT)	£999*
(*in Teak or Walnut veneer: Mahogany, Light Oak, Natural Ash, £1019; Ebony, Rosewood £1129; Yew, £1159)	

LAB REPORT

Sensitivity of the LS5/12 measured at just over 80dB, a smidgen under the 81.5dB specification: this clearly a low-sensitivity mini-monitor. However, impedance does not drop below six ohms and is above 9ohms above 1kHz, so this is not a difficult load. To minimise air chuffing noises, the BHC team decided on a large diameter, flared port, but in order to achieve decent bass from such a small cabinet this has been made quite long at 45mm (any longer and it would not fit in the cabinet), although such long ports can often produce resonances. Initial sine-wave sweeping revealed a powerful and clean port output centred on around 90Hz, with cone-movement minimum at around 80Hz. At higher frequencies, port radiation was also very clean, with none of the strong whistles and howls that often greet the ears. Only a small buzz, some 20dB down at around 1kHz, betrayed the reflex nature of this diminutive beast. Inside, the port aims directly at the rear of the tweeter. This

has been done before, but here, the tweeter is covered by a plastics moulding to direct the air flow radially. Measurements using sine waves and MLSSA near-field revealed a slight boost in output just above 100Hz and a fast cut-off below. However, in room, the bass extended quite nicely to 55Hz or so (-6dB relative to the mid-band average), which is a fine result for such a small loudspeaker. Frequency response on axis is very smooth, with just a slight lift in level above 1kHz with the grille off. This is due to the tweeter's output being marginally higher than that of the woofer and may account for the minor thinning of instrumental tonal colour noticed. However, this only amounts to one or two decibels and is hardly major. The 15° above axis curve is fine, though the 30° above-axis curve shows some large variations from the on-axis response, where the woofer and midrange overlap. The horizontal off-axis curve indicates very good dispersion, and this is reflected in the very even room-averaged

curve, which is quite smooth except for a bump at around 4-5kHz (this also noticeable on the pseudo-anechoic responses). Generally, these results indicate good driver integration and in-room performance. The grille frame is not chamfered, having 90° sides close to the tweeter, and has a fairly dramatic measured effect. It actually makes the response slightly flatter when third-octave analysed (reducing the area above 3kHz and increasing the region from 500Hz to 3kHz), which suggests that the balance was optimised for use with the grille on, but the deviations from the no-grille state are as much as 5.5dB unsmoothed. Serious listeners to this loudspeaker would probably remove the grille in any case. The waterfall plot of energy decay [Fig 5] was quite revealing. Energy drops off quite rapidly over most of the frequency range, but there are areas of storage, one at around 4kHz and another around 2kHz. Fortunately, these are down to more than 20dB below by about 10ms. The 4kHz effect is associated with the tweeter and the minor 2kHz wobbles are from the woofer. The crossover between the two is at around 3kHz.

The review pair was very closely matched, within 0.5dB, from 80Hz to 10kHz. Only at 12kHz did this rise to 1dB.

Overall, this is a very evenly balanced, competently engineered and built loudspeaker.

Supplier:
Harbeth Acoustics,
Unit 1, Bridge Road,
Haywards Heath,
West Sussex
(0444) 440955

Fig 3. Harbeth LS5/12A: upper trace, room averaged response (RAR), 5dB/div. Lower trace, impedance, 1ohm/div

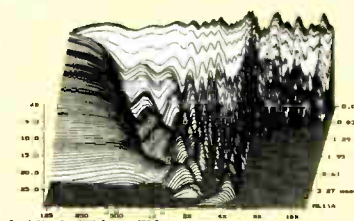


Fig 4. Harbeth LS5/12A: MLSSA decay waterfall, 30dB range, 0.1ms risetime.

47 ➤ where a pair is used for monitoring the sound track of the Jools Holland show, have been seen leaping about and bopping beyond the glass for the first time in recorded history. For such a small box speaker the bass is remarkably clean, tight, rhythmical and well-defined.

Experience, and comparison, suggests that there is little real bass below the lowest notes of a bass guitar, but with Karl Richter's Decca Bach Toccata and Fugue in D minor, the low Ds and Es were strong and powerful. A short-lived, barely audible 'huff' at the lower end was the only sign that the LS5/12A is a ported design.

Slightly less satisfactory, compared with the Quad ESL, was the differentiation between tenor and baritone voices, noticeable on both Victoria's Requiem and a Pioneer DAT-07 live recording of a country-rock band. On both recordings, with LS5/12A, there was a barely discernible dryness to tenor voices and huskiness to baritone. BBC announcers also sounded a fraction more chesty than usual.

Above all else, the new BBC design is user-friendly. Using XLO Type 6 cables, the sound was very equable, detailed and smooth; equally so with much cheaper Ortofon SPK100, and with a just discernible 'shiny' violin tone with Audio Synergy's relatively inexpensive silver cable. The LS5/12A sounded slightly louder when bi-wired, but there appeared to be no other discernible effect. While the Chord was used over a period of several weeks (linked to an Argo pre-amp, Sugden SDA-1/SDD-1 transport and DAC, with QC-powered Gyrodec/Morch da Capo, the Ortofon Supreme range of cartridges and Michell Iso head-amp), a 60-watt Stemsfort SF-60 line power amplifier also drove the LS5/12A easily, with power to spare. Integration between the drivers was excellent, and off-axis response was also particularly good: one ludicrously off-axis listener's comments matching those of another centrally placed guest; this was something I had only experienced previously using ATC SCM20s.

CONCLUSION

With the LS5/12A, the BBC monitor has bounded into the twenty-first century: it's Auntie with her bloomers swapped for something much sexier. There's not a trace of fin de siècle *doleur* about it. Anybody who wants a small but dynamic, superbly detailed and lively loudspeaker, beautifully veneered to boot, should start saving the thousand pounds now. Unequivocally, these monitors are worth every penny. ✓



SONIC FRONTIERS SFC-1

When can an integrated amp be called a control amp? When it's full of high grade Holco, MIT and Solen passive components and made by Sonic Frontiers...

by KEN KESSLER

Pure rhetoric it may be, but I suspect that Sonic Frontiers' use of the term control amplifier instead of integrated amp is enough to double the perceived worth of the SFC-1. It's just that much more, uh, techie a description, almost fooling consumers into believing that they have something which falls into some nebulous but more respectable category above integrated and toward separates. Okay, okay I know that way back in the days of the original *Hi-Fi Yearbook* control units meant pre-amps, but this almost neologistic use of the term is just so much nicer. In any case, Sonic Frontiers' SFC-1 is not merely an integrated amp. How any single chassis amplifier priced at £1595 could be considered mere is beyond me.

Not that the SFC-1 doesn't ooze value, like most of the company's wares. I mean, how many integrateds weigh 60lb? Then again, it is betubed and tubes normally mean hefty transformers, three of which fill the back half of this monster. If integrated calls to mind such compact featherweights as NAD 3020s and the like, think again. The SFC-1 contains its 27kg in a case measuring 483x432x191mm (whd) and it's all-metal, with no plastic front panels or lids diminishing the structural integrity.

It looks typically Sonic Frontiers in that it bears all of the vintage, no-style, quasi-lab look hallmarks which have made this brand a fave among retro-wannabees who'd prefer to see their money spent on essentials rather than trim. Like the reissued McIntosh MC275 and the 'new' Dynaco products, Sonic Frontiers hardware encourages you to pretend it's still 1961 without letting you worry about the condition of the tubes, capacitors, etc.

The SFC-1's front panel is a combination of bare metal and brass common to most of the company's products, uncluttered and business-like. Three knobs control volume, balance and the selection between

four line inputs, while four switches toggle from mute to operate, mono to stereo, tape to source and normal input to direct. The latter, now seemingly *de rigueur* in audiophile pre-amps, feeds inputs direct to the volume control, presenting an 80k-ohm input impedance, compared with the 40k-ohms the signal sees when fed via balance and selector controls. A rocker switch in the lower right-hand corner is used for mains power on/off. Status is indicated by a green LED positioned between the bank of toggles.

At the back, the no-nonsense hardware includes five-way binding posts and gold-plated phono sockets for the aforementioned sources plus tape. Paranoids will be pleased to know that user adjustable bias facilities are also fitted at the back, with an easy-to-read meter and externally mounted adjusters enabling neurotics to check on the bias state on an hourly basis if required for true peace of mind.

Generous to a fault with designer goodies, Sonic Frontiers has made the SFC-1 a veritable Fortnum & Mason hamper of brandname componentry. Apart from MIT, whose MultiCaps are fitted, Solen and Holco supply other passive parts, while the tubes are supplied by the highly respected Gold Aero. Power comes from a quartet of EL34s while 12AT7As and 12AU7As perform the pre-amp and driver duties. The tubes are used in a regulated dual triode input stage coupled to a dif-



ferential phase splitter/driver stage, and both the screen and bias supplies are regulated. The SFC-1 contains a high capacity, conservatively rated power supply, with polypropylene shunt capacitors, while the output transformers are custom wound devices with grain-oriented silicon steel cores and a fixed 60hm output tap. Only 11dB of feedback is used in the design.

Specs? The SFC-1 is rated, curiously, at 100W/channel peak power, or 50W/channel RMS at 1kHz, one channel driven (not the pure RMS power of both channels driven we've long accepted as the norm). The unit is also described elsewhere as requiring 0.40V RMS at 1kHz for 45W output, so it is probably safest to regard this as a 40W/channel RMS device. Given the SFC-1's price of just under £1600, I felt it appropriate to conduct most of the listening sessions with the amplifier driving Sonus Faber Minima Amator speakers since they retail at roughly the same amount. Line level sources used during the review sessions included the Krell MD-20 transport, Krell Studio converter, Marantz CD-52 MkII SE, the Vimak CD combination and the Sony Walkman Pro. Note that Sonic Frontiers produces a matching phono section, the £995 SFP-1 tube/J-FET Phono Stage.)

Warm-up, not just to the level where it sounds right but to a point where its viable for adjusting the tube bias, takes around 15 minutes. I found a quarter of an hour to be surprisingly quick for an all-tube design, but I'm sure there are some who'd argue that warm-up should be instantaneous and that it is with solid-state gear. Yeah, right. And foreplay is a golfing term, eh?

Quick warm-up it might be, but I didn't warm too quickly to the SFC-1. Maybe I was expecting some modicum of universality, or more likely I was hoping for the Pollyanna niceness of the delightful and forgiving Unison Research Simply Two. No way. This product is as reveal-

ing of source component anomalies as any ultra-hygienic, superclinical solid-stater of the high end persuasion and that's without the kind of transparency found in big bucks, high end separates. Until I figured out what kind of partnering equipment the SFC-1 favoured, I spent time concentrating on the aspects of performance which were independent of the choice of sources, like power output capability and its synergy with a wide range of speakers. And let this be a lesson to number-noshers: if the SFC-1 really is only a 40 or 50W, then I'm a Druid.

No speakers, and I mean no speakers among the following: Sonus Faber Minima Amators and Extremas, ATC SCM 10s, Wilson WATT 3/Puppy2s and LS3/5As were too much for the SFC-1 in my 7x4.5m room at acceptable but not headbanging levels: . Now that's a pretty varied mix, leaving out only sub-4 ohm speakers as a torture test. Yes, I did hook up the amp to the Apogee Stages, and, yes, it worked, but only just. That aside, the SFC-1 shouldn't be found wanting in most small-to-medium domestic listening rooms.


Because I stayed with the direct input once I found it to be markedly superior (cleaner, more dynamic) than the standard inputs, I had to concentrate on sources which both complemented and exploited the SFC-1. It was here, for instance, that the Marantz CD-52 MkII SE, the DAC-In-The-Box and other entry level digital devices were outclassed. Let's put this into perspective, though: I could still live with the Marantz or the wee DAC even in true high-end systems because they're so musical. It's just that the SFC-1 demanded more detail and absolute transparency. And that's because the SFC-1, as I hinted before, isn't the most transparent integrated amp you'll ever hear.

Neither 'clouding' nor 'thickness' quite conveys the condition, and I'd rather not use too pejorative a word. Everything is relative, and this slight

The SFC-1 is as revealing of source component anomalies as any ultra-hygienic, superclinical solid-stater of the high end persuasion and that's without the kind of transparency found in big bucks, high end separates.

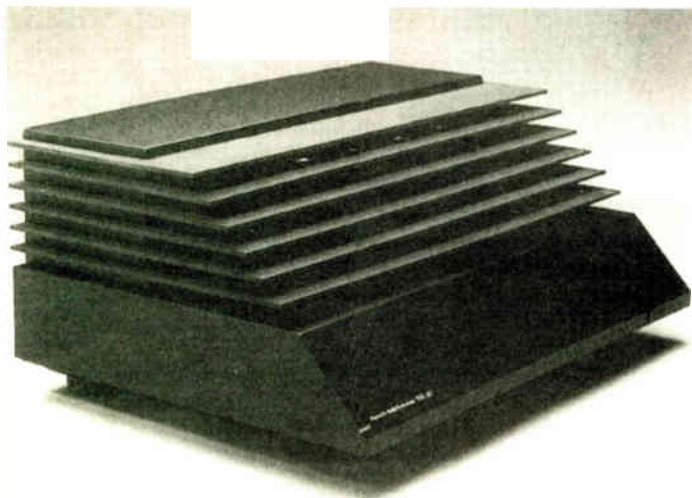
lack of transparency is hardly a crippling flaw. Its worst manifestation is a just barely detectable haze, exacerbated as you'd expect by lesser components. Which is why the better sources are mandatory if this haze is to be minimised. The effect is consistent in strength across the frequency spectrum, a touch of vintage tubeness which might even be deliberate. It's certainly not unpleasant, but it's an artefact which will be noticed by ears accustomed to squeaky-clean, naked-sounding tranny gear.

Perhaps the biggest surprise in the SFC-1's bag of tricks, though, is its capacity for dynamic swings more in keeping with three-figure wattages. It's a by-product of the powerful character (only 50W? for real?), an ease with level extremes which allows the SFC-1 to fall on the right side of the dividing line between upper-level mid-fi and entry-level high end gear. This unit behaves like a much bigger, much more powerful device than its price, its specs or its integrated format would ever imply. It's refreshing to find an affordable tube product capable of doing justice to music rife with dynamic swings, from Sousa to hardcore rap.

An interesting contradiction presents itself when you start thinking about how the SFC-1 reconciles its merely average transparency with absolutely convincing three-dimensionality. The supersoft, barely discernible low-level clues which help to create ambience are somehow unaffected, and the SFC-1 provides a musical landscape which allows pin-sharp imagers like the LS3/5As to sing. Additionally, there's a lack of coloration throughout the lower registers betraying no valveness, the midband devoid of rosy artifice. Which means that, despite my reservations about transparency (and, to a lesser extent, openness), the SFC-1 sounds modern despite appearances. I'd like to be able to say that the SFC-1 has carved its own niche within the not-uncrowded genre of upper-to-mid-priced tube pre/power amps. It certainly makes most of its European equivalents seem weedy, what Beavis would call wussy. And while the build quality, the handsome, no-nonsense retro styling, the unit's sheer grunt and the company's great reputation are four undeniable strengths, it must be pointed out that the UK isn't short of sub-£1600 pre-/power amp separates. Whatever you choose to call it, the SFC-1 is a single chassis amplifier vying for attention in a market that has, traditionally, favoured two-or-more boxes. Here's hoping that enough people need the benefits of space saving. 

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High sensitivity loudspeakers capable of high power handling are becoming more and more popular with designers and customers alike. Tannoy's key exponent in a slim pillar form is its Definition 700 [HFN/RR, July 1993]; now this £2,000 plus design has been complemented by a smaller model, the Definition D500 costing £1,500 a pair.

The tapered almost triangular shape of the 700 has been retained for the 500, combating the usual sense of *déjà vu* that greets yet another box-shaped speaker. The downsizing of the cabinet has been achieved by using 200mm (8in) drivers for the 500, compared with the 250mm (10in) version which is fitted to the 700.

A key feature of these speakers is the use of a Tannoy Dual Concentric two-way combination main driver, where the treble unit is mounted coaxially with the bass/mid driver cone. Acoustically, this is very beneficial, since the coincidence of axis for the midrange and the treble sections of the speaker makes that often awkward blend of their respective sound energies much easier.

However, it is not all good news, since the tweeter now operates within the physical environment of another driver, in this case an angled or flared bass/midrange cone. This will act as a horn, and indeed it is essential that this fact is recognised and made best use of in the design. Tannoy's concentric principle has been developed over many decades and has been applied to a wide range of models. It differs fundamentally from the more recent 'Uni Q' from KEF, where an open miniature tweeter is placed at the apex of the main cone, 'substantially aligned' for the radiating planes and using an 'open' dome. For the Tannoys, the tweeter is close coupled to the main cone by a phase-correcting acoustic device called a Tulip Waveguide, a name derived from a multicell appearance that resembles the petals of the flower. The tweeter element is set a little further back, in most examples in the rear section of the main driver magnet. The normally solid centre pole of the main driver is bored out in a horn profile allowing the treble to progress smoothly through to the main cone, which acts as the main horn.

Whether the tweeter is substantially time-aligned or not, it is the coincidence of radiating axis which endows the Dual Concentric with such a great advantage. The desired sound quality is constant over a wide range of frontal axes, and in theory the benefit should be a sharp stereo focus. The sound should also be low

in coloration, since the reverberant room is driven more uniformly over the frequency range.

TECHNOLOGY

The D500 stands tall at 960mm (including the floor-coupling spikes supplied with the speaker), the narrow style of moulded grille helping to make this big cabinet look slimmer than it really is. Its appearance changes substantially when the grille is removed.

Finish is very good, using man made real wood composite veneer with satin black framing for the base and upper edges. Five-way gold plated binding posts allow for single or bi-wiring.

There are three working drivers, the Dual Concentric for the full range and one more in the form of a separate bass driver, used to share the workload of the main unit.

Sensitivity is high at a claimed 91dB/W, even though this is nearer a '4 ohm' than an '8 ohm watt', while power handling is typically 200W, peak programme, allowing high sound levels to be attained.



TANNOY D500

A smaller 'Definition'

Dual Concentric model

aims to match the

success of the big D700

by MARTIN COLLOMS

Larger rooms can be driven by speakers of this type, particularly in view of the well-damped low frequency performance.

The concentric driver design has been headlined in the introduction but the enclosure also deserves some attention. Internal standing waves are discouraged by the non-parallel sides, the irregular shape defined by the truncated triangular plan. Only the side view [see page 59] can do justice to the interior of this enclosure where the loading at bass frequencies is more complex than usual.

Designated a double chamber reflex, the enclosure has a main upper volume tuned by a ducted

port. There is a second lower chamber communicating with the main volume, the link between the two established by another ducted port which acts as a filter providing communication at low bass frequencies. At low frequencies the pair of bass drivers now share the total enclosure volume which is reflex tuned by the third port. Such multiple tuning can smooth and extend the bass response while the foam plugs in the ports provide firm resonance control. The interior is well fitted with damping rolls and absorptive slabs.

Inevitably horns bring some of their own problems. For instance it may be hard to achieve high levels of smoothness in the upper treble. At its simplest, a tweeter is generally a small hemispherical radiator or sound source cleanly positioned on a flat baffle. Almost any further complication can affect the result, validated by measurement and listening.

Conversely, a tweeter ideally placed on its own section of speaker baffle or front panel must be, by definition, spaced from the other driver carrying the next section of the musical spectrum, namely the mid range. That spacing can lead to problems in defining the correct listening axis and in blending the

Whether the tweeter is substantially time aligned or not, it is the coincidence of radiating axis which endows the Dual Concentric design with such a great advantage

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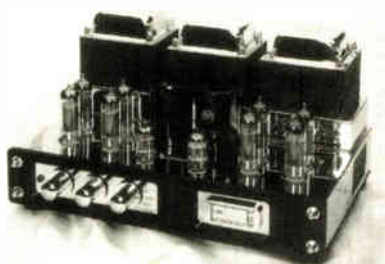


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sound from these two elements in the range where they most overlap, the vital crossover region.

The main driver cones are made by injection moulding a mineral-loaded polypropylene. Medium loss nitrile rubber has been chosen for the surrounds for good midrange termination, while the bass driver is mass loaded to extend the low frequency range and match the low order single element crossover, comprising an air core inductor. Both driver chassis are die castings. The midrange crossover is quasi second order (damped), while the treble section is again first order, in this case a single mechanically damped polypropylene capacitor. van den Hul interconnect is used, hard soldered throughout.

SOUND QUALITY

A well tried selection of compatible electronics was assembled, from the Exposure 15 'integrated' to the Musical Fidelity A1000 and the Naim NAP 250, the latter with Audio Synthesis Passion. CD sources included the Marantz CD63, a Micromega Stage 3 (the Micromega set of three Stages will be reviewed soon) and a QED Digit Reference driven by a Meridian 200. Speaker cables included Naim, Exposure and bi-wired Siltech silver.

The spike complement was fitted and experiments in placement were made at various angles and spacings from the wall, from 0.2m to 0.8m.

I still had a good recollection of my positive experiences with the D700 some months ago [HFN/RR, July 1993], recalling with some pleasure their fine dynamics and timing, their wide dynamic range, firm powerful bass and punchy clarity.

I do not feel the D500 was unfairly diminished by comparison with the larger 700. Irrespective of its smaller size, the D500 is an animal of a different species and however hard I tried, I just could not bring the D500 to life.

First impressions were of a band limited sound, dry and over damped in the bass, lacking in air and extension in the high treble as well as somewhat closed and forward in the midrange. Stereo depth was barely average and the transparency was insufficient clearly to define space or ambience. In addition, transients lacked full expression, while rhythmic analysis was poorer than average and there was a recessive character to the sound.

Detaching the grille proved only partially helpful, the sound opening up a little and gaining sharper focus. The effect was to make the sound a touch crisper and more alive. 59 ►

LAB REPORT

The D500's sensitivity was high at 91dB/W, though this was about 1.5dB less than for the bigger D700, and somewhat compromised by the near 4 ohm impedance.

Claimed frequency response is 40Hz to 30kHz ± 3 dB; however, my results [Fig 1] showed that output fell rapidly above 16kHz. In the central range, though, it measured 80Hz to 16kHz (± 2 dB), a fine result especially in view of the low order crossover. Bass extended to 46Hz (-6 dB), fair for the size, although it was a little shy in the main range partly due to the high port damping which gives a slow, near-infinite baffle rate of final rolloff.

Yes, the midrange/treble balance was very good on the axial graph [Fig 1] but experience with large concentric speakers, including KEF's Uni-Qs, suggests that a touch of treble lift on axis is a useful way of obtaining a desirable overall energy balance and 'opening out' the sound. From the individual driver responses (dotted), the 1.7kHz crossover can be seen. Interestingly a notch in the tweeter at 6kHz was neatly filled by the secondary output from the midrange.

Looking off axis [Fig 2], the pattern of progressive, gradual high frequency rolloff

correlating with greater axial offset is a classic result, making the case for the Dual Concentric design on the basis of excellent off-axis uniformity. Up to 30° off axis the deviations were small and on the face of it, this should support the case for a sound which was rather more open than was actually heard. At 45° off axis (the long dashed response), the treble rolloff was greater and earlier than usual, which relates more closely to the sound identified.

Detaching the grille had the surprising effect of restoring 2dB of output at 3.8kHz, while the density of the cloth was sufficient to attenuate the treble by 1.5dB 8kHz to 16kHz. No wonder the effect of removing it was so obvious! Spot checks for distortion showed that the D500 performed most respectably in this department, recording below average figures and very capable bass power handling, right down to 40Hz.

The impedance trace [Fig 3] showed a dip to 3.5 ohms over the low frequency range, while above the crossover point the good treble efficiency gave a load value nearer 10 ohms. The low frequency range was almost devoid of resonance.

The ETC (energy/time curve) results were complicated by the delay to the

tweeter, due its placement behind the midrange magnet. (In most speakers, the tweeter is located forward of the midrange driving point.)

Overall, 35dB of decay was achieved in around 1ms, a good result, but there was a resonance in the treble near 12kHz which could be seen in full force on the second waterfall display [Fig 5].

My present measurement technique for the room response indicated that some bass lift should be present [Fig 3]. For the D500 the mean bass level was 2.0dB below the midrange, correlating with the speaker's bass-shy sound, though output was quite well extended to 35Hz. The overall smooth energy output was confirmed, especially for a floor stander, but comparison with the D700 results showed that the D500's 'energy response' was 2dB weaker over the entire treble range (3kHz to 15kHz).

From these results, I suspect that it is unwise to try to 'tame' a Dual Concentric. It has to be allowed to 'let rip' and drive the room if it is to realize its true dynamic potential.

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TANNOY D500

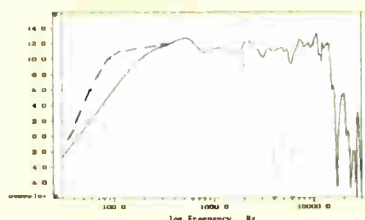


Fig 1. Tannoy D500: on-axis 1m response. Dashed trace is LF correction; dotted traces show individual driver responses (see text)

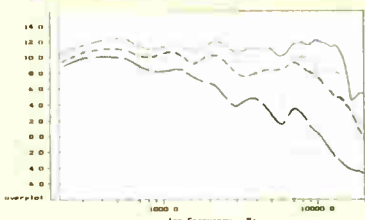


Fig 2. Tannoy D500: 2m forward response family with 1/3 octave weighting. Solid trace (top) axial, dotted traces 15° vertical, 30° and 45° lateral off-axis

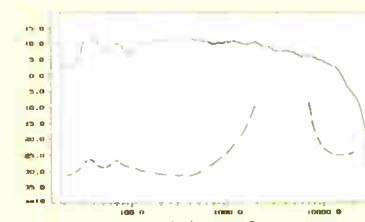


Fig 3. Tannoy D500: room-averaged response (RAR), 1/3 octave, with impedance plot below (2 ohms per division, baseline zero)



Fig 4. Tannoy D500: MLSSA waterfall display of energy decay, 30dB dynamic range, 0.1ms risetime



Fig 5. Tannoy D500: MLSSA waterfall display of energy decay, 60dB dynamic range, 0.2ms risetime

Test results	Tannoy D500
Dimensions (whd,mm)	314 x 460 x 344
Recommended amplifier power per channel	15 - 200W
Recommended placement	Free space
Frequency response	50Hz - 17kHz
± 3 dB (2m)	46Hz
LF rolloff (-6dB) at 1m	35Hz
Bass frequency extension (typical in room)	35Hz
Voltage sensitivity (ref 2.83V) at 1m	91dB/W
Approximate maximum sound level (pair at 2m)	108.5dB
Impedance (minimum/typical/ease of drive)	3.4/5.0 ohms/average
Forward response uniformity	excellent
Typical price per pair (inc VAT)	£1500



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*The EC 'single market'
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contender in the UK*

by KEN KESSLER

Sheepishly, I'm here to review a product from a company we've been ignoring for all the wrong reasons. Mentioning 'JM Lab' might trigger a response in those who remember the minutiae of show reports. They'll think 'French', 'speaker manufacturer', 'Focal drivers'. And it's that last bit which makes this so embarrassing. Not only is JM Lab the speaker manufacturing division of a company well-known for raw drivers (the Wilson WATT uses Focal units, for example), it has UK distribution for some time. So this long-overdue assessment of one of its products isn't mere appeasement of the French!

Because JM Lab has taken advantage of the single-market concept, if not quite shoving speakers at us through the Chunnel, its range of imported speakers do not suffer the price disadvantages normally attributed to foreign-made goods. The Micron Carat retails for only £390 per pair in basic form, and it offers performance and perceived value on a par with home-grown speakers.

Stand-mounted, rear-ported, compact two-way speakers are not exactly in short supply in the UK, so the Micron Carat has to offer something substantially different to make it stand out. The £390 version is finished in black ash vinyl over chip-board while a £459 version uses an MDF cabinet veneered in auburn or lacquered in black satin. I would suspect that the cabinet changes are accompanied by some small sonic gains, too, but I've spent time only with the less-expensive model.

So far, so similar. The enclosure, measuring 300x194x202mm (hwd), has bevelled vertical edges to create a narrower baffle. Build quality matches British speakers at this price point; if the badge were removed I'd easily mistake these for small Tanos or Mordaunt-Shorts. Multi-way terminals allow you to wire them in single, bi-wired or bi-amped mode.

Remove the grille and things become interesting, not least because the Micron Carat contains a version of the company's famous inverted dome tweeter: this will allow the impoverished audio casualty to boast that his/her system shares a genetic

link with the Wilson WATT. The tweeters aren't actually the same as those found in the WATT, of course. The Micron Carat uses a new version of the 25mm inverted dome, this time made from something called Tioxid. Although the name sounds like a noxious medicine, Tioxid is actually titanium treated with a proprietary coating, said to absorb surface waves and reduce distortion. Behind the dome is a 72mm diameter magnet.

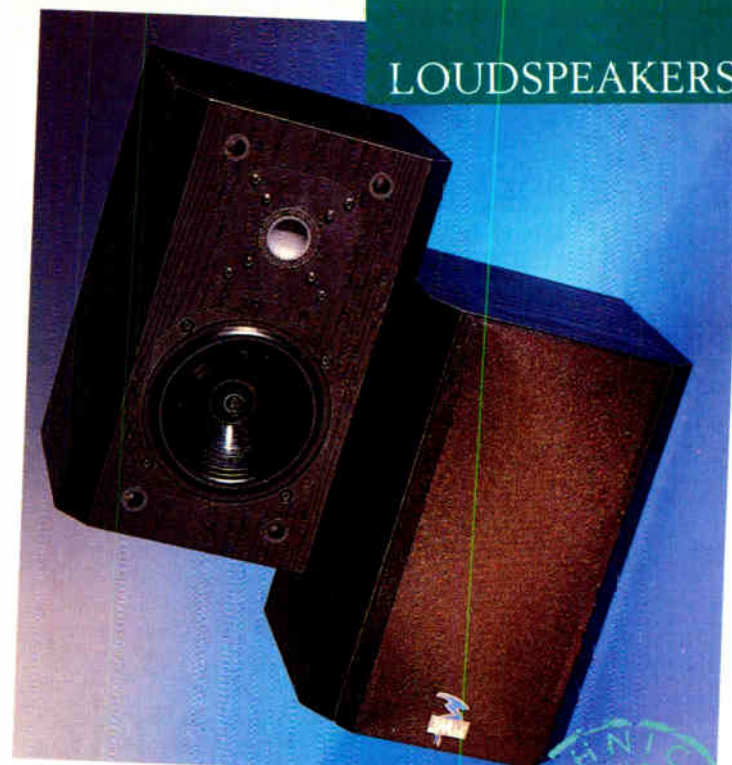
Crossover at 3kHz is 18dB/octave, the recipient of the lower frequency signals being a 136mm woofer consisting of a Neoflex cone, dual voice coil, diecast chassis and 100mm diameter magnet. The system is specified as a 4 ohm impedance, sensitivity 88.5dB (2.83V/1m), with a maximum SPL of 103.7dB. Hungrier than today's 90dB-plus efficiency experts, the Carat is happier with a bit more than the miserable 40W offered by sub-£200 integrat-eds (though that's what will most likely power them in the UK).

Even though the grille material itself is thin, reminiscent of the cloth used by Sonus Faber, the frame itself is heavy and thick, enough to inter-

fere a bit with the dispersion. Purists will, therefore, prefer the Micron Carat au naturel. As an added bonus, said purists will then be spared the one aesthetic mistake made by JM Lab: the badge is comic-book grotesque, more suitable for a computer games console than a speaker. (I'll overlook the model name and the hilarious owner's manual. But maybe next time they should have the literature proof-read by someone who speaks English like a native. If only the French were as charitable about our handling of their language.)

Even though power demands led me toward using the Acurus A250 and Classé DR10 power amps, I was drawn continually to the little Unison Research Simply Two valve amp, which just happened to complement the Micron Carat so well. But I couldn't use it as my primary power source because it compromised an area where the Micron Carat positively excels, which also happens to be the quality the company boasts of in the literature: 'Your dream is a small-sized loudspeaker which produces the sound of a big one'. And they hit the nail

The Micron Carat contains a version of the company's famous inverted dome tweeter: this will allow the impoverished audio casualty to boast that his/her system shares a genetic link with the Wilson WATT



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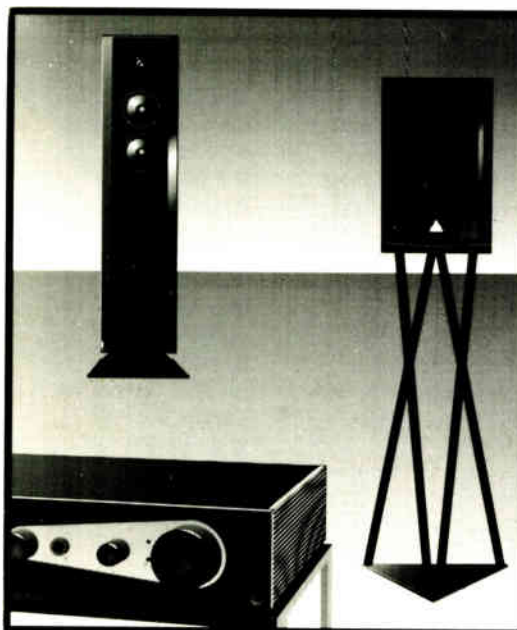
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on the head. So large-sounding is the Micron Carat (remember, it's scarcely larger than an LS3/5A) that you might forgive it any other sins if scale is your priority.

As large speaker systems become less popular because of the narrow-minded, soulless taste police who influence so many wives (there, I've said it: wives put the damper on most hi-fi purchases) the need for big-sounding small speakers increases proportionately. And while there are plenty which 'disappear', creating a large sonic stage in which to frolic, the Carat expands in all directions, on all types of music, at all levels, and with only one proviso: that your amp produces enough juice to let the dynamic attributes match the spatial.

Partly through the use of the rear port, partly due to the long excursion of the woofer and the double voice-coil arrangement, the Micron Carat provides more than enough bass to preserve the notion that the listener is in front of a much larger system.

How large? Well, the Carat has an internal volume of 6.6 litres. It was not embarrassed by speakers in the 12-15 litre range, sporting woofers some 30% larger. Miraculously, the Carat matches the sheer quantity of bass with reasonable control and

extension, like a well-behaved Linn Tukan. All that's missing to complete the illusion is that carpet-curling thunderbass so beloved of Americans. Big deal. Whether listening to the crunching artifice of current dance music (Virgin Records' *Signed, Sealed, Delivered No 2* sampler for £1.99 is full of the stuff) or the monumental bass which seems to be the preserve of soundtracks, the Micron Carat managed to behave in a most Wilson-like manner. It delivered what was within its range, ignoring that which would cause it to splat, belch or simply implode.

Even better is the way the Micron Carat handles the mid and upper frequencies, glare-free, full of detail but utterly devoid of the aggression often present in the Tukan, most metal-domed units and the (now-deceased) WATT 3. (Had I listened to the Micron Carat before hearing the WATT 5, I'd have been less surprised by the latter's new-found politesse.) The treble is silkier than I expected, smooth and grainless and supported by a rich midband. Although I preferred the speaker with the added warmth of the Unison Research tube electronics, the intrinsic balance of the Micron Carat is far from cool, overly analytical or hygienic, so it would take a fairly fierce transistor amp to do too much

damage to the sound. As the above should suggest, this is a terrific speaker for vocals, placing them to the fore and leaving the much-needed life-giving details — breathing, natural sibilants and chesty resonances — relatively intact.

But however much this sounds like an LS3/5A with extensions at either end, I can't help but come back to the sense of scale this miniature provides. And I don't mean just the height and width. I can give no better advice than to suggest to the potential customer to sit way off axis, to the left of the left speaker for example, to 'look into' the stage, with depth recreation of a calibre I normally associate with thoroughbred panel systems.

Is this the best speaker in the UK for under £400? I don't know, as I've not tried them all. But it certainly is a welcome and strong contender. Beyond that, though, it forces us to stop thinking of French speakers just as goofy freakery with eyeball modules or weird finishes. This little import is interfering with what seemed to be solely a British preserve, however conservative and established is the world of two-way, box-type speaker. But the Micron Carat is one to watch, since, back home across the channel, it has 19 larger siblings. ✧

So large-sounding is the Micron Carat (remember, it's scarcely larger than an LS3/5A) that you might forgive it any other sins if scale is your priority

Supplier:
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sidelines

Following up last month's look at stereo/mono signal reduction, it might be thought that the resultant shift in program balance is all that could be of interest to the hi-fi layman. But a few further words may help to explain why the prospect of mono mix-downs for two-channel TV sound gave rise to the worries I mentioned, while there are some points arising which lead back to stereo matters.

On the face of it, a 3dB diminution of level for sources located at the soundstage extremes is pretty marginal. This is in terms simply of loudness changes, ignoring the loss of directional information, which with video support is less important since one is then usually able to augment ears with eyes. But in purely aural terms a combination of mild loudness imbalance and zero spatial separation could mean that some quiet sources which in stereo were out at the wings would become obscured for the hard-of-hearing when heard in mono.

These were the sort of factors which caused a minor flurry in 1989, although there's another element in the equation working in the oppo-

site direction. This is the ambient setting, which tends to collapse disproportionately when switching to mono because of its antiphase components. A truly random distribution of reflected sound would produce an even spread of L/R phase differences from zero to 180°, giving an average of 90°. This would result in a 3dB reduction of amplitude when mixed to mono, whereas the direct components in a stereo signal are only reduced by that amount if situated at the lateral extremes. Thus the fall in level for an orchestra can be quite small (zero at the centre), while the *whole* reverberant field is reduced by 3dB or more, which can be very striking with highly 'ambient' recordings.

The upshot is that the loss of directional information is offset by a considerable reduction in reverberance, thereby enhancing clarity in a manner appropriate to the single-channel medium. In practice that hypothetical 90° phase difference is often exceeded, as spaced mikes introduce further echelons of time-related signal artefacts. Also, an authentic Blumlein set-up (using crossed figure-of-eight velocity

mikes) generates truly antiphase signals from sounds reflected laterally across the recording venue, in contrast with in-phase signals from the direct sounds. In stereo, such out-of-phase reverberant components can add both height and width to the perceived acoustic, but if the direct image is to be expanded likewise, it too needs phase manipulation.

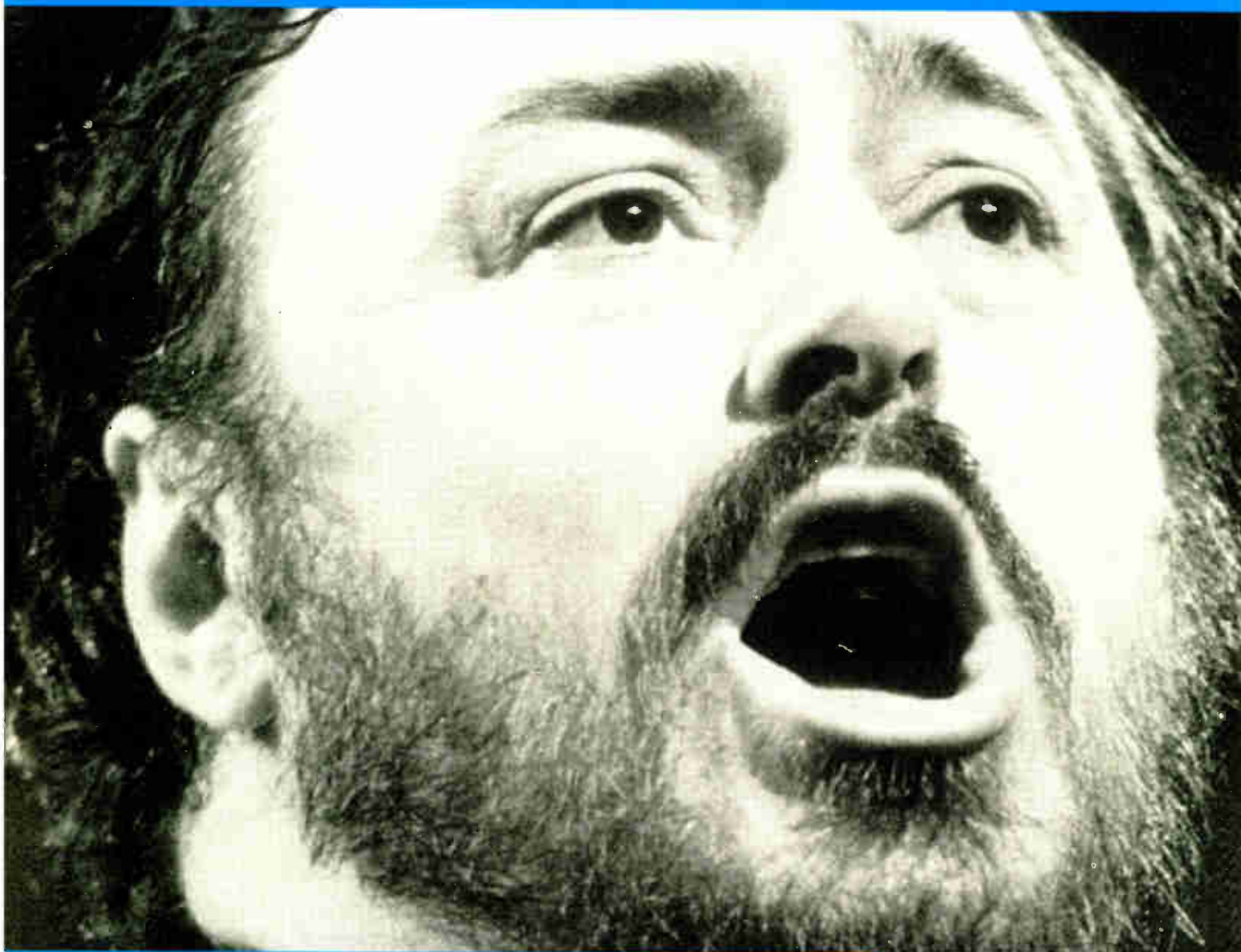
Interestingly, and about as far removed from mono reductionism as one can get with two channels and as many speakers, Bud Fried (of IMF fame) is promoting a system in the US which deliberately exploits and manipulates the phase difference in spaced-mike recordings.* It uses speakers with dual-coiled bass units, each of which handles its own normal signal via one coil and the interchannel difference-signal via the other. This is said to enhance dramatically the ambient warmth deriving from recorded phase differences below 800Hz, and to open out the image to 180° despite conventional speaker placements. I haven't heard it, but the idea looks intriguing.

John Crabbe

*Enquiries to: Fried Production Corp, 1323 Conshohocken Road, Norristown, PA 19401, USA.

An authentic Blumlein set-up (using crossed figure-of-eight velocity mikes) generates truly antiphase, signals from sounds reflected laterally across the recording venue, in contrast with in-phase signals from the direct sounds

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LOUDSPEAKERS

lumps or spikes and an ability to play loud in larger rooms with no subjective hint of compression, distortion or overload. In particular, the treble remained in balance at very high levels thanks to the good conversion efficiency of this horn-loaded design.

CONCLUSION

Temporarily doubting my judgement during the D500 auditioning I placed a pair of 16-year old LS3/5A speakers upside down on top of the Tannoys and wired them up. Immediately the test audio system made musical sense; within its limited dynamic compass that venerable miniature had more bass with clearer tunes, decent transparency, good stage width and pretty fine rhythm, especially, considering how the speaker was being misused!

Inexplicably the balance of merits so evident in Tannoy's larger D700 appears largely absent in the D500. Competent as a piece of acoustic engineering, well crafted and finished and with a highly satisfactory lab report, the D500 just didn't 'deliver' in my review system, despite my experiments with placement.

In summary, I felt that this new speaker from Tannoy was overly dry in the bass, rhythmically below par, lacking dynamic expression and stereo transparency. There was also a dull, closed-in effect and some coloration in the midrange and treble. Although the balance of my measurements and listening test results precludes a recommendation from me, try the D500 and make your own judgement. ✓

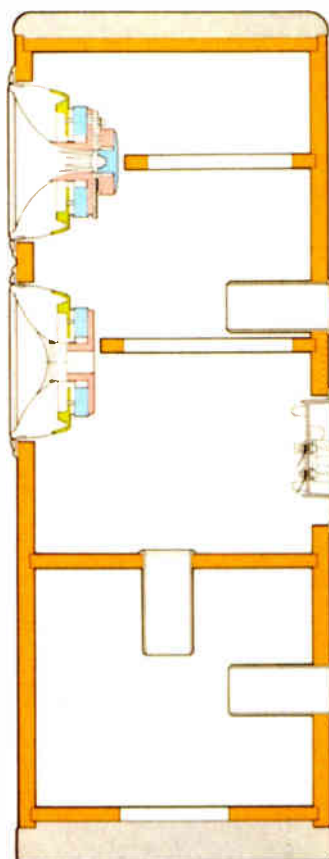
There were plus points: a notably smooth sound free from lumps or spikes and an ability to play loud in larger rooms with no subjective hint of compression, distortion or overload. In particular the treble remained in balance at very high levels thanks to the good conversion efficiency of this horn loaded design

CONCLUSION

As a very mild counterbalance to what is otherwise an excellent review of the LS7, I have to say that in my view it did not quite reach the highest available standard for rock-orientated rhythm and dynamics, although undeniably it was highly competent in this area.

Aside from this, the LS7 is a superb product. Built for 'speed', its combination of simplicity, fine circuitry, and triode amplification has resulted in a wonderfully balanced sound. On a shopping list of sonic virtues, all are placed very high; in fact many are at today's state of the art with an overall score to match. Yet this description cannot do justice to the wholly musi-

Sectional view shows Tannoy's Dual Concentric unit mounted near the top of the cabinet. Below this can be seen the second bass unit, and the double-chamber reflex port arrangement



cle attack and syncopation diluted. Another subjective problem concerned the bass. As supplied, this is rather dry and overdamped; this speaker also lacked slam and weight, making the D500 sound 'smaller' than it actually was. It may be dry sounding but it wasn't particularly quick or very detailed. Opening the ports revealed where the bass power had gone but the resulting boom and coloration showed precisely why the ports had been choked off.

Comparisons with reference monitors showed the midrange to have a moderate degree of hollow, boxy coloration and a tonal balance that pitched voices up, making them thinner. Violins sounded dull in the extreme treble and a bit too 'wiry' in the lower range. Certain treble sounds were distinctly odd while a distinctive driver 'talk' was heard on occasion. In the larger 250mm size (used for the D700) the chosen voicing for the concentric horn tweeter appeared to avoid this coloration.

A very wide range of programme was tried, ranging from Michael Jackson's *Dangerous*, Track 10, which I felt barely worked, to cathedral organ which lacked weight, articulation and sufficient resolution on complex pipe work.

Even with Siltech bi-wiring the D500 failed to produce more than average depth and it never sounded really open or transparent.

However, there were plus points: a notably smooth sound, free from

The lack of rhythm remained a problem for me. Adjustments to both speaker placement and/or the foam plugs in the ports, and experimentation with choice of electronics failed to compensate for this speaker's slow, barely average rhythmic ability. Easily recognised when playing rock material, this was also plain enough on a string quartet, where the cello part seemed to be undermined. Pace and timing were also thought to be below par; Jacques Loussier tracks were perceptibly slowed, with even their gen-

record reviews

index



classical

- ALKAN**
Concerti da Camera 1,2
Hamelin/BBC Scottish/Brabbins
- BARTOK**
Music for violin & piano
Stanzelet/Fenyó
- BEETHOVEN**
Symphonies 2&8
Concertgebouw/Sawallisch
- Kazakevich/ECO/Mackerras**
BORODIN
Symphonies 1&2 etc
RPO/Ashkenazy
- BRAMMS**
String Quartets 1&3
Borodin Qt
- DVORAK**
Symphony 8
NYPO/Masur
- Symphonies 1&9**
Concertgebouw/Giulini
- Violin Concerto**
Tetzlaff/Czech PO/Pesek
- Piano Quintet**
Frankl/Lindsay Qt
- Borodin Trio**
FIBICH
Moods, Impressions &
Reminiscences
- Kvapil**
FRANCK
Symphony
Boston SO/Ozawa
- HAYDN**
Symphonies 45-47
Tafelmusik/Weill
- Symphonies 50, 64, 65**
Tafelmusik/Weill
- Symphonies 53, 73, 79**
Orpheus CO
- HENSELT**
Piano Concerto, Variations
Hamelin/BBC Scottish/Brabbins
- LALO**
Symphonie espagnole
Tetzlaff/Czech PO/Pesek
- HOLLOWAY**
Second Concerto for Orchestra
BBC SO/Knussen
- IBERT**
Flute Concerto, Escapes etc
Montreal SO/Dutoit
- JANACEK**
Sinfonietta
NPYO/Masur
- MAHLER**
Symphony 1
Florida PO/Judd
- Symphony 2**
soloists/Ernst-Senff-Ch/BPO/ Haitink
- soloists/Arnold Schoenberg Ch/VPO**
etc/ Abbado
- MARTINU**
Concerto for 7 winds etc, Erasmi,
Studies for String Orch
- LPO/Bamert**
MARTINU
Piano Quintet 2
Frankl/Lindsay Qt
- MULDOWNEY**
Oboe Concerto
Careri/LSO/Tilson Thomas

The HFN/RR Ratings

Sound quality and performance are separately graded as a summary of each review. In Rock/Pop/Jazz the numerical rating also reflects musical content. (A few releases are reviewed from master-tape copies, as stated.) An additional 'star' denotes outstanding quality.

	Sound quality :	Performance
Fine modern recording	A	1 Very Good
Good, some minor reservation	B	2 Good
Only moderately convincing	C	3 Moderate
Poor sound	D	4 Poor
Historical source, eg 78rpm	H	H Historical

INFORMATION

Review headings show catalogue number and CD total playing time, followed by a price coding (see 'Compact Disc Service'). Reissues are shown as ® with the first UK publication date
Ⓜ = monophonic recording.

- MUSSORGSKY**
Boris Godunov
soloists/Chs/BPO/Abbado
- PART**
Fratres, Cantus, Tabula Rasa etc
Little/Roscoe/Bournemouth Sinfonietta
- POULENC**
Organ Concerto
Preston/Boston SO/Ozawa
- PROKOFIEV**
Symphony-Concerto, Concertino
Harrell/RPO/Ashkenazy
- RACHMANINOV**
Symphony 2, Scherzo, Vocalise
St Petersburg/Jansons
- R STRAUSS**
Four Last Songs
Studer/Dresden/Sinopoli
- STRAVINSKY**
Apollon musagète, Dumbarton Oaks,
Danses concertantes etc
Montreal Sinf/Dutoit.
- TELEMANN**
Trio Sonatas etc
Amsterdam Baroque/Koopman
- Suites in C, D, B-flat**
English Concert/Pinnock
- TIPPETT**
Symphony 3, Praeudium
Bournemouth SO/Hickox
- WAGNER**
Wesendonck-Lieder, Tristan - Prelude
& Liebestod
Studer/Dresden/Sinopoli
- WOLF**
Italian Songbook
Bonney/Hagegard/Parsons

reflections

- PROKOFIEV**
Violin Concerto 2, Violin Sonatas
Perlman/Ashkenazy/Boston
- SO/Leinsdorf**
RACHMANINOV
Preludes
Katin
- RAVEL**
Orchestral works
Boston SO/Ozawa
- SCHUBERT**
Winterreise
Schreier/Richter
- SIBELIUS**
Symphonies etc
LSO/Collins
- Symphonies 2&7**
Philadelphia/Ormandy
- STANFORD**
Symphonies
Ulster Orch/Handley
- R STRAUSS**
Sinfonia domestica, Tod und
Verklärung, Salome - Dance
Cleveland/Szell/Philadelphia/Ormandy
- KARAJAN CONCERT**
Borikoz, Bizet, Respighi, Sibelius,
Smetana
Philharmonia/BPO

rock/pop/jazz

- DAVID ALLEN TRIO**
Live 1963
- DAVE ALVIN**
King of California
- AMERICAN MUSIC CLUB**
San Francisco Virgin
- BEN ANDREWS & THE BLUE RIDER TRIO**
Preachin' The Blues
- CHUCK BERRY**
Poet Of Rock'n'Roll
- DAVID BOWIE**
Santa Monica
- LINDA BRADY**
Linda Brady
- JIMMY BRYANT/JODY REYNOLDS/LES PAUL**
Guitar Legends
- CARAVAN**
Cool Water
- SHAWN COLVIN**
Cover Girl/Columbia
- TED CURSON**
Tears For Dolphy Black Lion

- THE DOWNLINERS SECT**
Singles A's & B's
- DAVE EDMUNDS**
Plugged In
- SIDSEL ENDRESEN**
Here The Moon
- EVERYTHING BUT THE GIRL**
Amplified Heart
- CHRIS FARLOWE**
I'm The Greatest
- The R&B Years**
CHARLES GAYLE TRIO
Live At Disobey
- BUDDY GUY/JUNIOR WELLS**
Drinkin' TNT'n'Smokin' Dynamite
- RICHIE HAVENS**
Cuts To The Chase
- HESSION/WILKINSON/FELL**
The Horrors of Darmstadt
- HOB0**
Hobo
- FRANKLIN KIERMYER**
Solomon's Daughter Evidence
- AKEMI KUNIYOSHI**
Ary Music
- YUSEF LATEEF**
The African-American Epic Suite
- PEGGY LEE**
The Best Of, 1952-1956
- MALCOLM McCLAREN**
Paris
- MAT MANERI/PANDELIS**
Karayorgis In Time
- THE MAZELTONES**
Lattes & Lattes
- VAN MORRISON**
Pavane Dues
- MIGHTY BABY**
Mighty Baby
- AMOS MILBURN**
Down The Road Apiece
- MOON MULLICAN**
Moonshine Jamboree
- DAVID MURRAY**
Live '93 Acoustic Octfunk
- THE NEVILLE BROTHERS**
Fiyo On The Bayou
- NEW RIDERS OF THE PURPLE SAGE**
Wasted Tasters 1971-1975
- NETTY GRITTY DIRT BAND**
AcousticLiberty
- NO-MAN**
Flowermouth
- ALAN PARSONS PROJECT**
Tales of Mystery and Imagination
- GENE PITNEY**
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- QUICKSILVER MESSENGER SERVICE**
Quicksilver
- THE RAMONES**
End Of The Century
- Pleasant Dreams**
LEON REDBONE
Whistling In The Wind
- REPULSA**
Repulsa
- ROLLING STONES**
Voodoo Lounge
- SANTANA**
Evolution Thunderbolt/Magnun
- SPIN DOCTORS**
Turn It Upside Down
- SUDDENLY TAMMY!**
Suddenly Tammy!
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The Sue Records Story: New York City - The Sound Of Soul
- Ain't Nothing But A House Party**
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- The Chess EP Collection**
Dance With Me ... The Autumn Teen Sound
- The Scorpio Records Story**
With Honours (Soundtrack)
- 3000 Volts Of Stax**
FRED WESLEY & THE HORNY HORNSA
Blow For Me, A Toot For You
- Say Blow By Blow Backwards**
The Final Blow
- ROY WOOD**
Boulders



photo: David O'Driscoll



interview

- 6 Trevor Pinnock talks to Antony Hodgson

record of the month

- 65 Haitink re-records Mahler's *Resurrection Symphony*

classical

- 65 Beethoven concertos revised; Dvorak & Haydn Symphonies; Holloway, Muldowney & Pärt; Boris Godunov

reflections

- 76 The historic Collins Sibelius cycle

rock/pop/jazz

- 79 Three turns on the Spin Doctors; Voodoo Lounge; Dirt Band for audiophiles; jazz roundup & box sets

reissues

- 86 Reviews by Ken Kessler

finale

- 114 The Decca story – by Colin Escott

TREVOR PINNOCK

by ANTONY HODGSON

'What I try to do is respond to what the music seems to be asking. You can't have a pre-set notion, I simply try to get the most natural balance possible, and I think there is an inbuilt natural balance when using old instruments'

I think I can safely say that nowadays you are thought of mainly as a conductor of 18th-century music who uses period instruments; but originally, did you see your future career as being that of harpsichordist?

'I saw my future as a musician, and that is how I feel now – but it's funny you should ask that question as I've just been sitting down planning various harpsichord things, and in future you may see rather more harpsichord playing. I am happy for people to see me in whatever pigeon-hole they choose, as long as there is always the greater heading of "musician".'

When the English Concert began playing together, did you find any problems in adapting to a style which may then have been fairly new to some of your players?

'Well, this goes back to the days of 1973, and in the early years we knew that we could probably have done better using modern instruments, but I'm very glad that we held on to the belief that if those old instruments were good enough for Bach and his contemporaries they must be good enough for us. Now that we are able to play them to the maximum of their capabilities this gives us the freedom to get on with

interpreting the music in the proper style. I am sure composers never wrote exquisite music expecting it to sound disappointing, so we owe it to them to play these instruments well.'

In an interview given by one of your players, it was suggested that in the case of period performances, 'audiences are more prepared to accept blemishes'. Have you any comment about the need for precision?

'One has to go for realistic precision – we must make everything as good as possible – but I am becoming more and more against these strongly analytical recordings. One should realise that recording gives us a greater freedom to live dangerously: if we get to the level of musical communication rather than scientific examination, then all sorts of things can occur in music-making. I felt this recently when I recorded Mozart 39 & 40. It was extraordinarily rewarding work: one has a tremendous responsibility in playing some of the greatest music in the world, and I do hope that all that I wanted to say about it is evident in those performances.'

Some Mozart performances tone-down the orchestral palette but what I like about your versions of the symphonies is your respect for the boldness of the instrumentation. Are you conscious of this?

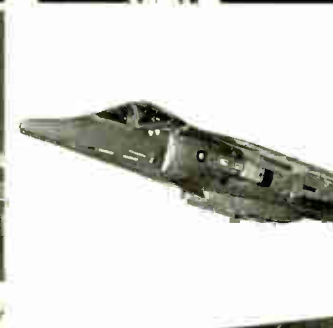


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World Radio History

'What I try to do is respond to what the music seems to be asking. You can't have a pre-set notion. I simply try to get the most natural balance possible, and I think there is an inbuilt natural balance when using old instruments. Remember however, there is a big change in Mozart as he develops. The writing in the last symphonies is a tremendous advance in coloration, largely due to his homogeneous use of the wind instruments, and this affects the style of string playing as well – quite a different sound from that of Haydn. So by doing all the symphonies I have become aware of this change.'

I much approve of your use of timpani whenever trumpets are in the score. We know that it was 18th-century practice to use timpani when trumpets were present, regardless of the existence of a timpani part. Do you make this a rule or are there exceptions?

'It is a good rule of thumb but there are a few occasions when it doesn't work. I don't feel it works in Mozart's 26th Symphony: here there are antiphonal effects for trumpets and horns which don't seem to require percussive support. I have made reconstructed parts for some symphonies and Robbins Landon wrote me a timpani part for one, but it is a fascinating problem and the 18th-century convention of the timpanist improvising from the second trumpeter's part, if he doesn't have one of his own, certainly works. I found this recently when I was rehearsing for a performance of Haydn's *Oxford Symphony*. Somehow the timpani part had become lost, so the timpanist played from the second trumpet part; and although Haydn's version is far more subtle, what the timpanist did was more than adequate for our purposes. On the other hand I wouldn't dream of adding timpani to Handel's *Water Music* because it wouldn't work.'

What are your views on the use of harpsichord as continuo instrument in music of the classical period?

'When preparing my Mozart series I decided not to reflect on how Mozart might have first performed each symphony, but looked instead at how he might have performed them during one of his many tours. So from my point of view, Mozart has been 'visiting the English Concert' and we play in a certain way – and this means that I direct it from the harpsichord. If I were working with another orchestra I might not use harpsichord. The same with Haydn: this is the way I direct the orchestra, so if Haydn "visits us", I perform it like this. I recognise

however, that as music gets later, use of the harpsichord becomes less important.'

It occurs to me that a harpsichord is an excellent continuo instrument, and the fortepiano is rather a poor one because it is difficult to hear.

'I have tried using fortepiano but it doesn't give the signals to the orchestra – it blends too well into the texture. The value of a harpsichord is that people can sense the attack on the notes even if they don't hear them precisely, and it gives very clear signals to the orchestra; so it is an ideal instrument from which to direct.'

Well we seem to be agreeing on everything so far, so can we come to the bit where I disagree?

'Oh yes – wonderful!'

Well, in KA 216 and K22 the players use the B-flat basso horns, and for me, especially in K22, the music loses character with the horns playing in the bassoon range – what made you do this?

'I can only say I followed what I thought it looked like on the page. I don't always feel the case for high B-flats although I like them very much. If it had been Haydn I'd have had the horns high, but the texture is not quite the same with Mozart. Nevertheless you have an interesting point, and there must be somebody else who has done it using the high parts.'

Yes there is – do you want to hear it? It's on this tape. . . [plays extract]

'... Well that was very interesting: yes, I'd accept it. My gut reaction was 'very exciting', but at the same time I thought, well, I'm not sorry I did it *my* way.'

In three minuets in your Mozart set (in K45, KA214 and K110) you made both repeats of the minuet before the trio but only the first *after* it. It felt uncomfortable because this spoils the symmetry – why did you do this?

'Although I never do the double repeats after the trios in concerts, the musicological evidence to do so is such that I didn't really have the courage to omit them in this series of recordings. In the cases you mention, the structure is such that it seems to imply that you can't help making the first repeat although you *can* help making the second repeat. I do this in one or two Haydn Symphonies too. The trouble with this repeat business is that you can't win! If you don't do the double repeats after the trio some people feel unhappy, if you do, then you upset a different group of people, and if you do only one of them you're probably making everyone feel unhappy – especially you!'

'Right or wrong that's what I did



photo: Clive Barda

and I have to take the responsibility for it – I'm sorry it made you feel uncomfortable. There is another minuet problem too: some of the historical instrument people have a very fast minuet always, very much one-in-a-bar, even in the last three Mozart symphonies, but I can't persuade myself that a Mozart *Allegretto* should be a vigorous one-in-a-bar.'

The current project of yours is music by Telemann. This may not attract quite the same sales as Mozart – was it you that persuaded the record company to go ahead with the project?

'Oh, it was my idea. At first there was to be only one disc, now they have decided on a second, which is just coming out, and I'm pleased that the company has gone along with me on this.'

What do you plan beyond Telemann – or if no plans, what would you like to record?

'Well I've had a full lot on my plate, so Mozart has recently dominated the classical side of my repertoire. But after Telemann I should like to proceed to Suites and Concertos by Fasch: good healthy baroque style, not all great music, but well worth doing. There will be more Haydn including the Masses and also some Purcell, so we are certainly not short of ideas!' ♪

'If we get to the level of musical communication rather than scientific examination, then all sorts of things can occur in music-making'

RECORD OF THE MONTH

MAHLER: Symphony 2

Sylvia McNair (sop)/Jard van Nes (con)/Ernst-Senff-Chor/
BPO/Haitink

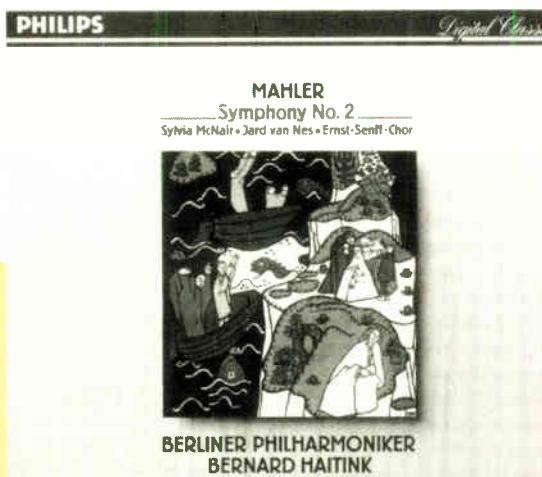
Philips 438 935-2

(2CDs, 86m 05s) ♦

Consistent with other readings in his BPO cycle, Haitink's 'Resurrection' Symphony is more spacious than in the earlier Concertgebouw recording: notably by some 2m in (i) and almost 1m in the finale section 'Aufersteh'n'; there's only a few seconds between the two inner movements. (CD1 takes in the *Andante moderato*; as before, five access points follow the 'Urlicht' – far less confusing than the many tracks favoured by DG in Mahler.)

Intending merely to remind myself of the older set, I found it hard to tear myself away from (i), so uncommonly purposeful was Haitink's approach. In the new set there's a substantially increased beauty of sound: partly the recording, more particularly because Haitink seeks to explore every potential for it. His mastery of and demands on the Berlin Philharmonic remind us of his ever-increasing stature (and, alas, Abbado's de-luxe Vienna 'Resurrection' cannot hold a candle to this Philharmonie version: it's essential emptiness is thrown into stark relief). There's one surprise in the coda, where Haitink's tempo for the final plunge into the abyss, one of extreme deliberation, is now about half of what it was. Again, the *Andante* contains some ravishing effects and the subtle transition in and out of turbulence has an unwavering linear simplicity.

After Baker, Ludwig or Heynis, van Nes's is a somewhat pennyplain voice (it's the Berlin oboist whose eloquence makes you hold your breath in the 'Urlicht'), but she does sing with very fine control – she's quite distantly balanced, so the unleashed torrent of sound as the finale begins makes a wonderful éclat! The whole concluding part – and the engineers make a marvellous job of its crowning climax – is paced with majesty and sensitivity.



**Mahler's
'Resurrection
Symphony': a
mighty peak in
Haitink's
Berlin cycle
for Philips**

Bernard Haitink



ALKAN:

Concerti da Camera 1 & 2,
Op.10/HENSELT: Piano Concerto in f
Op.16 □ Variations de Concert on
'Quand je quittai la Normandie',
Op.11

Marc-André Hamelin (pno)/BBC
Scottish SO/Brabbins

Hyperion CDA 66717 (69m 56s) •

This volume in Hyperion's survey of The Romantic Piano Concerto features two reclusive composers and four works that were hardly well-known in their own time, let alone any time since. Still, it's an odd coupling. There are two premier recordings, one of them a striking discovery, the other something perhaps better left undisturbed – although the disc as a whole will undoubtedly augment the reputation of the greatly gifted Marc-André Hamelin, who bids fair to become the most remarkable Canadian keyboard personality since Glenn Gould.

Adolf von Henselt was a talented and serious-minded composer-pianist who spent most of his career in Russia, and whose small output and heroic keyboard technique exercised a considerable influence on better-known contemporaries. His only Piano Concerto (1844) was premiered by Clara Schumann, and though always something of a rarity it figured in the repertoire until the early years of this century, championed by Busoni, Rachmaninov and Petri among others. In the LP era it was recorded by Raymond Lewenthal for CBS, and Michel Ponti for Vox, neither performance as assured and polished as this one. A sincere and well-shaped piece which should commend itself to lovers of the Chopin and Schumann concertos, Henselt's is condemned to its half-life by transcendental technical demands often not really apparent to the casual listener, and by the absence of a really distinctive compositional voice.

The earlier set of virtuosic variations on a theme from Meyerbeer's *Robert le Diable* is, I'm afraid, a mere curiosity – a mildly diverting and giddily difficult contribution to a genre which resulted in more than its fair share of empty display pieces. There's a nice *Adagio* variation and cadenza before the coda, and the piece is a superb vehicle for Hamelin; but that rather exhausts its slender virtues.

However, with Alkan we encounter an altogether different order of musical mind. His so-called *Concerti da Camera* (concertinos would be a better term) are very early works, but full of characteristic ideas and biting wit. The second, the C-sharp-minor, scored for piano

photo: Michael Ward/Philips Classics

First recordings of two Beethoven piano concertos? Dr Barry Cooper has deciphered late changes in manuscripts that were never sent to print

and strings, was also recorded by Ponti: it's a tiny, waspish, ternary-form effusion that displays a gift for epigram and for fearsome technique in the smallest space. But the A-minor (1832) is the discovery: at 14-odd minutes' duration, in three linked movements, with a full orchestra, this is much more like a real concerto. It was long known only in Alkan's arrangement for four hands: the orchestral parts turned up as recently as the mid-1980s, and provide us with the best evidence so far as to how Alkan could write for orchestra (at age 19, superbly). Prodigal of ideas and extravagant of gesture, with a pulverising Rondo finale, it is vintage stuff – even though immeasurably less important than the mature Concerto for solo piano (which Hamelin has recorded for Music & Arts) – and not really 'Romantic' at all, rather a caustic reaffirmation of late-classical ideals by a passionate worshipper of Beethoven. All Alkan fanatics will want this recording; and it ought to add some of the unconverted to their number.

[A:1/2] **Calum MacDonald**

BARTOK:
Music for Violin & Piano Vol.2 – Rhapsody 2 □ Violin Sonata 1 □ Hungarian Folk Songs/BARTOK-GERTLER: Sonatina/BARTOK-SZIGETI: Hungarian Folk Tunes
Susanne Stanzeleit (vln)/Gusztav Fenyo (pno)

ASV CD DCA 883 (68m 41s) •

I was most impressed with the first of the Stanzeleit/Fenyo recordings of Bartok's violin and piano music, and

this second instalment is equally good. Apart from the First Sonata, an intense work, grittier than the Second, the music itself is scarcely on the same level. As in the solo sonata on the previous disc, Stanzeleit probes the music to find the elements of the romantic side of the composer that lie beneath its surface. *The Rhapsody* is also admirably played, the romanticism of its opening movement nicely caught, and the lively *Friss* attacked with appropriate brio and well-judged aggression. The rest is fairly soft-centred Bartok and may not unreasonably be described as 'fag-ends', populist pieces, easily digested and with a strong national flavour; though not to be dismissed on that account. They were all put together for recital use by their arrangers with the composer's blessing.

[A:1/1*] **Kenneth Dommett**

BEETHOVEN:
Symphonies 2 & 8
Concertgebouw/Sawallisch

EMI CDC 754 5022 (60m 27s)
live recording •

Beethoven in F-major must be especially congenial to Sawallisch: the 'Pastoral' has been the one outstanding recording in his EMI cycle so far, and here is as lively and characterful an Eighth as you will find in the catalogue – if not as suave in finish as the 1984 BPO/Karajan on DG. I particularly liked the quick *Tempo di Menuetto*. The Second Symphony is bold in cut, not untraditional. But enjoyment here is marred by crude engineering: the sound, much inferior to that with the hall full, is grainy and harsh. (Decca are currently making the best Concertgebouw recordings.) Needless, separate track entry points are allocated to 2(i) *Allegro* and 2(iii) trio. A pity the audience noise is faded to silence before 8(ii) starts.

[C:2][B:1] **Christopher Breunig**

BEETHOVEN:
Piano Concertos 2 & 4 (revised versions)
Mikhail Kazakevich (pno)/ECO/Mackerras

Conifer CDCF 237 (60m 37s) •

At 1m 11s into the Second Concerto the orchestra gives out a little romantic sigh, 'ah – well': first of many departures from these scores as we know them. (The motif is heard again later: 6m 20s.) Changes, though, are restricted to the solo part in the outer movements of the Fourth. Here, Dr Barry Cooper has reconstructed from manuscript previously regarded as indecipherable

an elaborated version played by Beethoven himself on 22 December 1808. Cooper sees these as the composer's last thoughts, and therefore important. [See also 'Music News' May '93, p71.] With the B-flat Concerto Beethoven effected various changes between 1787 and 1798; having sent the score for printing he then made further alterations to (i) which, however, were not sent to his publisher. Dr Cooper has edited and restored these variants for this excellent All Saints Tooting '20-bit' recording [Keener/Tryggvason].

How significant is all this for the general collector? Whereas Cooper naturally argues that we have long been deprived of the composer's truest intentions, long familiarity with the standard editions makes me somewhat unsympathetic, especially to the changes in the Fourth (which one has come to regard as a 'perfect work'). Consequently, as the piano part veers off, each change strikes me as fussy, unconvincing tinkering. Given his status in Vienna, why did Beethoven not insist on new plates being created, so that he could set down his final thoughts even though he no longer performed in public?

As it is, Kazakevich's pearly, luminous articulation makes the Second Concerto rather more feminine and even-tempered than, say, with Serkin or Schnabel: the *Adagio* becomes John Field-like, and thus the more romantic additions to the opening movement fit in well. In 4(iii) it bothers me to have the end of the theme decorated (bars 19–20) but not when heard at 178–9; and the complication at the end of the chromatic run (160) seems to me to weaken the effect of linking back to the tutti [2m 31s on the CD]. The use of a chamber orchestra, and Sir Charles's no-nonsense tempi set these performances apart, regardless of the textual changes. Incidentally, familiar composer-cadenzas are used: the so-called 'Hammerklavier' one in 2(i), and in 4(i) the more severe one also preferred by Brendel (and to be heard with far more colour in his Chicago/Philips cycle) and Pollini – appendix 2 in the Eulenberg Edition.

[A/B:1] **Christopher Breunig**

Wolfgang Sawallisch conducts a live performance of Beethoven's Eighth Symphony. Right: David Anstey's portrayal of the composer

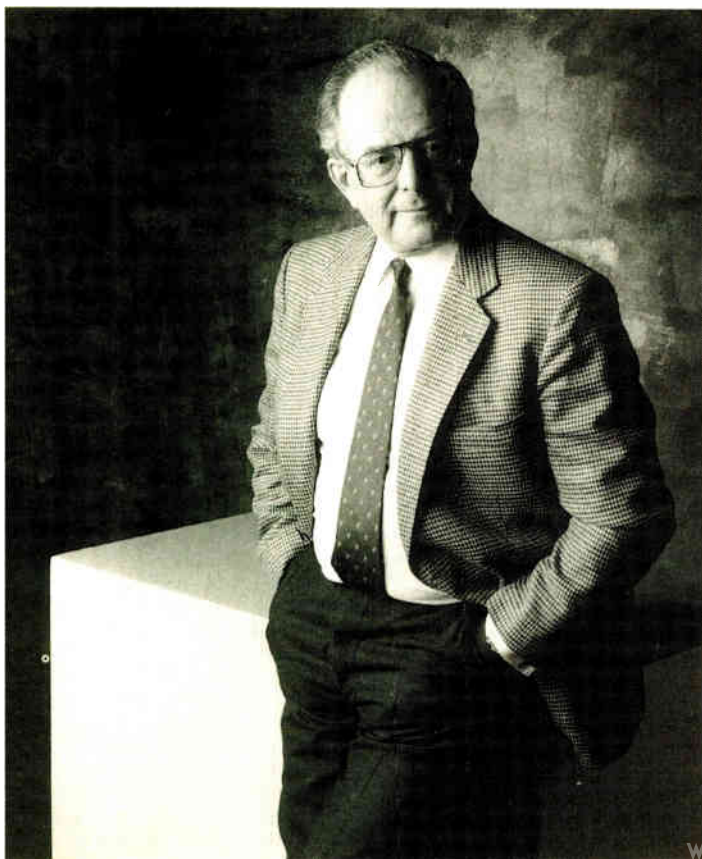


photo: Paul Hyl/EMI Classics



Decca Classics

BORODIN:

Symphonies 1 & 2 □ *In the Steppes of Central Asia*

RPO/Ashkenazy

Decca 436 651-2

(69m 37s) •

After Rozhdestvensky's warmly affectionate but rather soft-centred Chandos performance of the First Symphony, Ashkenazy provides a vivid contrast. Impressively keen and alert, with sharp athletic orchestral playing and crisp articulate rhythms, his new version has plenty of attack and forward momentum. Indeed, if there is a criticism, it is that the playing is sometimes just a little too tightly drilled – the start of the finale almost sounds like a demonstration of orchestral discipline. But you can't have it both ways, and his fiery approach is arguably preferable to Rozhdestvensky's more laid-back style. Yet if Ashkenazy is faster and more direct in the outer movements, he's also broader and more expansive in the slow movement; fervently committed, his is a very rich, passionate account, full of power and grace.

The Second Symphony is also given full-blooded treatment, with ripe, powerful brass playing and plenty of Slavic ardour. Borodin's liking for tricky cross-rhythms is very akin to Schumann's, and Ashkenazy always ensures the music has plenty of spring in its heels. This is a work that can so easily sound bombastic, but here it emerges fresh and alive, with no loss of power or resilience.

In the Steppes of Central Asia gets a warm and sinuous performance, its bitter-sweet mood of nostal-

gia and exotic romance caught perfectly.

Though each work was recorded at a different location with two production/engineering teams, the sound is always consistent with the mood of the music. Climaxes are powerful, but the quieter, more atmospheric passages remain clear, with pungent lower strings and rich lucid brass tone.

[A:1/1*] *James M Hughes*

BRAHMS:

String Quartets 1 & 3

Borodin Quartet

Teldec 4509-90889-2

(69m 23s) •

Wise, long-meditated performances from a vastly experienced quartet, full of affection and juice. Comparing Op.51:1 with the Carmina Quartet version on Denon, which I much admired in July, the Borodins make the young Swiss players, excellent and interesting though they remain, sound somewhat straight-laced. As I observed at the time, the Carmina approach this Quartet as a late Classical, almost post-Mozartian piece; the Borodins' view of it is Romantic, fiery, colourful. Yet they avoid too, as the Carmina do, the mood of hectic, airless *Sturm und Drang* which so readily envelopes such a strenuously-written work. And the Russians' cunning touches of rubato, their assured elasticity of tempo within the bar, the subtle shortening or lengthening of notes to point a phrase or a cadence, bespeak the garnered years of experience the Carmina have yet to acquire.

These virtues – never over-Ro-

manticizing or sentimentalizing Brahms, but treating his text with a freedom he himself would undoubtedly have expected from really confident players – are on display throughout Op.67 too. This performance is a delight, Brahms's most idiomatic quartet writing expounded with the cunning, elegance and rustic humour the music demands – an interpretation that reminds me of the fine old Budapest Quartet version for CBS. If the total effect, in both quartets, is faintly Slavic, with a balletic charm to the inner movements, it does them no harm at all. Teldec's studio recording has admirable resonance and depth, easily differentiating the voices even in the densest contrapuntal moments of the C-minor.

Valentin Berlinsky's noble cello deserves an individual credit.

[A:1*] *Calum MacDonald*

DVORAK:

Symphony 8/JANACEK: Sinfonietta

NYPO/Masur

Teldec 4509-90847-2

(62m 39s) •

Kurt Masur's New York Philharmonic harks back beyond Leonard Bernstein to Bruno Walter, to hushed dynamics and an accommodating rubato that allows a phrase the freedom to sing. His rapt handling of the Eighth Symphony's *Adagio* (and its opening measures in particular) is worlds removed from the sanitised 'freshness' of certain later interpreters, while the *Allegretto grazioso* courts sombre hues much as Walter himself did back in the late 1940s. The outer movements are relatively soft-grained, the finale being fairly heavyweight; and although the emphasis is more on woodland thickets than sunshine, a feeling of outdoors remains intact, with the spirit of the dance as a major component.

The Janacek is similarly warm-hearted, although I rather suspect that some readers will balk at the blended opening fanfares and rhetorical broadening for the *Moderato*'s crowning brass-and-strings climax [track 7, 4m 19s]. Still, it's something of a relief to sidestep, at least for once, the obligatory yelping, squealing and brittle percussiveness of so many Czech-based *Sinfoniettas*, authentic though they may be, and more immediately exciting too than Masur's subtly inflected, infinitely flexible account. OK, Masur does rather downplay the score's primitivistic elements, although we might usefully remember (as Teldec's annotator does) that the work was originally conceived as an act of homage to the city of Brno – its Castle, Queen's Convent, streets

The years of experience show in Teldec's outstanding Brahms coupling from the Borodin Quartet



Kurt Masur conducts the NYPO in Dvorak's genial Eighth Symphony. Left: Vladimir Ashkenazy

A subtle, flexible account of Janacek's Sinfonietta – a far cry from raw Czech 'authenticism'

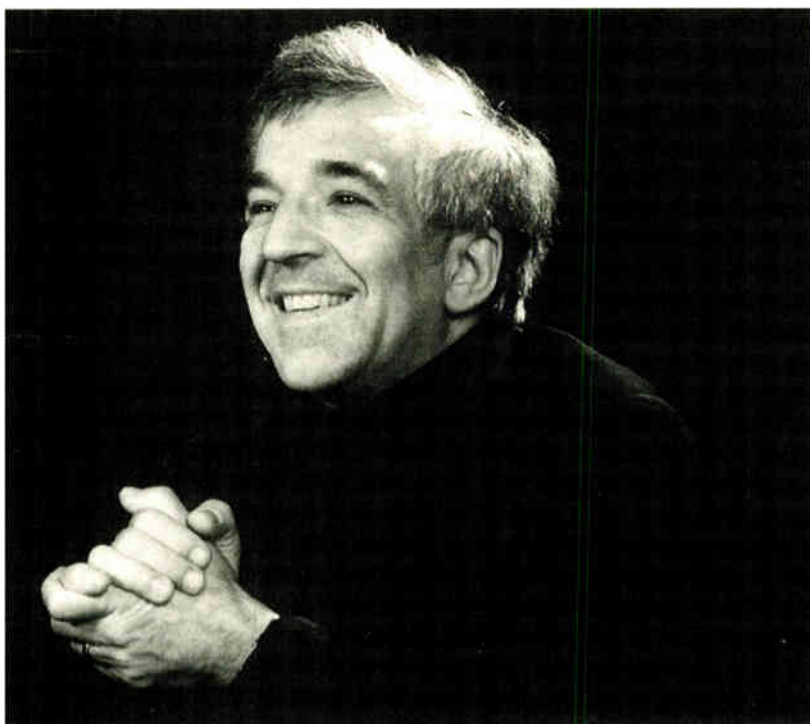


photo: Wilhelm Fröhling/Decca Classics

and Town Hall – and not as a manic soundtrack to some Leni Riefenstahl-style gymnastic extravaganza. Masur, like the great Bretislav Bakala before him, concentrates more on the score's majestic lyricism, and Teldec's engineers offer his orchestra plenty of space to project it.

[A:1] **Robert Cowan**

DVORAK:
Symphonies 7 & 9
Concertgebouw/Giulini

Sony Classical CD 58946
(2CDs, 90m 44s) ♦

No-nonsense purchasers will make straight for the LPO/Mackerras 'Eminence' coupling of these works (one CD, 79m 28s – the contentious repeat in 9(i) is omitted, as indeed it is here) or the Davis/Philips 'Duo' 7–9 trilogy, also with the Royal Concertgebouw. Sony are claiming this to be Giulini's first recording of the

photo: Virgin Classics



More Dvorak – Giulini re-records the Seventh and Ninth Symphonies; Christian Tetzlaff records the Violin Concerto with the Czech Philharmonic

Giulini's 'New World' Largo: 'solemn but not somnolent'



photo: Tanja Nienmann/Sony Classical

DVORAK:
Violin Concerto/LALO: Symphonie espagnole
Christian Tetzlaff (vln)/Czech PO/Pesek

Virgin Classics VC 545 0222 (63m 09s) ♦

The Hamburg born violinist Christian Tetzlaff is a discerning and serious young artist, as his earlier CDs of Bartok and Haydn have already shown. Here he clearly differentiates the styles of Lalo and Dvorak for the listener, and I find him far preferable to Chung, Midori or even Zimmermann in the latter. (When I say 'serious' I mean the manner in which he seeks out the character of the music he undertakes; nowhere is there a sense of all-purpose virtuoso glossiness, yet his articulation is consistently clear and his tone warmly attractive.) The snag is the waffly acoustic of the House of Artists, Prague, which was surely quite unsuitable for the *Symphonie espagnole*. The *Intermezzo* is especially vulnerable to so thick a reverberation; thus one has to concentrate more to catch the soloist's light touch. Recommended, then, with reservations indicated in the technical grading.

[B(C):1] **Christopher Breunig**

DVORAK:
Piano Quintet in A/MARTINU: Piano Quintet 2
Peter Frankl (pno)/Lindsay Qt

ASV CD DCA 889 (69m 51s) ♦

This is the sixth in ASV's series 'The Bohemians' featuring the Lindsay Quartet, and further enhancing their reputation for sensibility and style. Frankl, likewise, is a player of insight who melds more happily with the quartet in the Dvorak than did Jeremy Menuhin in a recent Chandos issue. The broad stretches of the unusually long second movement are more convincingly bridged, for example, and there is a welcome buoyancy and rhythmical liveliness throughout. Martinu's quintet, his only composition of 1944, a year of profound physical and mental exhaustion, heralds a change of direction away from the Stravinsky-inspired ostinato writing of the 1930s towards a more fluid, introspective and lyrical manner which brings it closer to Dvorak and to the mainstream of Czech nationalism. Despite the composer's state, this quintet is one of his most consistently successful chamber works, and it receives a most persuasive performance here. Perhaps in a future issue room could be found for Martinu's quintet of 1933, of which there is at present no good modern recording.

[A:1] **Kenneth Dommett**

Seventh (overlooking his 1977 LPO version for EMI); but this merely reminds me that when a friend interviewed the maestro, Giulini himself had no recollection of certain of his earlier recordings! The 'New World' he's done twice before, with the Philharmonia in 1961 [EMI] and – adding the repeat in 9(i) – Chicago SO in 1977 [DG].

The Seventh receives a characteristic reading: more engaging than the earlier version (very po-faced in the *Poco adagio*, whereas Sejna in his old Czech PO/Supraphon version showed there was also a place for joy when the tempo is not too slow); with both elegance and emphatic passion. But, taking the performance as a whole, Giulini's spaciousness in a quest for clarity of articulation and expressivity is too much at the cost of dramatic flow; he is also rather poorly recorded, with clouded textures at *forte* and a bleaching-out of orchestral colour. Sony's Seventh simply does not match the cohesiveness and beauty of Davis's 1976 analogue recording.

The quality in the 'New World' (produced one year earlier, in 1992) is actually a lot more persuasive. This is a more impressive reading too, with an opening movement where the orchestral playing wonderfully conveys Giulini's love for the piece, is scrupulous in dynamic shading and clear, terraced balances. A good sense of impulse is also maintained in (iii), where the folksy elements are pleasingly fresh. The *Largo*, some 2½–3m longer than the average, is solemn but not somnolent – Giulini presents it much as he might the slow movement from Beethoven's Ninth, but I must confess to a lack of patience with the concept. It hardly needs saying that a reissue of the Eighth would have filled some of the spaces on these discs: CD1 is under 44m.

[B/C:2] [A:1(*)]

Christopher Breunig

DVORAK: Piano Trios in B-flat & g Borodin Trio

Chandos CHAN 9172 (75m 25s) •

These engaging performances of Dvorak's first two piano trios are somewhat spoiled by forward piano placement and an edgy violin tone, noticeably hard in the uppermost register. The music itself is played *con amore*, and, though both works are overlong, they are never allowed to sag. The melodic lines, even at this relatively early state strong and individual, are kept afloat, and the rhythmic energy inherent in Dvorak's Slavonic upbringing is well pointed up. With better recording balance this would have been a worthy contender for outright recommendation.

[B/C:1] **Kenneth Dommett**

FIBICH: Moods, Impressions & Reminiscences – excerpts □ Studies of Paintings Op.56

Radoslav Kvapil (pno)

Unicorn-Kanchana DKP 9149

(69m 50s) •

Fibich's 'Moods etc' must be one of the most remarkable collections in the entire repertoire of romantic piano music. They were composed between 1892 and 1902, and comprise, in all, 376 short pieces recording the composer's association with his young mistress Anezka Schulzova, his reflections on their relationship, his thoughts about her body and other intimate aspects of their life together, and reflections on her moods. The manuscript indicates the nature of the pieces, some now unfathomable, but these were not included in the published score. Kvapil, a pianist with uncommon sympathy for this kind of music, has recorded nineteen of them, a reasonable selection that gives a flavour of the whole. (Inevitably, one supposes that, somewhere, someone is about to embark on recording all of them.) The *Studies of Paintings*, not published during the composer's lifetime, were written during the 1890s. Fibich had a genuine love of painting. He assiduously visited art galleries and was an avid collector of prints, and these five movements (more were projected) represent his reactions to pictures by van Ruysdael, Breugel, Fra Angelico, Correggio and Watteau. It is difficult to assess how well Fibich's impressions match their inspiration, but as music the pieces stand up well enough unaided, and are a useful addition to Unicorn's Anthology of Czech Piano Music.

[A:1] **Kenneth Dommett**

FRANCK: Symphony /POULENC: Organ Concerto

Simon Preston (org)/Boston
SO/Ozawa

DG 437 827-2

(59m 44s) 'live recording •

Seiji Ozawa is an inconsistent performer, to say the least. Whilst visiting Boston last Autumn, I heard him give a stunning world premiere to Henze's delightful new Eighth Symphony, followed by a tremendously exciting Berlioz *Symphonie Fantastique*. Yet the concert a few days later brought a curiously indifferent Mahler 4, its rapt slow movement impossibly earthbound. The Franck here was taped 'live' as long ago as November 1991. It's a solid, nicely-paced, undemonstrative conception, featuring some often handsomely well-upholstered orchestral playing (as you'd expect), but lacking something in emotional flair and unbridled conviction. In both outer movements, the blazing fervour of a Monteux or Otterloo is not to be encountered, whilst (ii), for all its indisputable refinement, errs towards blandness.

Fortunately, the Poulenc concerto fares much better. With the Boston strings in radiant form and Simon Preston a commanding, superbly agile soloist, this strikes me as a most distinguished performance on all counts, acutely responsive to Poulenc's characteristically skittish mood-swings. Indeed, Ozawa's conducting is a model of sensitivity throughout, and he imparts to any faster music a genuinely refreshing bite and urgency. Altogether a most invigorating display. Very good sound both here and in the Franck, if at times just a trifle thick in the bass.

[A(B):2/1(*)]

Andrew Achenbach

HAYDN: Symphonies 45, 46 & 47 Tafelmusik/Weil

Sony Classical CD 53986 (67m 43s) •

Once upon a time it was easy to make a Haydn symphony recording: take a respectable conductor (say Walter or Beecham), a large orchestra and a corrupt edition. The skilled conductor would balance the unwieldy orchestra carefully, would largely avoid romantic tempo changes, and conventional minuet repeats would be observed (you needn't have expected any others). There was no continuo problem because no-one ever bothered to record the early symphonies.

Nowadays it is less simple, for although conductors frequently use

the proper instruments, sort out the continuo, use decent texts, and the modern recordings ensure clear balancing, this disc typifies a new set of problems.

Weil is basically sensible with repeats, and full marks for making the second in 46(iv): vital because Haydn carefully marks the rest-lengths at the end of the first time through (surprising that the usually precise Goodman omits it). However, when in 45(iii) and 46(iii) Weil makes the first but not the second minuet repeat after the trio, symmetry falls flat. Symmetry is also lost in 47(iii), famous for being playable both forwards and backwards, because Weil omits the bass line from the last chord so Haydn's clever joke becomes imprecise.

More raised eyebrows also at the hectic rapidity of the minuets; and Weil unaccountably dulls 46 by taking the horns down an octave. Goodman's high horns are magnificent here, Solomons's better still. For 45, 46, 47 Goodman is currently best (and he uses keyboard continuo, Weil doesn't) but Solomons is even more convincing in 46 & 47 – when are his recordings coming back?

[A:2] **Antony Hodgson**

HAYDN: Symphonies 53 'L'Impériale' □ 73 'La Chasse' □ 79

Orpheus Chamber Orch

DG 438 779-2

(63m 11s) •

Scholarly matters are carefully attended to here, and I welcome the use of Haydn's own *Capriccio* finale for 'L'Impériale'. In Haydn's time this was often replaced in performance by one or other of his Overtures, a tradition usually followed today, even though the *Capriccio* is included with the symphony in the Esterhazy archives. The Orpheus performance is surprisingly string-heavy – the orchestra uses only sixteen strings – but I tend not to blame the engineers because when brass and drums are not blown or hit with much strength, it is hard to capture them.

'La Chasse' is presented clearly, and again the musicology is reliable. In the finale the authentic trumpets and drums found in the 1784 Paris edition are used (these are missing from some scores). There is a rather dogged approach to (i), but (ii) is nicely poised. The rewriting of the wind parts in some repeated sections of (iii) goes well beyond mere decoration however.

The neglected No. 79 used not to be a favourite of mine until I read a sleeve-note which suggested that (i) 'is a little forced', that in (ii) 'Haydn

Zdenek Fibich's unpublished piano pieces, composed at the end of the last century, translate to music his impressions of paintings



Good texts, period instruments with continuo – yet Weill's Haydn has its own anomalies

Magnificent playing from the BBC Symphony Orchestra under Knussen in Holloway's Second Concerto for Orchestra: an exciting and stunningly recorded entry in NMC's lists

seems to have some reservations', and that (iii) 'is somewhat short on inspiration', so I have leapt to its defence ever since. Although the theme of (i) is predictable, Haydn takes it through some extraordinary keys and the wild *poco allegro* which interrupts the *Andante cantabile* of (ii) is strikingly original. Landon has used the phrase 'rococo exquisiteness' concerning some of 79. Orpheus's neat performance, the best of the three, recognizes this element. [B:2] **Antony Hodgson**

HAYDN:
Symphonies 50, 64 & 65
Tafelmusik/Weil

Sony Classical CD 53985 (50m 30s) •

Swift, vital performances with bassoon but not harpsichord to support the bass. If you can take Weil's very fast speeds then this disc ranks high for excitement. Symphony 50 really is vivid and in (iv) where the parts are separated, the antiphonal play of trumpets and horns displays Haydn's unique mid-period sound to the full without obscuring the superbly articulated string figuration.

In the dark, dramatic, often misunderstood No.64, Weil comes to terms with the inner fire of (i), where the tempo is controlled and not, as so often, too swift. What a shame that he ruins it by having one of his repeat aberrations in the minuet, playing the first section but not the second twice after the trio.

No. 65 is very well done and the racing approach to the finale is thrilling; on the other hand (iii) is so fast that Haydn's witty idea of throwing the music on to the wrong beat has passed by before this deliberate oddity can be noticed.

Once again Weil's strings are so brilliant at speed and his readings so close to excellence that I regret not being able to recommend this disc unreservedly. The highlight is No. 50 which convinces despite its unconventionality. The silvery recording is beautiful but bassoon and double-basses lack definition.

[A/B:1/2] **Antony Hodgson**

HAYDN:
Divertimenti, Hob II: 20-22
Vienna Haydn Sinfonietta/Huss

Koch Schwann 312 742 (53m 44s) •

Two of these Divertimenti, Nos 21 and 22 in Hoboken's listing, were originally published by Chevardière in Paris as part of the six String Quartets, Op.2, but complete with two horn parts! They follow the early divertimento pattern: a long slow movement framed by two bold minuets and trios, the whole framed again by two fast movements. No.20

is in the same design, and the horns and strings are joined by two oboes and a bassoon. It would not have been wrong for a bassoon to strengthen the cello here and there in Nos.21 and 22, but sadly that temptation was resisted.

Simon Standage takes first violin. His small but stylish embellishments sound pleasing and spontaneous, enlivening, as they do, the generous repeat quota; and the playing in general is so enthusiastic in fast movements that ensemble is only just maintained. These charming domestic works were somewhat daring in their day (c1760) and the players would have relished their fresh ideas, just as does Manfred Huss's group. Josef Brazda and Milos Rovensky play their natural horns as if just in from the hunt, with an exciting rasp. Dynamics are interpreted rather than strictly observed: thus, No.22 opens, *Presto*, with the whirling crescendo *p* to *f* – not marked but definitely in keeping with the style of these invigorating performances. Occasionally Standage's figurations are masked, but otherwise the recording, intimate but not dry, is excellent.

[A:1/1*] **Robert Dearling**

HOLLOWAY:
Second Concerto for Orchestra, Op.40
BBC SO/Knussen

NMC D015M
(33m 50s) Complete Record Co ♦

Robin Holloway's intoxicating *Second Concerto for Orchestra* was originally inspired by a visit during the period from 1977–8 to North

Africa where the composer 'was excited by the extremes of contrast – opulence and austerity, richness and drabness both of colour and texture, brilliant light and dense shadow, fertility and barrenness. And above all, the noises: in the working quarters of old cities there were no distorting sounds of traffic, but only the polyphony of hammering, tapping, thudding, tinkling, bashing on all varieties of wood, stone and metal'. All this and more is brilliantly conveyed by Holloway's extraordinarily imaginative orchestral canvas, nowhere more so than in the extended central *Andante*, whose effect is akin to an enchanted dreamscape of almost hallucinatory beauty: here fragments of familiar material (including quotations from Wagner, Chopin and, most strikingly, Parry's *Jerusalem*) drift in and out of focus, 'half-discerned, as when falling asleep', in the words of the composer. It's a work I've found readily invites repeated exploration for its powerful sense of drama, remarkable emotional range and ear-tickling textual variety. (By the way, the study score from Boosey and Hawkes also makes a sensational 'read'!)

No praise can be too high for the magnificently assured response of the BBC SO under the work's indefatigable dedicatee, Oliver Knussen, whilst Tryggvi Tryggvason's exemplary recorded sound has stunning transparency and impact. This is undoubtedly one of the most exciting contemporary music releases to have come my way for some considerable time.

[A*:1*] **Andrew Achenbach**

James Judd begins a Mahler cycle with his Florida Orchestra for Harmonia Mundi



photo: Florida Philharmonic Orchestra



IBERT:

Escales □ **Flute Concerto** □
Hommage à Mozart □ **Paris – suite**
symphonique □ **Bacchanale** □
Bostoniana □ **Louisville-concert**
 Timothy Hutchins (flt)/Montreal
 SO/Dutoit

Decca 440 332-2

(79m) •

A thoroughly enjoyable compendium, featuring Decca/St Eustache sonics of now-customary demonstration quality. The limpid tone of MSO principal flautist, Timothy Hutchins, will be familiar to collectors from many a Montreal/Dutoit offering over the last decade: as you'd expect, his agile realization of the lovely Flute Concerto gives great pleasure, and Dutoit partners attentively – though, if memory serves, this conductor's accompaniment with the RPO on James Galway's 1977 RCA version was perhaps an even more quick-witted affair. The tartly evocative Symphonic Suite *Paris* (1932) follows very much in the racy footsteps of the *Divertissement* from two years previously (mad-cap police-whistle finale and all!) and is memorably delivered here. Both the bustling *Hommage à Mozart* (a bicentennial commission from 1956) and chuggingly vigorous *Bacchanale* (composed the same year) are also right up Dutoit's street, and he presides over equally committed, superbly prepared readings of the less-inspired *Bostoniana* (all that remained of Ibert's uncompleted Second Symphony) and agreeable, if rather manufactured *Louisville-concert*.

In fact, only Dutoit's slightly bland way with *Escales* gives rise to any momentary qualms. The orchestral sounds are, of course, gorgeous, but by the side of Charles Munch's classic 1956 Boston account [RCA 'Living Stereo'] both outer movements are, in all truth, lacking just a little in glitter and sheer unbuttoned panache, whilst in the dusky central tableau (inspired by a visit to Tunis) it's undoubtedly Munch's principal oboe, Ralph Gomberg, who is the more exotically insinuating presence. Otherwise, this outstandingly generous collection spells firm enjoyment from start to finish.

[A*:1] **Andrew Achenbach**

MAHLER:

Symphony 1 □ **Blumine**
 Florida Philharmonic Orch/Judd

Harmonia Mundi HMU 907118

(66m 14s) •

James Judd has already made a name for himself in Florida and his new Mahler cycle on Harmonia Mundi, the first volume of which is released this month, now looks set

to establish his position on this side of the Atlantic as one of the world's most exciting young conductors.

Judd copes stylishly and effortlessly with the technical problems of Mahler's uncompromising orchestral writing. There's no audible break in continuity at the harmonic take-over between the first and second violins at the opening of the work for instance [placed left/right], while he handles the gentle broadenings on *glissandi* and the rapturously blossoming *espressivo* passages with sensitivity. Unusually in recent Mahler performances, score markings are scrupulously observed throughout. For example, in the second movement he switches to the metronome marking (minim = 66) on the fifth bar, when most conductors read this instruction as being operational right from outset. Surely the plodding start of the rustic drone was intended by the composer? Similarly, the solo double-bass 'Frère Jacques' motto theme at the beginning of the third movement is phrased with the slurs correctly applied to each individual phrase in the bar rather than the whole melody being played in one fell legato swoop!

And in refreshing contrast to Bernstein, who appears determined to break both the land speed record and the sound barrier simultaneously, Judd ensures that the weakest movement – the finale – makes *musical* not merely *virtuoso* sense. His steady tempo lends increased textural clarity to brass and winds while comfortably allowing for the numerous tempi changes. The *Pesante* buildup (Fig. 66 onwards) is perfect – I can forgive the slight urgency in the final bars. The discarded slow movement. *Blumine*, quite beautifully played, follows the symphony.

Recorded in long takes, the Florida Philharmonic excel themselves. It all sounds remarkably clear, clean and spontaneous. On this form they can be favourably compared to the Berlin or Vienna Philharmonic Orchestras. I can't wait to hear the Fourth later in the year.

[A:1*] **Bill Newman**

MAHLER:

Symphony 2 'Resurrection'
 Studer/Meier/Arnold Schoenberg
 Ch/VPO/Abbado

DG 439 953-2

(2CDs, 84m 12s) ♦

The well-heeled patrons at the Musikverein in November 1992 may have had a memorable evening, but the occasion hasn't transferred to disc that convincingly. It may be an unusually accurate translation of the notes, yet the intense drama of the 'Resurrection' Symphony is very

underplayed. True, there are areas of breathtakingly beautiful orchestral playing and choral singing (especially in quiet passages) but Abbado's overview of the work remains puzzling. Possibly he sees the large *Totenfeier* as closer to the character of the First than most conductors. But, in matters of detail, Abbado is obtrusive both in introducing little gestures (eg, the delay between the two pizzicati ending the *Andante moderato* is extraordinary) and where Mahler's motifs, which by assimilation into the language of Hollywood now semaphore something as much

A MAHER-SZYFONIA.

(A Piharmóniai honosorlen.)



comic as sinister, need discreet handling, but here emerge in naked awkwardness. Not even Cheryl Studer's soprano lifted aloft, over the chorus [track 12, 1m 48s], makes its usual effect. In quiet passages the sound is extremely fine, but *fortes* have a harsh edge and the close of the work wholly disintegrates, musically, as the engineers seek to sensationalize what is already colossal. Overall, the pre-'4D' Verdi *Requiem* conducted by Abbado was a much better large-scale production. The impatient overlap of the Scherzo (iii) with audience unsettled will surely become increasingly irritating. Lastly, given the formal occasion, why have the art department only come up with photos of Abbado working under studio conditions?

In sum, worth hearing for its many felicities, but poor value relative to Mehta's VPO/Decca reissue: in effect twice as dear, as Decca couple Schmidt's Fourth Symphony [440 615-2]. DG utilize track entries, 25 altogether, where index points would be less confusing.

[A(C):2] **Christopher Breunig**

In 1889 a Hungarian cartoonist parodies the First Symphony: the composer blows a 'Wunderhorn'; the punning title reads 'Melheur Syphon'

The drama of Mahler's Second Symphony is seriously underplayed in Abbado's deluxe set, recorded 'live' in Vienna

Muldowney's concerto: 'dangerously tuneful... contemporary music you can safely play to your granny'

MARTIN:
Concerto for 7 Wind Instruments, Percussion and Strings □ **Studies for String Orchestra** □ **Erasmi monumentum**
Leslie Pearson (org)/LPO/Bamert

Chandos CHAN 9283 (66m 49s) •

The good news here for all admirers of this immensely civilized Swiss composer is the first commercial recording of the *Erasmi monumentum*. Commissioned by the Rotterdam Foundation for the Arts (where it was first performed in 1969), this is a 25-minute piece for organ and orchestra. Both outer movements possess a dignified, statuesque beauty and harmonic subtlety that are often genuinely haunting, whereas the central tableau (entitled *Stulticiae Laus*, or 'In Praise of Folly', after Erasmus's eponymous work) is more capriciously extrovert and colourful in nature. Martin's countryman, Matthias Bamert, presides over a nicely-turned account of this imaginative score; Leslie Pearson is the excellent organist.

Both remaining items are better-known, but competition is tough to say the least. In the case of the fine *Concerto*, Bamert undoubtedly secures a decent response from the LPO, but the reading as a whole has not the passionate urgency of Jordan's with the Suisse Romande [Erato] nor the stunning refinement and sensitivity of Thierry Fischer's outstanding COE account for DG (part of a quite exemplary all-Martin concert). As for the *Etudes*, it's once again Fischer and his superbly accomplished band who win hands down – Bamert's LPO string section too often sound merely effortful and heavy-handed by comparison. Recordings are, admittedly, first-rate, yet there's no getting away from the fact that this is only a partially successful release.

[A:2/1] **Andrew Achenbach**

MULDOWNEY:
Oboe Concerto
Roy Carter (ob)/LSO/Tilson Thomas

NMC D0185 (25m 15s) ♦

Dominic Muldowney has written musically and/or politically abrasive pieces in his time, but this cunningly crafted oboe concerto isn't one of them. Conceived as a kind of wordless song-cycle, a single movement in which substantial lyrical sections are framed by shorter recitatives, it's a gentle, relaxed, dangerously tuneful piece, of predominantly Anglo-French orientation. To begin with it sounds something like Rawsthorne, or even – given the old-style jazz inflections – Malcolm Arnold. But recurrent Ravelian echoes in the strings eventually open out, in tracks 5 and 6, to reveal that the real model was probably Satie's *Gymnopédies*, as orchestrated (with solo oboe) by Debussy.

Muldowney, no spoilsport, delays to the very last track before introducing a tiny hint of darkness and dissonance to suggest, in the Post-Modern manner, that everything we have heard should really be enclosed in ironic quotation marks. Don't believe it: this is an old-fashioned Romantic piece, 25 minutes of beguiling concert filler à la 1932 (rather than 1992, when it was written). It has no significance apart from the modest and elegant quality of the music itself, which is beautifully composed and ideally suited to the solo instrument.

On this CD single it is also beautifully and sympathetically played by Roy Carter, with discreet and affectionate accompaniment from the LSO under Michael Tilson Thomas, and it's superbly recorded. Recommended, without malice, for a piece of contemporary music you can safely play to your granny.

[A*:1] **Calum MacDonald**

MUSSORGSKY:
Boris Godunov
Kotcherga/Lipovsek/Ramey/Larin/Leiferkus/Langridge/Nichiteanu/Valente/Gorochovskaya/Zaremba/Shaidullin/Slovak Philharmonic Ch/Berlin Radio Ch/BPO/Abbado

Sony Classical CD 58977 (3CDs, 200m 42s) •

It has often been said that the protagonist of *Boris Godunov* is the chorus – which rings less true, incidentally, when you consider that Mussorgsky's original version ended with the death of Boris, not the Kromy Forest scene – but the stars of this particular show are undeniably Abbado and his orchestra. As always, Abbado knows exactly when

and how to quicken or slow the pulse according to the psychology of the drama (invaluable here, where Mussorgsky gives little indication of tempo fluctuations within sections), and he vindicates Mussorgsky's orchestration as a thing not just of unorthodox wildness but also of incomparably chaste beauty: Pimen's, Shulsky's and Boris's attitudes to the miracle-working of the dead Dmitri, for example, though outlined with careful acknowledgement of their respective interests, glow with an unearthly light.

Not so the singing: Abbado has chosen, with several exceptions, voices that are neither larger-than-life in the old Russian mould nor text-sensitive souls. Ramey's Pimen is solid but bland – neither the doughty warrior of old nor the holiest of holy men – and whilst Kotcherga takes a decent shot at Boris's guilty torments in Act Two, he is hardly a charismatic or especially bass-resonant ruler. When Sergei Larin's Grigory vauntingly pretends to the throne, too, one wants to hear the heroic stops pulled out; yet in other respects he proves one of the honourable exceptions, sweet of voice and vivid of diction. The Polish ('love-interest') act of Mussorgsky's second version is especially welcome here, with Larin at his best and Lipovsek reminding us how much a sense of dramatic shading can bring to this opera (listen to the sound of religious awe that immediately shadows the voice when she first spots the Jesuit Rangoni). Abbado vindicates the garish colouring of an unusually febrile Polonaise, and the Berlin strings really come into their own, too, conjuring up an opium dream of a world away from Russia – one's imagination works overtime to think of what an offbeat designer like Richard Hudson might care to make of it. Only Leiferkus's Rangoni is out of character in this act: while his natural sibillance works well for the serpent in this strange Polish Eden, his heroic baritone spectacularly misses the wheedling that's so effectively written into the music (unlike his opposite number in Moscow, Prince Shuisky, as sung by Philip Langridge – third of the exceptions to the casting rule).

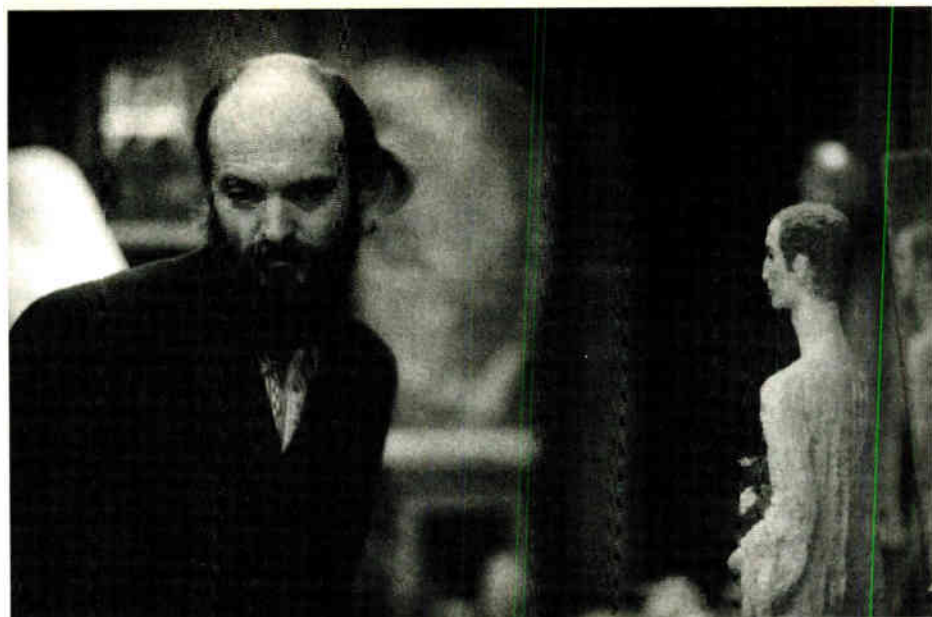
Abbado's composite version is probably the ideal: he sticks to the 1874 (second) version, with its much more striking re-write of the Kremlin Palace scene (a pity the Tsar's 'children' are no match for their characterful orchestral support), but he includes from the 1869 version – as has become commonplace – the Act Four scene outside St Basil's Cathedral, where the Simpleton



Marjana Lipovsek sings in Sony's prestigious new *Boris Godunov* recording. Below: Mathias Bamert



photo: Hanyu Chialai/Chandos Records



comes face to face with the Tsar. Mussorgsky replaced it with the Kromy Forest chaos in 1874. It needs to be said that the children's teasing of the Simpleton and the Simpleton's final lament make only one appearance respectively in each scene: a sensible compromise on stage, but on a recording we could have had both in their rightful places. A small quibble, perhaps, especially when someone's dramatic sense (Abbado's or the producer's?) has made sure that every sound effect and unmusical noise indicated in the score is there exactly where it should be; and the recording is gloriously forthright. So, despite the vocal reticences, Abbado lights the way for the 1874 version. That still leaves room for a set of the original 1869 score, and perhaps also for Shostakovich's respectful re-touching. Certainly I can't hear this masterpiece soon enough again.

[A(*)]:1*/2]

David Nice

PART:

Fratres ☐ **Cantus in memory of Benjamin Britten** ☐ **Summa** ☐
Spiegel im Spiegel ☐ **Festina Lente** ☐
Tabula Rasa

Tasmin Little (vln)/Martin Roscoe, Robert Aldwinckle (pno)/
 Bournemouth Sinfonietta/Richard Studd (vln/dir)

EMI CD-EMX 2221 (63m 42s) ■

Tasmin Little's account of *Fratres* is utterly different from, but no less convincing than Gidon Kremer's [ECM]. If he presents the music (the piece was composed for Elena and Gidon Kremer) with a certain objectivity, that is, as if not wishing to impose upon it, Little brings enormous passion – a Brahmsian warmth of expression – to it.

It is highly rewarding to have this Arvo Pärt collection from 'Eminence' for, as others have also observed, these new performances bring out unsuspected affinities with British works: *Summa* (1978) might easily

be a post-Britten strings composition. The piece for tolling bell and strings which alerted collectors to this composer, *Cantus*, receives its fourth recording; in atmosphere I would place it second only to Neeme Järvi's on Chandos (in an Estonian collection). *Festina Lente* is a mood-related piece from a decade later which will certainly appeal to those drawn to Gorecki's Third Symphony – similar see-sawing motifs occur in both scores. *Tabula Rasa*, with its striding rhythms and turbulent climax in 'Ludus', makes ultimately a less comfortable statement than the companion works here. The piano is required to be prepared and is adapted with screws to create resonating bell-like timbres. Again, Tasmin Little brings sweetness and concentration to her part (two solo violins are heard, and this time the florid figuration is somewhat Tippettian). The production [Keener/Hatch] and Milton Abbey Church acoustic are wholly sympathetic. Recommended.

[A:1] Christopher Breunig

PROKOFIEV:

Symphony-Concerto ☐ **Concertino**
 Lynn Harrell (vlc)/RPO/
 Ashkenazy

Decca 436 232-2 (57m 33s) •

Symphony-Concerto ☐ **Concertino**
 Mstislav Rostropovich (vlc)/USSR
 SO/USSR Radio and TV SO/
 Rozhdestvensky

Russian Disc RD CD 11 103 (53m 05s)
 live recordings •

If this really were a *Sinfonia concertante*, and not the weighty Symphony-Concerto that Rostropovich confirmed to me as Prokofiev's intended title, then Harrell would come out of it rather well. Ever the chamber musician, he blends the difficult accompanying figurations perfectly against orchestral solos – magical indeed the feathery triplet-patterns against the 'dream' subject

Music by Arvo Pärt is recorded for EMI's 'Eminence' label



Philip Langridge at the Berlin sessions for Boris Godunov

of the first movement – and he certainly enjoys the little dialogue between cello harmonics and flute that provides a brief respite in the conflicts of the mighty *Allegro giusto*. But soloistic moments writ large such as the forthright, singing protest at the start of the work or the phenomenal feats of rapid double-stopping that Rostropovich persuaded the composer to include, almost defeat him.

What emerges at such moments is a weak voice indeed; comparisons with the dedicatee in his impetuous, risk-taking prime are cruelly revealing. It's a great pity, because in more introspective mode, Harrell's dark, burnished legato is unique, and he uses it to moving effect in both the nostalgic, beautiful melody at the centre of the piece and the surface-simple but elusive, typically late-Prokofiev theme in the *Andante* of the *Concertino* (quite different dynamics here from those employed by Rostropovich, but both cellists respect the underlying sadness).

What is, to my knowledge, Rostropovich's earliest recording of the *Symphony-Concerto* makes very exciting listening. Never mind the rough orchestral edges or the occasional soloistic bolt for freedom; it all makes sense when every phrase burns like this. White-heat orchestral savagery in the central battle between sane humanity and vicious madness has as its price a cruder finale than usual; the RPO players are more poised than their Russian counterparts in the opening variations, and the 'Eroica' touch of horns and full orchestra, which Rozhdestvensky boisterously rushes, is spaciouly taken by Ashkenazy; Decca's admirable recording really comes into its own here. Alas, a snarling trumpet seems to be missing at first from the whirlwind coda on Russian Disc, but it re-emerges with redoubled fury, and Rostropovich shows us what he meant by asking for that insanely high final flourish for cello; once again, Harrell must have wished he hadn't.

The near-contemporary *Concertino* makes the perfect companion, not least because the lurching principal theme of its finale – taken with menacing relish by the Russians – pops up in the *Symphony-Concerto*; the rest is surprisingly sombre (for once I find myself disagreeing with Christopher Palmer's sleeve-note assertion of 'lightweight Prokofievian attractiveness'). Harrell's inward spirit here makes last-minute amends; but no-one is going to want the Decca disc for the *Concertino* alone.

Harrell [A(*)]:3/(1)], Rostropovich [B:1*].

David Nice



Photo: Paul Huf/EMI Classics

RACHMANINOV:
Symphony 2 □ **Vocalise** □ **Scherzo**
in d

St Petersburg PO/Jansons

EMI CDC 555 1402 (67m 13s) •

This follows three new recordings reviewed last month: including Temirkanov's with the same orchestra. (Jansons's earlier Chandos recording with the Philharmonia is reissued at midprice.) Recorded in the Philharmonic Hall last October, it virtually eclipses the RCA (Henry Wood Hall Nov '91); the playing is finer and the direction altogether more focused and purposeful. The repeat in (i) is not made though; EMI have put an extra track point at the close of the Largo introduction. Both discs have *Vocalise*, but Jansons adopts the composer's orchestration (if not his ultra-quick tempo), and on EMI there is also the Scherzo, written in 1887 and first performed two years after Rachmaninov's death. (Mendelssohnian, rightly suggests Julian Haylock in the booklet note, yet its rhythmic thrust may even faintly call to mind that of Bruckner's Ninth Symphony, commenced in the very same year!)

Jansons has said in interview that he's not a 'non-interventionist' conductor, and in the symphony – notably in the *Largo* – his calculated speed changes, pauses and the very wide dynamics of his performance I think only just side-step mannerism. On balance, and taking into account the technical success of this Fraser/Sheddy recording, I'd suggest it as a first choice. But for romantic passion, rather than a stance which some will feel holds back from true depth of commitment – contrast Gergiev, too – go to Ashkenazy on Decca 'Ovation' (though the sound now seems comparatively clogged).

[A:1(*)] **Christopher Breunig**



*Mariss Jansons's
St Petersburg
Rachmaninov
cycle continues
with the Second
Symphony*

If Cheryl Studer is unsympathetically partnered in the 'Four Last Songs', her Wesendonck-Lieder are nevertheless beautifully realised

R STRAUSS:
Four Last Songs/WAGNER:
Wesendonck-Lieder □ **Tristan und Isolde – Prelude & Liebestod**
Cheryl Studer (sop)/Dresden Staatskapelle/Sinopoli

DG 439 865-2 (60m 35s) •

An hour of cunning programme building, when there is self-quotation in both the Strauss (*Tod und Verklärung*) and the *Wesendonck-Lieder* (*Tristan* itself), fruits of Wagner's relationship with the wife of benefactor Otto Wesendonck. The conductor Felix Mottl orchestrated four of these songs; only 'Träume', which echoes the Act 2 duet, was undertaken by the composer.

This is Cheryl Studer's second recording of the 'Liebestod': in 1988 she was accompanied by Tate and the Bavarian RSO [EMI nla]. Not surprisingly, there's a dramatic change to be heard: Studer has become the true mistress of her instrument (two edgy spots excluded); her German now carries real authority. The voice seems to have darkened slightly too, which may be partly the effect of different microphone types. But for a real sense of music-making, of something warmer, less impersonal in projection, stick with the earlier CD. One despairs yet again of DG's abysmal '4D' engineering, as the lazily unfocused Dresden accompaniment is suddenly to the fore at the climax; the listener senses no real contact between conductor and soprano, when the engineering focus is so intent on every vocal nuance.

Fortunately, such criticisms do not apply to the Wagner songs; here the balance is fully acceptable, and Studer has exactly the degree of intimacy for these settings – this must be the most beautiful version we have had so far ('Träume' is especially haunting, with its ebbing wind/horn postlude).

The *Four Last Songs* bring various disappointments: principally that the recording hardens the voice in *forte* (eg, first entry in 'September'). Then there is Sinopoli, who in 'Beim Schlafengehen' seems to defy you to enjoy the music. As the leader plays out his violin solo Sinopoli seems to be in his most tiresome 'analytical lecturing' mode – there's no sensuality, no perceptible feeling. And then as the voice enters, both orchestra and voice are boosted on the crescendo out of all proportion to context.

Studer's artistry seems to me miscast in Dresden. Versions such as the della Casa/Böhm, Schwarzkopf/Szell, Janowitz/Karajan, the live Schwarzkopf/Karajan and the historic Jurinac/Busch stand un-

challenged. Studer's very finely controlled 'Im Abendrot' is almost a saving grace, but ultimately Sinopoli's conducting of the postlude there is little more than prosaic – just how wondrous and subtly shaded this music can be is demonstrated in the Karajan/DG of 1974.

Strauss [A(C):2], Wesendonck [A:1*], *Tristan* exopt [B(D):1/(3)].

Christopher Breunig

STRAVINSKY:
Apollon musagète □ **Concerto in D**
□ **Dumbarton Oaks** □ **Dances**
concertantes

Sinfonietta de Montréal/Dutoit

Decca 440 327-2 (78m 24s) •

A relaxed, elegantly tailored programme, with Stravinsky's racy syncopations shrugged off in typically Gallic fashion, Dutoit despatches the catchy *Dumbarton Oaks* Concerto with an engaging informality and considerable style, save for an odd hesitation 10s into (iii); his players achieve an amiable crispness, while the generous St Eustache acoustic reveals all without flaunting its size. The *Dances concertantes* are similarly breezy, although ensemble isn't always ideally watertight: one rather sticky moment slightly muddles 1m 38s into (i). Then there's the balletic *Concerto in D*, one of Stravinsky's most appealing scores where, again, Dutoit's laid-back, loose-limbed direction proves wholly appropriate – so many Stravinskians tighten the bolts wherever the arguments intensify, which is fine in the bigger ballets and grittier orchestral works, but it rather inhibits the flow of these witty, even mischievous neo-classical essays. And yet I would have preferred an even more pliable account of *Apollon musagète*, perhaps with something of Stravinsky's or Markevitch's keen sense of line. Dutoit directs a well played, nicely proportioned but rather foursquare performance, one that's not really on a par with its more vigorous disc companions. Again the sound is excellent, while Calum MacDonald's annotation is both perceptive and informative.

[A*:1/2] **Robert Cowan**

TELEMANN:
Sonatas in C & f □ **Trio Sonatas in b, g & d** □ **Two Quartets in G**
Amsterdam Baroque
Soloists/Koopman

Erato 4509-94355-2 (60m) •

A very varied selection incorporating contrasting timbres. No two works are scored identically, and Koopman's very skilled band selects from recorder, flute, oboe, bassoon, violin, cello and viola da gamba.

Koopman directs either from harpsichord or organ.

Logically enough the longest work – the big Quartet from *Tafelmusik I* – is placed last (violin, cello, flute, oboe, organ) but the care taken to ensure variation of instrumental colouring certainly makes this a most attractive assemblage.

Clarity and detail is necessary because it is typical of Telemann to put the leading voice in the lower octaves. Koopman's group (and indeed the engineer) are well aware of the need for sharp focus, and expert at etching the melodic line. Even the choice of keyboard continuo instrument is carefully calculated, with harpsichord backing cello but organ supporting gamba and bassoon (the D-minor Trio sonata has this latter combination, and the treble viol makes a delightfully tart, violinistic sound).

There is quite a 'roar' in the atmosphere of the Dutch church – at first I thought it was the blower for the organ yet it seems always to be there – but this is very high quality Baroque playing and the recording is forward and silvery.

[A*:1*] **Antony Hodgson**

TELEMANN:

Suites in C, D & B-flat

The English Concert/Pinnock

Archiv 437 558-2 (76m 52s) •

Few period instrument ensembles achieve the lightness and flexibility of the English Concert. The recording also clarifies the subtle difference between the concertante use of three oboes in the Suites in C and B-flat and the simpler doubling of the violin lines by two oboes in the D-major Suite. One of the secrets of effective performance of baroque music is being alive to these contrasts of texture and, as a subtle extension to this, Pinnock is not afraid to omit the oboe doublings on some repeats in order to vary the timbres. The scoring of oboes, bassoon, strings and continuo is expanded in the Suite in D by two hunting horns. These often merely fill in harmonies and are largely used in the lower register – I feel that more definition and a little more boldness from these instruments would not have come amiss.

This apart, there is great liveliness in the many dance movements. My personal preference would be for a smoother transition across double-bars, but in performances of this quality this is a minor point. Having recently queried Pinnock's very personal view of which repeats to make in the final statement of minuets [see interview] I must report that there is one such movement in

each work and that he makes both final repeats in that of the Suite in B-flat, neither in the D-major, and one of them in the C.

Excellent balance, fine continuo playing by Pinnock, and Henry Wood Hall sounds much warmer than usual.

[A*:1/1*] **Antony Hodgson**

TIPPETT:

Symphony 3 □ **Praeludium**

Faye Robinson (sop)/Bournemouth SO/Hickox

Chandos CHAN 9276 (64m 07s) •

Richard Hickox's Tippett cycle for Chandos really has begun in most auspicious style. The enormously ambitious Third Symphony places extraordinary interpretative and technical demands on its performers; happily, Hickox and his Bournemouth band pass the test with flying colours. Of course, Sir Colin Davis's pioneering 1973 recording has served us supremely well over the years, and the athletic zeal of his conducting (to say nothing of the LSO's splendidly committed playing) continues to impress. And yet I have to say that I find Hickox an even more lucid guide through this rewardingly complex score. In the haunting slow movement especially, Hickox achieves a remarkable stillness, poise and concentration, its half-lit, at times almost Messiaenic musings exquisitely caught by the recording engineers. (Indeed, the sound throughout is gloriously rich and transparent, with a beautifully-judged perspective.) Although Hickox's hard-working strings can't quite command the tonal 'clout' of Davis's LSO section, they respond with equally heartfelt dedication and commendable accuracy. The BSO brass, by the way, are just terrific. American soprano Faye Robinson is an ideal purveyor of Tippett's humanist message, more commanding and tangily idiomatic than Davis's (otherwise admirable) Heather Harper in the many 'blues'-inspired passages. Listen out, too, for a really excellent flugelhorn contribution in the first 'Slow Blues' setting 'As I drew nurture from my mother's breast...' [track 5].

In sum, like Hickox's altogether admirable account of Tippett 4, this can be recommended with all enthusiasm. The *Praeludium* for brass, bells and percussion (a BBC commission from 1962) makes a fine curtain-raiser, with Tippett's imaginative, sumptuously-blended sonorities once again thrillingly well caught by the Chandos production-team. Roll on the remaining two symphonies!

[A*:1/1*] **Andrew Achenbach**

photo: Tony Nudley



The extraordinary demands of Tippett's Third Symphony – the one with the 'blues' settings following a deliberate quotation from Beethoven's Ninth – are met by Richard Hickox and the Bournemouth Symphony Orchestra on Chandos

WOLF:

Italianisches Liederbuch

Bonney (sop)/Hagegård (bar)/Parsons (pno)

Teldec 9031-72301-2 (76m 09s) •

This recording, made in Teldec's Berlin studio, places the listener close to the singers but at an angle, as it were, to the piano, whose tonal qualities register in matt finish, not gloss. Whether this last characteristic has anything to do with Geoffrey Parsons's playing I doubt, but while technically spry and ever supportive, his contributions are otherwise prosaic, bringing little magic or interpretative insight to these multifarious vignettes.

The performance as a whole underlines just how un-Italianate Wolf's *Italian Songbook* really is. (Wolf himself said of these songs that 'their hearts beat in German, even if the sun shines in Italian'.) Barbara Bonney is the less natural Lieder interpreter of the pair, offering some personality, but a lack of tonal variety and an over-employment of little-girlie white tone. She scores some successes nevertheless, among them her sweet, unaffected manner in 'Nun lass uns Frieden schliessen', her conspiratorial passion in 'Mein Liebster singt' and her sense of wonder in 'Wenn du, mein Liebster, steigst zum Himmel auf'.

Håkan Hagegård sounds more at home. This is bigger singing (in fact he's inclined to over-sing at times), and he has a tendency towards what Fischer-Dieskau's detractors used to regard in his case as over-pointing. But the mention of F-D indicates the level on which Hagegård deserves to be judged. His conception of the songs has a wide scope, and there is detail here: his confidential, amorous manner in 'Heb' auf dein blondes Haupt', his nice line in tenderness in 'Benedeit die sel'ge Mutter', and his overall distinction in, among others, 'Heut' Nacht erhob ich mich' and 'Nicht länger kann ich singen'.

[B:1/2/3] **George Hall**

photo: Clive Barda/Archiv



Trevor Pinnock records Telemann Suites for Archiv. Above: Sir Michael Tippett

REISSUE OF THE MONTH

SCHUBERT: *Winterreise*

Peter Schreier (ten)/Sviatoslav Richter (pno)

Philips 442 360-2

(77m 22s)

® 1985 ■

Recorded at a recital in the Dresden Semper-Oper (and originally spilling onto a second CD), this *Winterreise* invites comparisons with the classic Decca studio version sung by Peter Pears. Each tenor has an accompanist of exceptional eloquence: Britten, of course, was not an artless Schubertian and I believe Richter surpasses him in quiet authority, subtlety and flexibility. From the beginning you feel he is sensing and adjusting to what is in the singer's mind; Schubert's key changes are ravishingly shaded, his pictorialism explicit and, at such places as the remorseless weighting of a chord in the postlude to 'Die Nebensonnen', Richter is even more telling than Schreier himself

(in this example sealing the fate as it is conceded 'I shall be better in the dark'). I find this far more involving than Schreier's new Decca, with Schiff. There's some coughing to put up with, but as the cycle reaches its numbing conclusion the atmosphere is palpable, and the ear discounts the audience (by then one has, as it were, 'joined' them). This disc comes with full German/English texts and a good essay by Karl Schumann. If you want a tenor version but like a certain formal distancing, stick with Pears/Britten, for (and 'Die Krahe' is a good example) whereas Schreier has intrinsically a more beautiful singing voice than Pears, in dramatic intensity he almost approaches a *sprechgesang* declamatory style: you almost imagine he steps distraught to the footlights to entreat his listeners! A very remarkable recital.

[A/B:1*]

Christopher Breunig

HERBERT VON KARAJAN

BERLIOZ: Overture Roman

Carnival □ The Trojans – Royal

Hunt & Storm/BIZET: Carmen

Suite 1/RESPIGHI: Pines of

Rome/SIBELIUS: Finlandia/

SMETANA: Ma Vlast – Vltava¹

Philharmonia/BPO/Karajan

EMI CD-EMX 2222 (72m 41s)

recordings from 1958–59 ■

There's a magical surprise here, when during Karajan's superb *Trojans* excerpt the Philharmonia is joined by an unlisted chorus; this is a version on par with Munch's Boston/RCA classic, yet it's never had due recognition. Apart from the marginally poorer Berlin recording (once lithe filler to Karajan's first postwar 'New World'), this is a welcome reminder of the Philharmonia in Kingsway Hall at a peak in EMI's recording history. 'I pini del Gianicolo' is another example of the Karajan/Legge partnership at its most productive – not even the much later BPO *Pines* surpassed this in atmosphere and suavity. But there's one thoroughly unattractive inclusion, too: for all its

virtuosity and polish, the *Carmen* Suite still strikes me as quite heartless.

[B:1/1*(3)]

Christopher Breunig

PROKOFIEV: Violin

Concerto 2 □ Violin Sonatas

1 & 2

Itzhak Perlman (vln)/Boston

SO/Leinsdorf/Vladimir

Ashkenazy (pno)

RCA 09026 61454 2

(78m 04s) recorded 1966, '69 ■

The Boston Orchestra is recorded with 'on stage' close balances (and with something of a left channel bias) – for once on records Perlman is almost overpowered – and the quality of the accompaniment does little to support the claims currently being aired in the *Gramophone* correspondence columns for Leinsdorf's tenure there. Made when he was 21, this concerto recording is perhaps one Perlman would rather forget (though already he was master of the piece). Nevertheless, the CD is important as it highlights one of his strongest accomplishments in partnership with Ashkenazy. I remember

the LP and its later reissue as rather ungracious in sound; RCA's digital transfer seems to have strengthened the focus. At midprice, this should win new converts for Prokofiev's two fascinating, if not easy, sonatas for violin and piano.

[B/C:2/3], Sonatas [A/B:1*].

Christopher Breunig

RACHMANINOV:

Preludes Opp.3:2, 23 & 32

Peter Katin (pno)

IMP Classics PCD 1081

(79m 49s)

® 1970 ■

This is a most welcome licensing of the Unicorn-Kanchana set of the complete Preludes: first 2LPs then on two full-priced CDs. The analogue recordings were beautifully engineered using a Steinway, and they have been faithfully transferred; Peter Katin's own descriptive notes are reproduced by IMP. Incidentally, his views are quite different from those of Earl Wild, whose Chesky recordings of Op.23 and eight from Op.32 have just been issued – CD114, with Sonata 2. Both sensitive and impassioned, these idiomatic performances supersede the present single-CD competitor [Weissenberg/RCA]. Decca really should re-price their Ashkenazy set now!

[A:1*] Christopher Breunig

RAVEL: Orchestral Works

Boston SO/Ozawa

DG 439 342-2

(3CDs, 184m)

® 1974/5 ■

First issued complete in a box-set of four LPs, Ozawa's Ravel was released to mark the 100th anniversary of the composer's birth in 1975. At that time DG were making some of their finest recordings in Boston, capturing the special sound of

this great orchestra in the marvellous acoustic depth and spaciousness of Symphony Hall.

Without loss of clarity, DG reproduced the rich ambient glow of this venue with a success none have equalled since. The orchestra, at a peak of excellence, respond magnificently to Ozawa's virtuoso direction. He drives the music hard at times (try the close of *Daphnis*) but is never insensitive. Climaxes sound exciting and incandescent, yet the playing has warmth and subtlety with plenty of colour and vivid detail.

Two of the CDs have been out before, but are not remastered. Disc 1 containing *Bolero/La Valse* (among DG's first 'Galleria' reissues) sounds less vivid than the other two, being transferred at a slightly lower level. The set is virtually complete, with only the fanfare to the ballet *L'Eventail de Jeanne* and the early overture *Shéhérazade* missing. Magical music, and some great performances. At midprice, irresistible I'd say!

[A/B:1/1*] James M Hughes

SIBELIUS: Symphonies 2 & 7

Philadelphia/Ormandy

Sony Classical CD 53509

(66m 25s) recorded 1957, '60 ■

Issued as a Philips ® LP in 1958 – the stereo transfer is remarkably good, if with some edge on strings at *forte* – Ormandy's Second was then thought to be somewhat fulsomely detailed. Much to be preferred to his later RCA, it strikes me as well structured and engaging. Incongruously paired with Respighi's *Roman Festivals* on LP(!), the Seventh, though, does suffer from too much expressive underlining – the coda promises to be very moving but then lapses into an all-purpose orchestral glow – and one misses the tautness and sparing qualities of Collins's reissued reading. Even so, Ormandy's is illuminated by interesting detail.

[B/C:2][A/B:2/3]

Christopher Breunig

Anthony Collins's Sibelius cycle is on CD. Above: the composer with Eugene Ormandy





SIBELIUS: Symphonies 1 & 7 ☐ **Karelia Overture**
Symphonies 2 & 6
Symphony 3 ☐ **Pohjola's Daughter** ☐ **Pelléas and Mélisande – excerpts** ☐
Nightride & Sunrise
Symphonies 4 & 5

LSO/Collins

Beulah 1PD8, 2PD8, 3PD8 & 4PD8 (59m 44s/69m 14s/67m 57s/61m 41s)

©recordings from 1952–55 •

None of the more illustrious pioneer conductors of Sibelius – Beecham, Ormandy, Sargent, Barbirolli or Koussevitzky – actually completed a symphony cycle. Karajan came nearest, working with Legge and the Philharmonia, but omitting 1 and 3. The task was left to the relatively unknown composer-conductor Anthony Collins. Hastings born and a composition student of Holst's, Collins became principal viola in the LSO in the early 1930s; he then played in Christie's ad hoc orchestra at Glyndebourne. In 1936 he wrote a film-score for Herbert Wilcocks's *Victoria the Great*, which led to work for RKO Studios. Collins died in 1963 in Los Angeles, his home for 24 years.

It was Decca's producer Victor Olof who decided that Collins (who was rather stiff in bearing and professorial in looks – I remember an LSO Beethoven programme he gave in the mid-1950s) should undertake what was to become one of the great monuments of the pre-stereo catalogue. Interestingly, a later RPO Sibelius concert on EMI didn't have the same magic as these Kingsway Hall

Deccas, which were technically remarkable for the period. Indeed, Decca were still recycling them as 'Ace of Clubs', then 'Eclipse', LPs well after their VPO/Maazel stereo cycle and up to the arrival of compact disc (so one cannot say these were much sought LP rarities, giving them a disproportionate value).

Sibelius was consulted by Collins and Olof concerning the vagaries of his metronome markings: they received a characteristic telegram instruction to allow Collins 'liberty to get performance living'!

The Collins cycle is now available on four quite well annotated and documented CDs (there's even a potted history of Decca's *ffrr* techniques). Vol.3 makes a good sampling disc for Collins's Sibelian credentials and the quality of the execution: in *Pohjola's Daughter* or the opening movement of the Third one hears this conductor's feeling for the fingerprint motoric rhythms – which he treats flexibly – and ear for texture. The 'gravitas' is always there, but there's a keen appreciation of the sudden shafts of brilliant sunlight which flood in, often displacing dank, gloomy scenes. Above all – and while the playing may not be the last word in technical sophistication – there's excitement and freshness about these performances. The Decca recordings, superbly transferred, sometimes tend to muddle in tuttis; against this must be set the sharp focus of individual instrumental timbres at lower dynamic levels. (Kenneth

STANFORD: Symphonies 1–7

Ulster Orch/Handley

Chandos CHAN 9279-82

(4CDs, 275m 57s)

© 1986–91 ■

Stanford did not scale symphonic peaks. The critic who said that he 'might have been a great composer if he had not been so superlatively good a musician' probably came closest to explaining why. Stanford was an academic. He knew all the rules but never broke any.

Wilkinson engineered all this material; other producers were Peter Andry and James Walker.)

In Vol.1, the *Andante* from the E-minor Symphony shows how grippingly Collins could built a narrative from simple pictorial elements evolving to swirling eddies of dark power, then restore the balance in Sibelius's assuaging coda, before the thrum of the scherzo, with its darting lines. Here, Collins really drives his players in an uncompromising Allegro. On the same CD we get a Seventh which far surpasses the RPO/Beecham in nobility, stature and organic cohesion. The one symphony which, at least on this occasion, eluded Collins was the Fourth: a major disappointment, though the coupled Fifth should be heard, and the cryptic Sixth, too, is very fine. It would be good to have Ormandy's Philadelphia Fourth from about this period on CD. Incidentally, the timpani-part variant at the end of Symphony 2, coupled with 6 in Vol.2, is not (as suggested elsewhere) 'rewritten' by Collins, but was agreed by Sibelius when Koussevitzky was preparing the work; the change, however, did not go into the published edition. Mackerras later recorded this same version.

One's only real regret is that *Tapiola* and *En Saga* are not included (Van Beinum had already recorded these pieces for Decca). But there's Collins's Delius and Elgar in the vaults, which may be worth listening to!

[B/C:1*/1/(3)]

Christopher Breunig

His symphonies are faultlessly crafted but content is frequently slender, and his harmonic language, diluted Brahms and Dvorak with some Schumann and bits of others, is too eclectic for his own good.

Does Handley accept this assessment? Well, he creates a sneaking impression that these works do not arouse any spark in him. Naturally, there is nothing routine about his conducting, and he does unbend for the Third. Perhaps the Irish tunes stirred his Celtic blood. They seem to have stirred Stanford into producing his best symphony, and Handley shows a degree of relish not evident elsewhere. Throughout, the Ulster Orchestra is in very good form, especially the woodwind and brass. But most often their colours emerge as pastel shades in a recessed acoustic. Spaciousness is laudable but pungency is important too.

[B:1]

Nalen Anthoni

R STRAUSS: Sinfonia domestica ☐ **Tod und Verklärung** ☐ **Salome – Dance of the Seven Veils'**

Cleveland/Szell/Philadelphia/Ormandy

Sony Classical CD 53511

(75m 11s)

recorded 1964, '57, '1962 ■

A completely inadequate booklet-note tells us 'the striptease of Salome... should come as no surprise... on television, to encourage, perhaps the purchase of ladies' lingerie'. Very helpful! In fact, the luscious Ormandy track is spoilt by the level mismatch at 1m 22s, when a flute suddenly appears in the RH channel at a ridiculous dynamic. Never mind, Szell's is a distinguished alternative to the Reiner/RCA coupling (*Sinfonia* 1956; *Tod* © 1950) – indeed his controlled unfolding of *Tod* is quite masterly, and the sound, if dry, remains good. His *Domestic Symphony* is excellent too, though this later Cleveland production has a hard edge and some string discoloration. It is regrettable that (and the same applies to the Furtwängler and composer CD transfers on DG) the purchaser is given merely the German movement-titles, when what is necessary is an indexed or timed synopsis of the events portrayed.

[C:1*][B:1*][B(D):2]

Christopher Breunig

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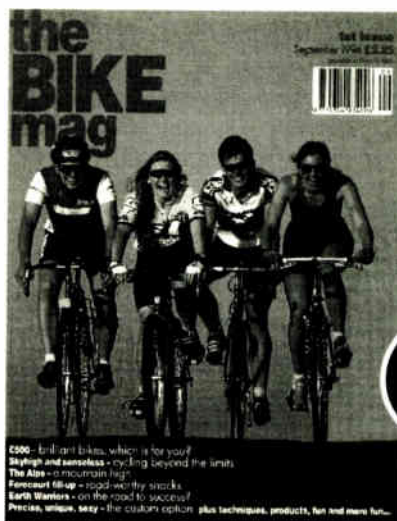
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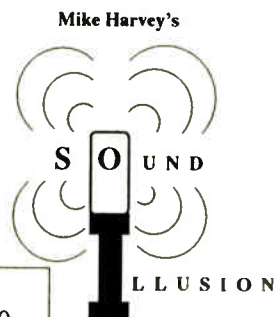
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RESPINNING THE SIXTIES



SPIN DOCTORS TURN IT UPSIDE DOWN

Epic EPC 476886-2 (55m
17s) ●

Spin Doctors have it all figured out. America clearly loves its big rock 'n' roll night out and the Docs are ready to supply it. The formula is simple. Take a guitar-based outfit with a rhythm section that can supply both rock and funk on demand. Stir with a few Hendrix licks, a touch of jazz 'n' blues and a great chunk of humour. Keep the whole thing human, so you can reach out and actually touch what's going on, then tour, tour and tour again, until everyone knows that when the Spin Doctors come to town, it's value for money time. Transferring that feel to disc is not easy. Even the Grateful Dead (with whom the Docs have been compared) rarely can. But on *Turn It Upside Down*, frontman Chris Barron and rock-solid crew have achieved just that. So much so that listeners might well go stadium-happy and run out for a burger and coke halfway through. Their last album sold over six million copies. This one won't see them joining the dole queue either.

[A:1] **Fred Dellar**

Even better than I hoped. Eclectic and poppish but so polished and accomplished that there could have been not just three but a 20-year, on-the-road hiatus between the two albums. It's like the Beatles post-Hamburg: dues paid, record companies admonished. What the Doctors have prescribed this time is a slice of humanity, a modern-but-traditional

road song, some arch weirdness, old-fashioned lust, loads of humour and melodies not heard since Todd Rundgren went loopy. And they play with that supersharp, surrogate Sixties-ness mastered by Kravitz, but minus the seriousness which can make Lenny hard to take. And for genre-blending, there's no one around to touch the Spin Doctors, reggae to funk, metal to jazz. If, at times, it gets too clever (familiar licks thrown in to test your Trivial Pursuit rating) think of the alternative: rootless grunge stupidity.

[A:1*] **Ken Kessler**

Hey, am I all alone out here? The Spin Doctors' ramshackle rock 'n' roll by the numbers occasionally recalls The Faces' rhythmic panache but where are the songs? Their similar first album was just about redeemed by the memorable 'Little Miss Can't Be Wrong' and the hookworthy 'Two Princes', but nothing here grabs my attention, even after several masochistic replays in search of whatever it is I'm missing that sends everybody else into paroxysms of classic rock frenzy. The words 'capable', 'bar' and 'band' are set on a headlong collision course in the canyons of my mind with the words 'anthemic', 'stadium' and 'chant'. I'd say this is a band that has got seriously out of its depth, and is in the process of evaporating faster than a fart in a florist's. Of course, I said the same thing about The Rolling Stones in 1971. I was right then, and I think I'm right now.

[A:3] **Johnny Black**

DAVE ALVIN KING OF CALIFORNIA

Hightone Records HCD 8054

(54m 37s) ●

Like surprises? Depending how much you loved the late, lamented Blasters, Brother Dave's fourth solo outing might be a shock you don't want. Mellow? Sub-Cooder? The predominantly acoustic King of California is so laid-back and down-home that you wonder just how much an album's title should dictate the tone; 'Californian' ain't the half of it. Despite Alvin's reworking some of his own tunes, this could be one of those tribute CDs designed to sound nothing like the source artist. But I refuse to believe that all the fire has been extinguished. I'm hoping this is a mere lapse, DA seeing how he'd fare as a surrogate John Prine. It's a bleak, mournful set, and you'll have a hard time not picturing Harry Dean Stanton and Sam Shepard as you listen. If you go in expecting Dave's alter ego, you'll have no trouble regarding this as [A:1]. But, please, find Phil and kiss 'n' make up.

Ken Kessler

AMERICAN MUSIC CLUB

SAN FRANCISCO

Virgin (advance tape) ●

AMC has been on a rise for some while now, with every release fulfilling more of the potential that's always been evident in Mark Eitzel's painfully perceptive songs. As the recent single 'Wish The World Away' suggested, this album is more immediately accessible than its predecessors, with Eitzel's voice pushed to the front and rightly so, because it has improved dramatically. He's still cynical, bitter and alienated, but the new strength in his voice accentuates his positives: the ability to cut to the heart of relation-

ships, craft a keen hook and ride over the top of a brooding rhythm. When the guitar peels out of the final chorus harmonies on the anguished 'Help Me' and when 'It's Your Birthday' switches between heaven and hell you know this is a songwriter and a band simultaneously hitting peak form. It doesn't happen often, and when it does you should be there.

[A:1] **Johnny Black**

DAVID BOWIE SANTA MONICA '72

Mainman Golden Years GY 002

(76m 37s) ●

At last, an official release for Bowie's first-ever live American radio broadcast. In retrospect the Spiders From Mars weren't as wonderful as we'd remembered, though Mick Ronson (to whom the album is dedicated) could always be relied on to prod things into action. But this gig was well worth a marvellous



'Space Oddity', on which Bowie scats the intro and provides rocket lift-off impressions; a joyously-strutted 'John I'm Only Dancing', and such borrowed gems as Brel's 'My Death' and Lou Reed's 'Waiting For The Man'. What surprises most is how acoustic many of the backings were. The album also serves as a reminder of Bowie's flexibility, his ability to shift from voice to voice, to switch range and change direction to maintain interest, a trait that has helped him outlast many of his contemporaries. All the evidence is neatly packaged here on an album of variable but generally good sound quality.

[B:1] **Fred Dellar**



LINDA BRADY

LINDA BRADY

SOB SOB CD 048 (37m 35s) ●

HOB0

HOB0

SOB SOB CD 047 (49m 57s) ●

REPULSA

REPULSA

SOB SOB CD 049 (38m 55s) ●

SOB stands for 'Son of Berserkley', Matthew Kaufman's 1970s US indie label, a sort of Yankee Stiff. A century hence, people with sense and taste will revile it for unleashing the inept, pathetic Jonathan Richman on the world, while thanking it for Greg Kihn and the Rubinoos. The new label mines the wealth of San Francisco's vibrant current music scene. Staggering singer-songwriter Linda Brady calls to mind *Broken English* Marianne Faithfull, Chrissie Hynde and Katrina (of the Waves)... all at once. It's delicious, listenable from start to finish, and contains some of the year's smartest pop. [A:1*] Hobo, formerly The Uptones, recalls those skinny-tied, guitar-driven late-1970s/early 1980s power pop acts, so sharp and slick you'll start chanting a twilleytwilleytwilley mantra. Elements of reggae and HM spice up the stew, but it's classic Trouser Press artistry all the way. The Knack minus the smirk. [A:1] And then there's Repulsa, too stupid to realise that a flood of 'f-words is neither shocking nor rebellious, and unaware that the Fugs, Lenny Bruce, the Last Poets and others beat her to it by 25 years. There's nothing clever or original about her bilious standard-fare HM thrash, which is so positively Eighties that it should have liner notes by Bret Easton Ellis. If Repulsa ever grows up, this'll come back to embarrass her to death.

[B:6] Ken Kessler

SHAWN COLVIN

COVER GIRL

Columbia (advance tape) ●

How could the girl get it so wrong? Shawn Colvin's first few albums have established her as one of the potentially great American singer-songwriters, but this set of six live and six studio cover versions opens with two clunkers. First is a seriously flawed interpretation of Sting's 'Every Little Thing She Does Is Magic', replacing Sting's celebratory joy with smouldering lust. Next, she clumsily changes the lyrics of Tom Waits' 'Heart Of Saturday Night' to make it a song about a woman. Why? Fortunately, she redeems herself in 'One Cool Remove' duetting beautifully with Mary Chapin Carpenter, and suddenly the album is on course, with hardly a foot out of place on the remaining ten cuts. She ends with a perfect live take on Dylan's 'You're Gonna Make Me Lonesome When You Go', reminding us that owld Bob was not only the voice of his generation, but a damn fine love song writer.

[A:2] Johnny Black

DAVE EDMUNDS

PLUGGED IN

Columbia 477333/2 (44m 27s) ●

Why does this work when the new Stones album, which it superficially resembles, is such a dodo? Edmunds mines his past as much as they do, and leans no less heavily on the Encyclopaedia of Rock 'n' Roll Clichés for inspiration. He rips off Chuck Berry's 'Memphis' mercilessly for 'I Love Music', and brilliantly pastiches The Beatles, Beach Boys, Presley and other icons as he stomps, boogies and powerglides, drenched in echo, through a clutch of songs you're sure you've heard before somewhere. The difference between him

and The Stones is love. When he sings 'I got Beach Boy blood in my veins' wreathed in perfect Brian Wilson harmony and counterpoint (ripped from 'Til I Die), he actually means it, because he really does love music and, even if he never makes another album, you'll find him 30 years from now plugging in to the power in some Welsh mountain village hall, playing for anybody who wants to dance their butts off. [A:1]

Johnny Black

**EVERYTHING BUT THE GIRL**

AMPLIFIED HEART

Blanco y Negro 4509-6482

(36m 36s) ●

A duo who never bought an electric plug in the first place, EBTG continues on its acoustic way. Despite having been beset by recent misfortune, mainly resulting from Ben Watt's life-threatening illness and resulting convalescence. EBTG is now, thankfully, on the way back, *Amplified Heart* finding the twosome operating in stripped-down mode, with little orchestral support, though veteran Harry Robinson contributes a brace of immaculately fashioned string arrangements to 'I Don't Understand Anything' and 'Two Star', the latter also suitably embellished by the cor anglais of Kate St John. The songs, all penned by Tracey and Ben, are warm without being overtly cosy. And though they're at their most audience-grabbing when opting for a touch of Simon and Garfunkeling, the most memorable track is the final, all-too-brief 'Disenchanted' on which Tracey Thorn hits a jazz-ballad mode, with Pete King contributing the kind of well judged, befitting a saxman rated by many as Britain's finest.

[A:1] Fred Dellar

RICHIE HAVENS

CUTS TO THE CHASE

Castle Communications ESSCD212

(advance cassette) ●

Another performer re-emerging for Woodstock's 25th Anniversary, Havens is an institution - some would say immutable. And, as expected, his latest is an acoustic guitar-driven set of covers, but methinks he's stretched himself a bit more than before. Yes, he doth protest too much, but there are

moments which take him out of the John Denver backwater and into the 1990s, including some near-Taj Mahal roots ventures and surprises like a wicked take of the Youngbloods' 'Darkness Darkness'. Then he undoes all of the progress with a distinctly banal rendering of the

creaky old Dylan classic, 'The Times They Are A-Changin'', surely the ultimate '60s cliché, and you wonder if maybe this really is the unreleased Woodstock III they've been promising all year. Still, I suppose, it's nice to think that there's someone who still clings to a genuine belief in all that peace, love and understanding hokum spouted (or should that be inhaled?) at the height of



Flower Power, more than a quarter century ago...

[A/B:1/2] Ken Kessler

MALCOLM McLAREN

PARIS

No Records (advance cassette) ●

An homage to MM's fave city and, despite the cynicism that pervades everything connected with this arch dork, it's a stunner. You might suspect that this is his stab at doing what Lou Reed did for Berlin. And given



World Radio History



the violinist to piss off, you're half-way there.
[A/B:1/2] **Ken Kessler**

NITTY GRITTY DIRT BAND
ACOUSTIC

Liberty CDP 7243-8-28169-2-8
(38m 17s) ●

that neither of them could carry a note in a Louis Vuitton suitcase, the analogy's not far-fetched. Just as Reed's opus reflects Berlin by being ponderous and bleak, so is Paris lighter, wispier and as pretentious as it needs to be; Malcolm even has French celebs like Catherine Deneuve and Francois Hardy in guest spots. Despite McLaren being to Things French what Loyd Grossman is to Things British, ultimately it is a genuinely enjoyable mélange of ambient music, cool jazz and a bit of taking the Michel. Malcolm is no Serge Gainsbourg (more Le Petomaine) but you'll listen to this one again and again. Especially if you're naive enough to believe that all Frenchmen smoke Gauloises and eat snails. I'm only surprised he didn't call on the services of Gerard Depardieu and name the album *Gaul Bladder*.

[A:1] **Ken Kessler**

THE MAZELTONES
LATKES & LATTES

Global Village Music CD159
(Dist by Topic) ◆

In my never-ending quest for more Mickey Katz Yiddishiana, I'll sit through anything with the words 'klezmer music' on the cover. The hiply-named Mazeltones, though, lack the irreverence to serve as a proper Katz substitute; instead, they're near-purists who - like some of their labelmates - simply want to keep the long-standing tradition of kosher Balkan party music alive and well. Authentic? You can smell the schmaltz as they wade through Yiddish lullabies, folk music, festival songs and more. Do you need to understand Yiddish to get a buzz from this stuff? No more than you need to speak African or Caribbean languages to appreciate most Andy Kershaw fare. If you've ever been to a Hungarian or Russian restaurant and not told

Calling it 'Unplugged' would be inappropriate, as the Dirt Band has never been afraid of a dearth of electricity. Unlike Dave Alvin's latest (see above), this is no surprise at all - only that it took so long to get here. And while the NGDB is one outfit which can claim a stake in establishing the country-rock genre, never have I heard so perfect a facsimile of a Tim Schmit-era Poco album. This is all gorgeous harmonies, luscious strings and twangy picking, as much a 1990s 'Opry offering as a return to the pre-Eagles Americana which identifies this band's birth period. It's also one of the most uplifting sets I've heard this year, again in sharp contrast to the Alvin solo. Go for it. Even if you despise country. If you need a dishonest reason (maybe you doubt your system's fidelity, for example) note that the sonics on this disc are of world class, audiophilic standard.

[A**:1/1*] **Ken Kessler**

NO-MAN
FLOWERMOUTH

One Little Indian TPLP67CD
(57m 45s) ●

One for great romantics. The opening 'Angel Caught In The Beauty Trap' is all you might imagine it to be - a pitter-pat 'Tubular Bells' of a thing, with Ben Coleman's violin punctuating Tim Bowness' Nick Drake-like vocals, while Ian Carr's trumpet and Mel Collins' sax add some jazz legality. Everything's ambient the way you'd hope quality ambient music would be, with substance poking in between those fluffy white clouds. And though No-Man's idea of dance can be translated as trance, the various colours and nuances keep ears perked while the feet are moving. Intriguing, but



the feeling remains that No-Man, bless their multi-hued ideas, will never quite manage to put together that all important hit single.

[A:1] **Fred Dellar**

LEON REDBONE
WHISTLING IN THE WIND

Private Music BMG 0100582117-2
(36m 20s) ●

Another glimpse through the windows of the pop museum. Everything here is around 50 years old, or in the case of Redbone's own 'Dancin' On Daddy's Shoes', merely sounds that way. As usual with Private Music's mystery man, it's a trawl through half-forgotten memories to the sound of deliberately dated accompaniments, while Redbone adds a vocal line

leader Little Jack Little (he committed suicide at the age of 55), Ringo Starr donates to the happy hula of the 1934 hit 'My Little Grass Shack', Merle Haggard drops by to help out on Carson J Robinson's 'Settin' By The Fire'. It's all amiable stuff, affectionately delivered, though Redbone is inclined to sing flat. But what I want to know is why the violin playing on 'I'm Crazy 'Bout My Baby' is credited to Joe Venuti, who died in 1978?

[A:2] **Fred Dellar**

ROLLING STONES
VOODOO LOUNGE

Virgin CDV 2750 (62m 10s) ●

Am I being unreasonable to expect that by now Jagger and Richards might be able to write song lyrics that make sense? I know it's only rock 'n' roll but why in the opening cut, 'Love Is Strong', does Jagger set up a situation of voyeuristic lust ('Some day babe, we got to meet') only to suggest in the rest of the song that they have already met? It might be argued that I'm spending a lot of time here discussing a very minor point, but that's largely because I can't find much else to say.



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It's another Stones album, uncannily similar to all its predecessors. Occasional glimmers (ha!) of interest come from the contributions of various sidemen, and from Don Was's undeniably imaginative production which rescues undistinguished songs like 'Moon Is Up' from total tedium. Irredeemable train-spotters will cream themselves working out which is this album's 'Angie', which is the '90s 'Jumpin Jack Flash', which is the new 'Lady Jane' and so on, but only Stones completists really need bother with this.

[A:2] **Johnny Black**



SUDDENLY TAMMY!

Warner Bros 936245524-2

(45m 14s) ●

A group that's really a solo act. Suddenly Tammy! is Beth Sorrentino, singer-songwriter-pianist. Sure, there's a capable

bassist and drummer, but they're along just for rhythm duties while Beth S parades her unremarkable talents. Her songs are wispy things that couldn't stick in your head even with an implant. Her piano-playing maybe matches Tori Amos, while her voice is of the all-too-youthful spring-fresh variety that'll have you harking back to the era of Altered Images and the precocious Clare Grogan. If Suede hadn't picked 'em as tour support, we might never have heard of this Pennsylvania-based outfit. For this album was recorded in '92, appeared in the States during Spring last year, and has only just made it to these shores. They're evidently not particularly high on anyone's promo list. Certainly not mine.

[A:3] **Fred Dellar**

BEN ANDREWS & THE BLUE RIDER TRIO

PREACHIN THE BLUES

Mapleshade 56962 (50m 11s) ●

With 'audiophile label' being pretty much a six-syllable four letter word, I'm loath to rave about this album's sonics. But it's just inescapable, because the sound really is nothing short of

glorious. Guitarist/vocalist Andrews, a blues devotee in the Ry Cooder/David Bromberg vein, is backed only by a slap bass and acoustic harmonica, recorded live to two-track analogue with minimal miking and no mixing, filtering, EQing or



other adulteration. And it shows because the live, in-the-room feel is spine-chilling. In a set consisting of a couple of originals and ten perfectly rendered acoustic blues classics, Andrews displays a deep respect for, as well as an understanding of the blues which makes you wish he'd scripted the film, Crossroads. Never veering toward the sterility of the (non-electric) British blues revivalists, Andrews & Co have managed to juice up the oldest of blues styles with-

out abandoning the crucial rural elements. How rare: a musical treat that sounds just fine. (Mapleshade can be contacted at 2301 Crain Highway, Upper Marlboro, Maryland 20772 US. How rare: a musical treat that sounds just fine. (Mapleshade

can be contacted at 2301 Crain Highway, Upper Marlboro, Maryland 20772 USA.

Ken Kessler

VARIOUS ARTISTS

WITH HONOURS- SOUNDTRACK

Maverick/Sire 9362-45549-2

(48m 50s) ●

This one's more interesting than your normal run-of-the-stalls release in that several of the artists have opted to play cover games. Duran Duran proffers a decidedly West Coast strum 'n' harmonies rendition of Led Zep's 'Thank You' (okay, but not a patch on The Temple Kazoo City Orchestra version of 'Whole Lotta Love') and Belly recreates 'It's Not Unusual' in a manner that, allthings considered, doesn't stray too far from Jones the Boyo's original '60s rave-up. The Pretenders' re-run of Dylan's 'Forever Young' comes pretty much as expected: neat, tidy, professional and so forth. Lyle Lovett's version of 'Blue Skies' provides a tasty run for some unnamed jazz quartet, which is only spoilt because Lovett decides he has to sing and fails miserably because he doesn't seem to know how to swing. Madonna, because this cinematic backdrop gets a release on her own label, regales us with the film's theme (not unlike any solidly constructed Coke commercial for TV). Probably the most engrossing track among those remaining is Kristin Hersh's acoustic 'Your Ghost' on which she duets with Michael Stipe, a mellow cello keeping the two-some company.

[A:2] **Fred Dellar**



BOX SETS

With so many labels producing worthy multi-CD histories, archivists have never had it so good. And it's not stopping with Motown or Stax-sized outfits. After the Specialty, Okeh and Brunswick sets, up pops The

Sue Records Story: New York City - The Sound Of Soul (EMI 7243 8 28093 2 6)◆, a fabulous 4CD package complete with obligatory 48 page booklet. Treasures include rare B-sides and hit singles, 100 tracks from 1957-1966 from Jimmy McGriff, Ike & Tina, Russell Byrd ('Hitch Hike'), Inez Foxx, The Poets, Jimmy Helms and other great R&B artists. Sue was one of the first black-owned labels, in itself an achievement, but the remarkable thing is the consistency of the material. A wealth of lesser-known treasures for the insatiable R&B fan. If you prefer single-artist sets, Charly has assembled a 4CD Chuck Berry collection, lovingly wrapped in a book-style 'digipack'. Poet Of Rock 'n' Roll (Charly CDDIG 1) contains 105 Chess tracks, from 'Johnny B Goode', 'Maybelline' and all the other hits of the 1950s through to the best of his 70s output. Sandwiched in between the discs is a gorgeous full-colour, 60 page booklet by Clive Anderson, annotating every track and providing a superb biography. Charly has also issued an unusual 2CD, slip-cased item for die-hard Van Morrison fans. Payin Dues (Charly CP 8035-2) is said to contain everything Van recorded for Bang Records in New York in 1967, after leaving Them but prior to joining Warners for solo superstardom. It contains the whole of the TB Sheets album (with 'Brown Eyed Girl'), plus studio jamming and cover versions - 18 finished tracks and 31 outtakes - to remind you that Morrison wasn't always a miserable Dylan Thomas wannabee.

Ken Kessler

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MAT MANERI/PANDELIS KARAYORGIS IN TIME

Leo Lab CD002 (62m 12) ◆

Six violin and piano duets, bookended by different takes on Thelonious Monk's 'Ugly Beauty'. Tunes are either by Maneri or Karayorgis; the improvising is atonal and highly charged. Modern jazz has been fascinated by the sparse world of Anton Webern since Chicago jazz musicians started addressing issues of space and silence in the 60s. Currently, much free playing in London sounds like improvised Webern; Maneri and Karayorgis have found a cool, convincing way of doing it. Thoughtful and impressive.

[A:1]

YUSEF LATEEF THE AFRICAN AMERICAN EPIC SUITE

ACT WDR 892 142 (46m 8s) ◆

Tenor saxophonist Yusef Lateef is one of the more intriguing musical forces in American music. Born in Chatanooga, Tennessee, in 1921, he played with swing stars Hot Lips Page and Roy Eldridge before moving on to post-bop modernists like Mingus and Cannonball Adderley. Lateef has had an academic career and eschews the term 'jazz', creating a third stream that nods to modern classical music whilst adopting the sleekness (and production values) of fusion. The only music that sounds remotely like this is the soundtrack to *Naked Lunch*, which had Ornette Coleman tooting over horror-film strings. Maybe a little starchily played: the Cologne Radio Orchestra does not jump on the scores the way the Modern or Asko Ensembles would. Still, Lateef bravely goes his own way, ignoring the 'jazz' straitjacket (just as Duke and Bird did before him). Raw, in-your-face sax over dream-like, harmonically shifting strings: tasty.

[A:1]

AKEMI KUNIYOSHI ARP MUSIC

Leo Lab CD004 (62m 42s) ◆

The press release tells us this relaxed, Debussy-like piano music is 'kind of ECM's territory'. If so, it avoids the gloss associated with that label, being

much more immediate and forceful. Paul Moss's reeds aren't echoed-out into atmospheric wall-paper, his playing has real-time tenderness. Leo has a knack for finding fresh music; this is a perfect example of gently beguiling musicianship that, by paying keen attention to every note, becomes much more than it seems.

[A:1]

HESSION/WILKINSON/ FELL THE HORRORS OF DARMSTADT

Shock SX025CD (64m 16s) ◆

The reference to Darmstadt (the Summer school which championed Stockhausen and Boulez and all the 'difficult' modern music minimalists wish to dump in the trashcan of history) connects this surging free jazz to the classical avant-garde. Fair enough. If you like Michael Finnissy (rather than, say, Steve Reich) - ie involvement and intensity, invention and insurrection - Hession/Wilkinson/Fell will be manna from heaven. Somewhat tinnily recorded (a gaff Shock has done much to alleviate), the sheer musical firepower and precision of the trio leave most official British (heck, world) 'jazz' at the starting post. You'd need to go to Paul Dunmall to find Wilkinson's equal on sax. A beautiful, lulling mid-section



shows what tenderness can be achieved in the midst of joyfully transgressive outreach. Superb. [B:1]

CHARLES GAYLE TRIO LIVE AT DISOBEY

Blast First BFFP100CD (63m 51s) ◆

London's Disobey Club - masterminded by Blast First, the rock label that brought you the Butthole Surfers, Sonic Youth and AC Temple - seeks to revive the take-no-prisoners atti-

JAZZ ROUND-UP

On *Here The Moon* (ECM1524 521721)◆ Sidsel Endresen sings in a measured, folksy manner; though she sounds superficially like Joni Mitchell, she hasn't got Joni's song-writing skills. When the Canterbury Scene (Robert Wyatt, Egg, Jan Steele) pioneered such improvised 'impressionism' it mattered; now it doesn't (unless you check out a post-punk version, like the excellent *Spoonfed Hybrid*). For some, the ECM 'sound' is a mark of refinement; for me, it's predictable and calculating - folk and jazz filtered for middle-class sensibilities. That couldn't be said of drummer Franklin Kiermyer's *Solomon's Daughter* (Evidence ECD22083)◆, which features Coltrane's protégé Pharoah Sanders on tenor. Free jazz is so hard to find that one is tempted to applaud every manifestation; however, given that there are no less than two examples above (Wilkinson and Gayle), we must start to be selective. The drumming here is blurred in comparison to Elvin Jones (or Paul Hession) and Sanders seems content to evoke Trane rather than really play. Despite much bustle, the musicians seem to be playing to their private visions of Trane's music rather than interacting in the here and now. David Murray continues to supply the real deal with *Live '93 Acoustic Octfunk* (Sound Hills SSCD8051)◆, his tenor backed by two heavyweights: Fred Hopkins on bass and Andrew Cyrille on drums. Oodles of sumptuous balladry are capped by the title track, where Murray shows improved bass clarinet chops and Fred Hopkins redefines the word 'funk' (enough to make the purveyors of so-called 'jazz funk' fusion weep into their wallets). Finally, reissue of a stone classic, showing that relatively obscure names can use a sense of occasion to create great jazz: Ted Curson's *Tears For Dolphy* (Black Lion BLCD760190)◆, lamenting the great multi-instrumentalist's death in 1964. Dick Berk's exotic polyrhythms and Herb Bushler's huge bass exact darkly emotive tenor from Bill Barrow and plaintive, muezzin-like trumpet from the leader. Hard bop delivered with so much soul it's breathtaking - three excellent unreleased tunes (not alternate takes) bring the timing up to an hour (if anyone out there has the missing sleeve of my original vinyl, could they get in touch?

Ben Watson

Hession/Wilkinson/Fell (left): free jazz meets classical avant-garde. Charles Gayle (below left), busking hero of New York free jazz

Photo (left): Jo Fell
Photo (below left):
Bleddyn Butcher



tude of Wyndham Lewis's art movement of 1914. Good luck to them. For this assault on the British aesthete ('cream of the snobbish earth, slut-bellied obstructionist' etc), they imported saxophonist Charles Gayle, busking hero of New York free jazz. Gayle makes all the right moves. He has a lovely way with distorted sax effects, and a lyrical soul. But finally an inept drummer and lack of direction make the music pall. After 30 minutes you tire of his tricks. David Ware and David Murray need lose no sleep (though they could do with some of Disobey's Vorticist flair for hype). [A:2]

Ben Watson

**ALAN PARSONS
PROJECT:
TALES OF MYSTERY AND
IMAGINATION**

Mobile Fidelity UDCD606

(40m 54s) ♦

MFSL's gold-plated version of Parsons' 1976 concept album based on tales from Edgar Allan Poe. While it's nowhere near as creepy as Poe's writings deserve, this is nonetheless a perfect example of a muso running amuck in a studio in the days when terms like 'self-indulgence' and 'progressive rock' weren't considered actionable libels. As bombastic and overblown as anything Rick Wakeman ever regurgitated, but sonically a treat.

[A:2/3]

**JIMMY BRYANT/JODY
REYNOLDS/LES PAUL:
GUITAR LEDGENDS**

CS RECORDS C5CD611

(78m 23s) ♦

Subtitled the 'Suntide Desert Jam', this finds the three guitarists trading licks in 1973. A weak showcase for the talents of the inventor of the electric guitar, the disc does have a curious appeal - if you find a blend of sub-Shads rock, weak jazz and lame country interesting. A curio, but then Colin of C5 does admit to an aberrant love for duff instrumentals.

[B/C:3]

**CARAVAN
COOL WATER**

Htd Htd CD18 (Dist by Pinnacle and Rough Trade)

(52m 20s) ●

An unexpected release, the never-issued album Caravan recorded in 1977 to follow *Better By Far*. With the tapes returned to Pye Hastings, the sessions were remastered by son Julian and converted into a modern-sounding Caravan update. Purists might balk - this is no 17-year-old artefact - but the vocals, melodies and feel are pure Canterbury. A welcome surprise. [A:2]

**DAEVID ALLEN TRIO:
LIVE 1963**

Voiceprint VP122CD (35m 35s) ♦

Hard to believe this flaky material was recorded 31 years ago - a good three years before psychedelics were widespread. Predating Allen's later bizarre work with Gong et al, this possesses

an importance that dismissal based on its unlistenability can't obscure: it links the beat era with the hippie era, with greater efficacy than any band other than The Fugs. [H:3]

THE DOWNLINERS

**SECT:
SINGLES A'S & B'S**

See For Miles SEECD398

(78m 54s) ♦

For devotees of early British R&B, a nicely compiled, 29-tracker from one of the lesser-known groups. SFM has assembled cuts from a variety of sources to produce a comprehensive study, including demos, all of the rare Contrast EPs and loads of singles sides. Liner notes by Alan (Backbeat) Clayson are, of course, thorough and informative. Another gap well and truly filled. [A/B:1/2]

**CHRIS FARLOWE:
I'M THE GREATEST**

See For Miles SEECD396

(75m 31s) ♦

THE R & B YEARS

Charly CDRB5 (59m 24s) ♦

An odd pair which, between them, give you more than you'll ever need from Farlowe who was, at best, a half-decent blue-eyed soul man. See For Miles' 25-tracker is hit-period stuff, dripping with collectability as it was produced by Mick Jagger, and it's the more listenable for it. The Charly set is a mild surprise, containing as it does some of his earlier, more pop-pish efforts, but the signals were all there.

[A/B:1/2]; [B:2]

**BUDDY GUY/JUNIOR
WELLS:
DRINKIN' TNT 'N' SMOKIN'
DYNAMITE**

Sequel NEMCD 687 (44m 46s) ■

No, not on a par with *Hoodoo Man Blues*, but still a performance to reckon with...especially when the backing band included Pinetop Perkins and a Rolling Stone. This set, originally released on Red Lightnin' in 1981, was recorded live at Montreux and these blues legends were in good form. With nothing to prove by this stage in their careers, they just boogied. Live blues the way it always should be.

[A/B:1/2]

**PEGGY LEE
THE BEST OF 1952-1956**

Music ClubMCCD 137 (53m 04s) ♦

£5.99 gets you 18 classic tracks from Lee's years with American Decca, including the terrific numbers she provided for Disney's *The Lady And The Tramp*. Outstanding stuff in a budget package that suffers no economies whatsoever, right down to full liner notes.

[B:1/1*]

**MIGHTY BABY
MIGHTY BABY**

Big Beat CDWIK 120 (60m 12s) ●

Wonderful progressive late 1960s rarity, from a band formed by remnants of the legendary The Action. Highly melodic semi-psychedelia which won't offend Deadheads, Man fans or Quicksilver devotees. This package contains the whole of the first LP plus extra tracks from The Action.

[A/B:2]

**AMOS MILBURN:
DOWN THE ROAD APIECE**

EMI CZ526 (72m 25s) ■

In the label's EMI Blues Series, 26 boogie gems from the Aladdin catalogue. The set kicks off with Milburn's signature tune, but the rest is of the same high standard: virtually definitive rock 'n' roll piano. A perfect evocation of post World War 2 R&B. [A/H:1]

**MOON MULLICAN:
MOONSHINE JAMBOREE**

Ace CDCHD458 (58m 53s) ●

If you like your C&W from the fringes (and that doesn't mean 'of your jacket'), this historic hillbilly material will make you think low foreheads, inbreeding and Burt Reynolds films. It swings like mad, full of unbri-dled energy, and it topped up the well from which Jerry Lee drank. This is what rednecks listened to in the days before beer cans with pull tabs. [H:1/2]

**NEW RIDERS OF THE
PURPLE SAGE:
WASTED TASTERS 1971-1975**

Raven RVCD (Dist by Topic) (76m 29s) ●

As only this Aussie label can do it, an absolutely terrific 24 track collection culled from the first seven LPs issued by the great-

est of the cosmic cowboy-cum-Dead offshoots. A weird amalgam of country music and West Coast drugginess, it calls up strange images like chewin'...wacky tobaccy. If Bob Wills had been born 40 years later and lived in San Francisco, this is what he would have produced.

[A/B:1/2]

**GENE PITNEY:
THE VERY BEST OF MUSIC CLUB**

MCCD155 (55m 33s) ●

Budget priced, 20-track collection featuring every major hit, including such angst-riddled gems as 'It Hurts To Be In Love', '24 Hours From Tulsa' and the original version of his latter-day hit with Marc Almond, 'Something's Gotten Hold Of My Heart'. That the music's superb is a given, but do yourself a favour and experience the surprising, sensational sonics...

[A/A*:1/1*]

**QUICKSILVER
MESSENGER SERVICE:
QUICKSILVER**

BGO BGOCD217 (38m 40s) ●

Post-San Francisco heyday Quicksilver, Valenti-led and therefore more cerebral and less rocking than in the earlier times which produced the band's classics. History hasn't been too kind to this middle-period (if you count their various reunions) work, but the tracks on this album are no worse than most late '60s West Coast excess.

[A/B:2/3]

**THE RAMONES:
END OF THE CENTURY**

Sire 7599-27429-2

(34m 14s) ■

PLEASANT DREAMS

Sire 7599-23571-2

(35m 01s) ■

SUBTERRANEAN JUNGLE

Sire 7599-23800-2

(33m 33s) ■

Da brudders' sixth-through-eighth albums (1980-83), now on mid-price CD. By this time, the novelty of their celebration of moronic behaviour had worn off, but the hardcore were rightly chuffed at the band's longevity. The first in this trio was a collaboration with the strange Phil Spector and the second

with 10CC's Graham Gouldman, while the third featured covers which presage their recent answer to Bowie's Pin-Ups. Standard Ramones fare, and [C:1**] across the board if you're a fan.

SANTANA: EVOLUTION

Magnum CDTB502 (71m 54s) ●

A two-CD 'historical document', the pre-CBS recordings from the band which fused Latin music and rock during the hippie era. Santana was always an acquired taste, best sampled after at least two joints, so the long, tedious meanderings might disappoint fortysomethings no longer partaking of the weed. Familiarity, though, is present as many of the tracks were later reworked for official release. Aptly issued during the year of the Woodstock 25th Anniversary. [H:2]

GEORGE THOROGOOD & THE DESTROYERS: BORN TO BE BAD

BGO BGOCD 224 (39m 13s) ◆

George Thorogood, a man who just can't seem to get no respect, was — as late as the end of the 1980s — continuing to play the bar-band, road-weary, party-down animal who made up for limited skills with explosive enthusiasm. What he delivered here, on his eighth album, was more of the same: high-energy R&B, covers of standards, some originals. If you can get past all the ineptitude and the sloppiness, this merits [A:2].

JOE TURNER: HUMPIN WITH JOE

EMI CZ527 (48m 16s) ■

His entire output for Aladdin and Imperial, some of the greatest R&B issued during the golden era. Turner's voice is one of the finest ever applied to boogie, and classics like 'Roll 'Em Pete', and 'Battle of the Blues' which predate 'Shake Rattle and Roll', show how he paved the way for rock 'n' roll. And to hear how Turner could move from swing to tormented balladry, look no further than the aching 'Story To Tell'. Quite simply, this is peerless stuff. [H:1***]

VARIOUS: AIN'T NOTHING BUT A HOUSE PARTY

Sequel NEM CD678 (55m 05s) ■

20 Northern soul treasures from the 1960s (including the Showstoppers' original take of the title track), though it's hard to figure out what the Cherry People's 'And Suddenly' — a well-known Left Banke collectable — is doing here. Rare, relatively unfamiliar soul, including some early Kenny Gamble, make this a standout for the hardcore.

[A/B:1/2]

VARIOUS: BLUES MASTERS

Rhino 8122-71386-2 (76m 22s) ■

Another contender for the title of 'Best Single-CD Introduction to the Blues', this contains 22 tracks from labels including Atlantic, Alligator, Excello, Delmark, Arhoolie and Sun. The roster includes Alberts King and Collins, Stevie Ray Vaughan, Johnny Winter, T-Bone Walker, Otis Rush, Junior Wells, Johnny Shines, Rufus Thomas, Koko Taylor — ah, to heck with it. This is the 'Best Single-CD Introduction to the Blues' yet.

[A/B/H:1*]

VARIOUS: THE CHESS LP COLLECTION

See For Miles SEE CD380 (76m 32s) ◆

Curiously named because it's part of See For Miles' longest-running series; in actuality, it's a Chess 'Best of', despite the title. 25 of the label's greatest tracks by its biggest stars: Larry Williams, Willie Dixon, Billy Stewart (with the wildest-ever 'Summertime'), Bo, Chuck, Muddy, — you get the picture. [B:1*]

VARIOUS: DANCE WITH ME -- THE AUTUMN TEEN SOUND

Big Beat CDWIKD128 (75m 20s) ●

THE SCORPIO RECORDS STORY

Big Beat CDWIKD129 (65m 40s) ●

Two more volumes chronicling the San Francisco indie scene of the 1960s. The Autumn set features the acts overshadowed by the Beau Brummels, including the Mojo Men, the Tikis and the Chosen Few, a glorious mix of post British Invasion

pop and nascent hippie fluff. The Scorpio package, of similar vintage and intent, is noteworthy as it includes tracks by the Golliwogs, later to become Creedence Clearwater Revival. Again, the notes are worth the price of admission. [B/C:1/2]; [B/C:2]

VARIOUS 3000 VOLTS OF STAX

Stax/Ace CDSXD 102 (58m 26s) ●

A third volume of ultra-rare archive material, this time including treasures by Johnnie Taylor, Booker T and the MGs, Otis Redding, Eddie Floyd, the Mar-Keys and a host of second division Stax acts. More prime soul which keeps you wondering why it wasn't released officially the first time around.

[A:1/2]

FRED WESLEY & THE HORNY HORNS: A BLOW FOR ME, A TOOT FOR YOU

Sequel NED CD 268 (58m 22s) ●

SAY BLOW BY BLOW BACKWARDS

Sequel NED CD 269 (55m 52s) ●

THE FINAL BLOW

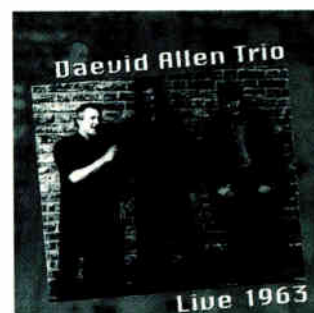
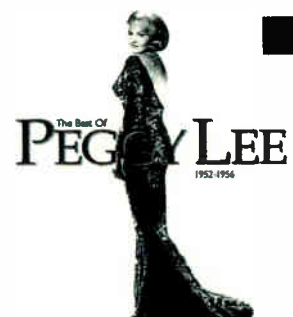
Sequel NED CD 270 ●

Funk fiends, rejoice! Sequel has reissued the two Fred Wesley/Maceo Parker albums from '77 and '79, with extra material and weird interviews. These (James Brown's) JB's/Parliament/Funkadelic veterans blow hot and cool with some of the sassiest jazz/dance music of the last two decades — as current sounding now as it was futuristic then. [A:1/2]; [A:1]; [A:1/2]

ROY WOOD: BOULDERS

BGO BGOCD219 (39m 34s) ◆

Wood's stunning 1972 solo, recorded entirely by himself — all instruments, voices, ad infinitum — during the chaotic post-Move and pre-ELO/Wizzard period. Perfect pop pastiches, including the best-ever impression of the Beach Boys. A long-lost, cruelly overlooked masterpiece. [A/B:1*]



THE HI-FI SHOW

RAMADA HOTEL HEATHROW
(TRADE ONLY 8-9 SEPTEMBER 1994)
PUBLIC 10-11 SEPTEMBER 1994

If you are serious about sound, there is just one absolutely essential event: **The Hi-Fi Show**, where enthusiasts gather to see and hear what's really new in the world of hi-fi.

Only **The Hi-Fi Show** provides listening rooms which allow manufacturers the facilities to demonstrate their equipment properly.

Sponsoring the Show, *Hi-Fi News & Record Review* magazine will have a stronger presence than ever this year, with a much fuller range of demonstration events and seminars with contributions from

The hi-fi event of the year!

several of *HFN/RR*'s highly-respected technical contributors.

Public opening hours:
Saturday 10th & Sunday 11th
September, 10am to 6pm.

Public admission: £2.50:
see *Hi-Fi News & Record Review* September issue
for free-entry coupon
and Show Guide.

Courtesy bus service:
A courtesy bus service
will operate to and from
Hatton Cross under-
ground station
(Piccadilly Line) during
the Show's opening
hours.

Car parking: Follow AA
signs.

Sponsored by:



THE GOOD HI-FI GUIDE

Welcome to The Good Hi-Fi Guide, *HFN/RR*'s selective directory to the hi-fi products which in our experience provide the best performance and value for money. In the following pages you will find technical details, review comments on sound quality and matching, performance and value ratings and supplier contact numbers for more than 200 hi-fi separates priced at between £100 and £2000.

SEPTEMBER 1994



After a major internal update which brought us the Mk III version, Musical Fidelity's long-established A1 amplifier continues to stand up to new competitors.

GETTING THE BEST FROM

THE GOOD HI-FI GUIDE

Each entry in The Good Hi-Fi Guide includes a listing of the main technical specifications and facilities where appropriate, as well as a succinct summary of the sound quality, based on review experience

All prices given are typical UK retail prices including VAT, but these are subject to fluctuation and, in any case, do not necessarily provide any indication of overseas prices

Supplier details are given for the manufacturer or for the UK distributor where appropriate. The supplier of any product should be able to provide further technical information on request, and should also be able to provide you with the name of your nearest dealer.

All the products included in this guide meet at least a basic standard of hi-fi performance. Those which are above average are given a rating for performance with a maximum of three stars for subjective sound quality, this viewed in 'absolute' terms, that is to say without reference to price. These ratings do not take into account other factors such as facilities, cosmetic appeal or convenience of use.

Ratings for better-than-average value are also given with a maximum of three stars and are based on a comparative assessment in terms of sound quality versus price. Other factors relevant to the final performance of a system (for example, in amplifiers, maximum power output) are taken into account but the subjective sound quality obtainable from the product (with suitably-matching ancillaries) is the over-riding consideration.

Where the product has been the subject of a published review in *HFN/RR*, the relevant issue date is given in abbreviated form (figures for month/year). Where no date is given, the sound quality description and rating is still based on evaluation by *HFN/RR* staff or contributors, even though no review has been published.

COMPACT DISC PLAYERS

DAC type: figures '16', '18' or '20' = proprietary 16-, 18- or 20-bit digital-to-analogue converters; BS = Bitstream (Philips PDM); PWM = Pulse Width Modulation (Matsushita); DS = Delta Sigma (Crystal). Note that the CD audio data is always 16-bit irrespective of the use of different digital word lengths in the conversion process.

Remote control: 'key' = numeric keypad for direct entry of track numbers.

Remote volume: where present, this is almost invariably actuated by a pair of buttons for 'up' and 'down'. (An exception is Quad's remote, which has a rotary volume control.)

Separate transport: unit containing the CD player mechanism and giving digital signal output. A separate DAC unit is needed to convert these to an analogue audio signal for amplification.

Separate DAC unit: unit providing digital-to-analogue conversion for signals from a transport unit. (Where both are indicated, the entry refers to a combination of two units: if neither is indicated, the entry refers to an ordinary 'single-box' player.)

Programmable: indicates ability to play tracks in a pre-arranged order or combination. Programming facilities vary in scope and complexity.

Phase reverse: indicates provision of a switch to invert the polarity of the

output signal, which may give a subtle improvement of sound on some recordings.

Optical outputs: refers to Toslink or other standard connection for optical transmission of digital data.

Wired digital outputs: normally via single RCA phono jacks, these provide digital signals for conversion by a separate DAC unit.

AMPLIFIERS

Power output: figure given is manufacturer's spec for RMS output per channel into an 8ohm load, both channels driven.

Line inputs: the number of inputs available to accommodate CD player, tape, tuner and other 'line level' sources.

Phono m-m: LP disc or 'phono' input for conventional 'moving-magnet' cartridges. Will usually also suit 'high-output moving-coil' models, though matching may not be ideal.

Phono m-c: LP disc or 'phono' input for normal (low output) moving-coil cartridges.

Tape monitor: when recording via the amplifier's 'record out' sockets, this switch allows the user to listen to the output from the tape recorder itself, not just to the source being recorded. 'Tape monitor' can also be used to connect other processing units between the amp's input and output.

Pre-amp: indicates a separate pre-amplifier or control unit, for connection to a separate power amplifier which in turn can be connected to the speakers.

Power-amp: a separate power amplifier needs a pre-amplifier for input switching and level (volume) control. Where both are indicated, the entry refers to a pre-/power amplifier combination; where neither is indicated, the entry refers to a normal single-box 'integrated' amp.

Speaker outlets: the number of pairs of speakers that may be connected to the amplifier at once. (Note that multiple speakers will make proportionately greater demands on the amplifier's power capability.)

Tone controls: indicates the presence of bass and treble controls, which some listeners find useful but which tend to be regarded as unnecessary by hi-fi enthusiasts.

Headphones: indicates the presence of a headphone socket, usually a standard 6.5mm (1/4in) stereo jack.

LOUDSPEAKERS

Drive units (number): there may be advantages in the use of three or more units, but the great majority of hi-fi speakers are two-way designs using a small treble unit or 'tweeter' with a larger cone unit for bass and mid frequencies.

Bass unit size: bigger driver cones

should produce more powerful or deeper bass, but the actual result is dependent on the design as a whole.

Sensitivity: indicates how loud the speaker will go for a given power input. Unusually low sensitivity means that a large amplifier will be necessary for good results.

Amplifier power (max): normally the safe maximum input the amp will stand continuously, but this need not rule out the (sensible) use of amplifiers of higher rated power.

Bass extension: the practical lower limit of the speaker's frequency response, although this may be extended further by room effects.

Recommended position: close proximity to walls (or other room boundaries) will increase bass output. The bass response of speakers intended for 'wall' or 'free space' mounting will have been designed to account for this.

Finish: most speakers are built from particle board veneered with real wood ('wood') or a synthetic wrap ('vinyl'): the latter can still give a convincing wood appearance. MP = moulded plastic.

Dimensions given for speakers do not include stands where these are separate items.

TUNERS

Number of presets: with even more FM stations available, a decent number of pre-sets is now becoming more of a necessity than a luxury.

Pre-set scan: allows the user to select a station quickly by scanning through the pre-set frequencies hearing a few seconds of each.

Wavebands: hi-fi tuners provide VHF/FM reception ('F'), while many offer medium wave AM ('M') and some have long wave AM ('L').

Signal strength meter: a useful facility, provided that it is accurately calibrated.

Manual tuning: traditional rotary control knob (K) or 'up' and 'down' buttons (B).

RDS facilities: options, based on data transmitted, include labelling for programme type ('PTY') and advanced Enhanced Other Networks (EON).

Automatic tuning: finds stations by scanning the band.

Remote control: usually provided among the facilities on a 'system remote', which will also operate all the other components in a manufacturer's system.

Mono button: manual over-ride of the usual auto switching which receives stereo broadcasts above a certain signal strength threshold.

IF bandwidth: switching the IF (Intermediate Frequency) bandwidth inside the tuner to 'narrow' gives better selectivity when required to reject interfering adjacent stations.

CD players

Aiwa XC-300 £150	Aiwa UK Ltd <i>Assembled in Wales, the XC-300 performed well in its price group with a focused and detailed projection of vocals. There was only mild emphasis of sibilants.</i>	081 897 7000		Key		●	24		●	10	*	**		
										92				
Arcam Alpha 5 £450	A&R Cambridge <i>Wealth of detail retrieval, astonishing dynamics and musical verve and gusto from multi-bit DAC. Forms a believable acoustic from broad and deep stereo image. Mid power reduction.</i>	0223 861550	16	Key		●	20		●	●	10	**	***	
										93				
Audio Alchemy DAC in Box £200	Path Premier <i>High levels of transparency give an open and detailed performance. Ideal upgrade for many CD players. Only a lack of total refinement betrays its budget nature.</i>	0494 441736	18			●			●	●	1	**	***	
										94				
Audiolab 8000 DAC(93) £750	Cambridge Systems Technology <i>True to the Audiolab house sound, refined and finely detailed. Redesigned with DAC7 D/A, gives sharply defined imagery and a greater feeling of clarity than before, if slightly cool overall.</i>	0480 52521	BS			●	●		●	●	12	**	*	
										93				
Aura CD 50 £400	B&W Loudspeakers UK Sales <i>Congenial-sounding and listenable player based on Philips 600 series: presenting a coherent musical picture, the Aura is smooth and polished rather than spectacular</i>	0903 750750	BS	Key			●	20		●	4	*	*	
										93				
Audio Synthesis DAX £1995	Audio Synthesis <i>Uses latest Ultra Analog 20-bit DAC to produce a reference class product. A neutral tonal balance benefits from high levels of clarity. AT&T glass optical link a bonus. Amazing value in kit form.</i>	061-434 0126	20			●			●	●	1	***	**	
										93				
Audio Note DAC 3 £1650	Audio Note Ltd <i>Open, transparent, with a lush midband and the euphony of a triode amplifier, though only after replacement of output coupling capacitor. A bulky design which has some quirks, notably a 100ohm electrical input impedance.</i>	0273 220511	20		●	●					4	**	*	
										94				
AVI S2000MC £999	AV International Ltd <i>A balanced, well proportioned and 'correct' sound, not possessing notable bite or attack, but capable of exquisite detail and ambience. Impeccable lab measurements.</i>	0453 752656	20	Key						●	5	**	**	
										93				
Counterpoint DA10 £1878	MPI Electronic UK Ltd <i>With options of different DAC types, the DA10 seemed to produce best results using the Ultra Analog converters. An open, lively and dynamic sound was obtained.</i>	061 777 8522	Var			●			●	●	8	**	*	
										93				
Counterpoint DA11 £1495	MPI Electronic UK Ltd <i>Despite a now corrected aversion to some cheaper DACs resulting in odd noises, a CDM12 mechanism offers fast track access and extracts more signal, more information and seemingly more power than comparable players.</i>	061 777 8522			●	●	●		●	●	5			
										94				
Denon DCD-890 £270	Hayden Laboratories <i>Able to sustain listener involvement quite well, the Denon has firm and well defined bass, good definition in the midrange and good stereo focus: just a little bright in the treble.</i>	0753 888447	20	Key	●		●	20		●	10	*	*	
										92				
Denon DCD-1290 £330	Hayden Laboratories <i>Lively and engaging, with superb dynamics and good 'slam' on percussion: good delicacy in the mid and treble on simple recordings but coarsens somewhat on complex tracks.</i>	0753 888447	20	Key	●		●	20		●	●	10	**	*
										93				
Harman-Kardon HD7525 £499.99	Harman Audio UK <i>Smooth, and at first hearing too laid-back for some, nonetheless a very entertaining player, with lean bass and a coherent performance throughout.</i>	081 207 5050	RLS	Yes	●		●	30		●	●	4	*	*
										94				
JVC XL-Z464 £200	JVC UK Ltd <i>Smooth and civilised with fine tonal balance. High degree of warmth and full extended bass output. Flattened stereo perspective and slight raucousness on string sound.</i>	081 450 3282	PEM	Key	●		●			●	10	*	*	
										93				
Marantz CD52 II £330	Marantz Hi-Fi Ltd <i>Still with the hallmarks of earlier Marantz players, the MkII has a full and bold bass sound quality, but has plenty of pace. Halfway house between the CD52 and CD52 II SE.</i>	0753 680868	BS	Yes			●	20		●	1	*	**	
										93				
Marantz CD52 II SE £300	Marantz Hi-Fi Ltd <i>Full and warm-sounding, still with Bitstream 'niceness' and a strong bass quality. But recent competitors have caught up with Marantz in terms of detail retrieval.</i>	0753 680868	BS				●	20		●	10	**	**	
										93				
Marantz CD63 £250	Marantz Hi-Fi Ltd <i>Lean, quick and precise with lively sound, but a treble which can be too sharp on some discs. Given high marks for its rhythmical abilities, this was while using alternatives to the uninspired cables supplied.</i>	0753 680868	BS	Yes	●		●	30	No	●	●	5	*	**
										94				
Marantz CD72SE £600	Marantz Hi-Fi Ltd <i>In its time, one of the best at the price, though now facing stiffer competition. A refined Bitstream design, ultra smooth but with real sparkle and vitality.</i>	0753 680868	BS	Yes	●		●	20		●	●	4	*	*
										94				
Meridian 500/563 £975/695	Meridian Audio Ltd <i>Exceptional levels of musical detail are combined with rhythmic expression in this combination. The 602/606 sounded sterile and explicit in comparison.</i>	0480 434334	DS		●	●	●	20		●	●	1	***	**
										94				

CD players

			DAC type	Remote control	Remote volume	Separate transport	Separate DAC unit	Programmable Memory	Phase reverse	Optical outputs(s)	Wired digital outputs(s)	Date reviewed	Performance	Value	
Micromega Microdac £349	Micromega UK Excellent value, the Microdac remains one of the most successful parts of Micromega's 'baby' system, and will perform very well with a high quality transport.	081 502 1416	BS			●			●		6 92		**	**	
Micromega Variodac £599	Micromega UK Variable output version of the Microdac, with a built-in remote control line pre-amp and 99 step volume control plus switching options. Sound quality is not compromised.	081 502 1416	BS	Yes	●	●		●	●		7 93		**	**	
Mission Cyrus Discmaster/Dacmaster £1800	Mission Group Somewhat system-dependent, but when well-matched a well-projected, detailed and immediate sound, subject to some electronic hardness. Adding a PSX to the DAC improves an otherwise average stereo focus and bass definition	0480 451777	20	●		●	●	20	●	●	5 94		**	**	
Musical Fidelity FCD £1500	Musical Fidelity Ltd Long-awaited CD component of the 'F' Series. Offers grace, clarity and poise. In its element with small-scale material. Neutral top-end combines with warm if not over-deep bass.	081 900 2866	BS	●	●		●	●	●	●	2 94		*	*	
Musical Fidelity CDT £519	Musical Fidelity Ltd Valve output stages are the distinctive feature of this player, which has a smooth midband, and a generally laidback sound. Bass is rich and plentiful.	081 900 2866	16				●	24			9 92		*	*	
NAD 502 £230	NAD Marketing Ltd With admirable resolution in the midband, and the ability to successfully unravel dense musical textures, the NAD is only compromised by a certain lack of bass 'slam'.	081 343 3240	BS	Yes			●	21		●	10 93		**	***	
Drelle CD160 £749	Orelle Electronics Philips-based, this player offers strong qualities of pace, rhythm and timing, while the well balanced midrange is almost totally devoid of the fabled 'multi-bit' glare.	081 810 9388	16	Key			●			●	4 94		**	***	
Drelle CD480 £399	Orelle Electronics Possessing a similar vivacity to Meridian's 500/563 combination, this one-box player brings music to life, successfully concentrating on the coherence of the sound although with a slight loss of bass articulation and top-end detail	081 810 9388	MB	Yes			●			●	6 92		**	**	
Pioneer PD-S802 £350	Pioneer High Fidelity (GB) Ltd Highly revealing and articulate exhibiting outstanding musical detail. Exciting transient attack and dynamic range. Upper harmonic enhancement gives a 'different' treble quality from normal CD players.	0753 789789	PDM	Key			●		●	●	10 93		**	***	
Pioneer PD-S901 £500	Pioneer High Fidelity (GB) Ltd More refined of the two previous Pioneer Legato Link players, (the 801 is now replaced by the 802), but not sonically superior to the cheaper model.	0753 789789	BS	Key			●	24		●	●	10 92		**	*
Pink Triangle Ordinal £790	Pink Triangle Pink Triangle finally goes digital with a DAC allowing plug-in filters: 18, 20 or 22-bit. This gives various levels of performance and allows a three-pronged approach to entice every potential customer.	071 703 5498	BS				●		●	●	2 94		**	*	
QED Digit Reference £399	QED Audio Products Ltd A Digit with two power supplies enclosed in a full-size chrome-fronted box. Highly detailed, and dynamic, a genuinely high grade decoder at a very modest price.	0276 451166	BS				●				4 94		**	***	
Quad 67 £825	Quad Electroacoustics Ltd Quad's second CD model, and a great improvement on the average-sounding 66. Balanced, civilised and detailed without loss of brilliance and dynamics.	0480 52561	BS	Yes			●	99		●	4 93		**	**	
Rotel RCD 965BX £300	Gamepath Ltd Rotel's second generation Bitstream player (7323 based) could give a rose-tinted view of the music, but the overall impression was one of good transparency.	0908 317707	BS	Key			●	20		●	2 93		*	*	
Rotel RCD 965BX Discrete £375	Gamepath Ltd Starkly explicit, with crystal-clear transparency and sparkling transients. With its UK-built output stage, this player can be delicate or harsh, depending on the quality of the recording, but always musically exciting.	0908 317707	PDM	●			●	20		●	4 94		**	**	
Sony CDP-411 £200	Sony Consumer Products Clear and crisp midrange with forward treble and reticent bass warmth. Stable stereo focus but limited recovery of ambience. Incisive attack to guitar and synthesizer. Percussion lacks weight.	0784 467000	PLM	Key	●		●		●		10 93		*	*	
Sony CDPX-303ES £550	Sony Consumer Products Sony's new Score dither scheme seems to have influenced the sound of this player, which is capable of striking spatial presentation and excellent detail.	0784 467000	PLM	Key	●		●	24		●	9 93		**	*	
Sugden SDD-1/SDA-1 £1544	JE Sugden & Co Ltd Well matched combination based on TDA 1541 16-bit technology, with CDM9 transport mechanism. The SDA-1 DAC was particularly liked for its rhythmic qualities.	0924 404088	16	Yes		●	●	●	20		●	5 93		**	*
TEAC VRDS-7 £599	TEAC UK Ltd Studio-machine look-alike, with Teac's VRDS transport at its heart, the '7 is highly explicit and detailed at the frequency extremes, but is less coherent in the midrange when it comes to more complex pieces	0923 819630	20	●			●	20			4 94		*	*	

CD players

			DAC type	Remote control	Remote volume	Separate transport	Separate DAC unit	Programmable Memory	Phase reverse	Optical outputs(s)	Wired digital outputs(s)	Date reviewed	Performance	Value
TEAC VR-DS10 £770	TEAC UK Ltd <i>A rather distant and reticent quality with an almost naturally deep soundstage is combined with a tight rather than weighty bass: not particularly strong on dynamics.</i>	0923 819630	BS	Key			●	20	●	●	6	*		
											93			
TEAC P-700/D-700 £1498	TEAC UK Ltd <i>Elegant two-box combination. Rounded performance, mellow sound. Handles most daunting of instruments giving bold earthy dynamics, but soft on focus.</i>	0923 819630	20	●	●	●	●	20	●		11	**	*	
											93			
Technics SL-PS740A £250	Panasonic UK <i>Stunning stereo image. Rich and slightly mid-forward nature enhances vocals but brightens string sound with an uneven texture. Full and rounded bass with weighty low frequency 'grunt'.</i>	0344 853214	PWM	Key	●		●		●		10	*	*	
											93			
Technics SL-PS840 £420	Panasonic UK <i>Technics has added Virtual Battery Operation to this MASH DAC-equipped player, resulting in a coherent, warm, well balanced sound free from harshness. Not as rhythmically assertive as competitor designs.</i>	0344 853214	1 bit	●	●		●	32	●		4	**	**	
											94			
Theta Data Basic £2250	Absolute Sounds <i>Presents complex sound-pictures to form a lucid and intelligible account of events. Up among the best, with solid and authoritative bass, this is a semi-affordable version of the Data II.</i>	081 947 5047		●			●		●		12	**	*	
											93			

Amplifiers

			Power output (W/ch)	Line inputs	Phono m-m	Phono m-c	Tape monitor	Pre-amp	Power amp	Speaker outputs	Tone controls	Headphones	Date reviewed	Performance	Value
Adcom GCA-510 £349	Celestion International Ltd <i>This minimalist integrated amplifier, equipped with separate record/playback controls, presents music in an upbeat, well projected manner, but sometimes with flattened perspectives.</i>	0473 723131	50	5		●	●	●	1			6	**	**	
												94			
Adcom GFP555 /GFA545 £998	Celestion International Ltd <i>Middle-weight, mid-priced, user-friendly tweak-free set-up. Lacking the slam and sheer drive from US offerings it has more kick than many British designs. It is never ruffled, it knows its limitations.</i>	0473 723131	100	6	●	●	●	●	1	●		12	*	*	
												92			
AMC 3030 £340	Portfolio Marketing <i>Cool running tube amp, lacking utter finesse and unlimited dynamics of super amps; but it is capable of vintage midband, digital-era precision and the feel of classic tube masterpieces.</i>	0494 890277	30	6	●	●			1	●	●	8	*	*	
												92			
Arcam Alpha 5 £230	A&R Cambridge <i>Very smooth treble and characteristics that allow easy matching to other components. Bass is firmly controlled but slightly overdamped. Becomes coarse and muddled at high power levels.</i>	0223 861550	40	4	●	●			2	●	●	11	*	*	
												93			
Arcam Delta 290 £450	A&R Cambridge <i>Remote control integrated with smooth, detailed performance and adequate power output. Remote facilities match rest of Delta range. Phono section is £50 extra.</i>	0223 861550	75	4	●	●	●		2	●	●	2	*	*	
												93			
Arcam Delta 120 MkII £550	A&R Cambridge <i>Bridgeable, bi-wire terminals, well made and undercuts most of competition. Partners most equipment well. Sounds clean, neutral and lively.</i>	0223 861550	100	2				●	2			10	**	**	
												92			
Audiogram MB1 £495	MPI Electronic UK Ltd <i>Italian design with no knobs: uses wonderfully simple remote handset. Fussy about speaker cables. Sound is clean and full, but could become tiring.</i>	061 777 8522	40	4	●	●	●		1	●	●	2			
												93			
Audiolab 8000A £450	Cambridge Systems Technology <i>Classic British integrated, refined over many years. The sound has a real cleanliness and no lack of detail; ambience and stereo depth are very good. Now has more rivals, though.</i>	0480 52521	60	5	●	●	●		2	●	●	4	*	**	
												91			
Audiolab 8000C/8000P £1100	Cambridge Systems Technology <i>Leaning in the direction of euphony and HF sweetness, the power amp mirrors the pre-amplifier: good detail, control and consistency tempered with mild restraint. Good value.</i>	0480 52521	100	5	●	●	●	●	2	●	●	11	*	**	
												84			
Audion 300B £995	Alema UK Ltd <i>Low power, no feedback valve power amp design with variable gain. Realism could be uncanny with some live recordings. Firm deep bass and plenty of detail.</i>	0273 202637	20	1				●	2			4	***		
												93			
Audio Research PH1 £1650	Absolute Sounds Ltd <i>Matching the superb LS2 line-only pre-amp, this phono amplifier/equalizer unit also provided very fine results and will suit most cartridges.</i>	081 947 5047			●	●	●					6	***		
												92			
Aura VA50 £250	B&W Nakamichi <i>Neutral-sounding in control with a wide range of loudspeakers, but a shade 'mechanical' and leaden at very low frequencies; the mid and top lack low-level resolution.</i>	0903 750750	49	5	●	●			1	●					

Amplifiers

Amplifiers			Power output (W/ch)	Line inputs	Phono m-m	Phono m-c	Tape monitor	Pre-amp	Power amp	Speaker outlets	Tone controls	Headphones	Date reviewed	Performance	Value
Aura VA100 £300	B&W Nakamichi <i>An agile, muscular sound. Phono stage is excellent, and the amp is capable of a 'big' sound, only slightly lacking in subtlety. Slight hum was sometimes audible on test.</i>	0903 750750	66	5	●		●		1			●		*	*
AVI S200A/MP £300	AVI International <i>A neat, well-screened, advanced seven-source line level pre-amp and rugged, powerful stereo power amp, which, in combination, sound as clean as a whistle, capturing fortissimo bravura without losing control.</i>	0453 765682	250	6			●	●	●	1			5 94	**	**
Copland 301/504 £3000	Absolute Sounds Ltd <i>Valve pre-power combo from Denmark. Pre-amp has guts, control and astounding detail but free from glare yet with the faintest hint of solid-state. Power-amp is beautifully self-effacing.</i>	081 947 5047	30					●	●				5 93	**	
Copland CSA14 £999	Absolute Sounds Ltd <i>Mid-priced valve/solid-state hybrid integrated from Denmark. Has Copland's traditional delicate, coherent and powerful sound, if restrained and polite. Rare package which softens at high levels.</i>	081 947 5047	70	4	●		●		1			1 94		*	**
Cyrus III £499	Mission Group <i>This remote controlled, half-width, microprocessor governed amplifier, upgradeable through the addition of remote power supply. The integrated amplifier's dry, forward midband is reigned in by the PSX power supply which achieves a better balance.</i>	0480 451777	50	5	●		●	●	●	2			6 94	**	**
Denon PMA250 III £160	Hayden Laboratories <i>UK-tweaked integrated with great clarity, deep bass losing a little weight. Capable of reproducing every nuance in an open manner suggesting a more upmarket pedigree.</i>	0753 888447	30	4	●		●		1	●	●	3 93		*	**
Denon PMA350 II £220	Hayden Laboratories <i>Articulate and refined clarity. Powerful, expansive and warm bass output with good dynamics. Wide and deep soundstage with rich ambience. Sound closes in and hardens at high levels.</i>	0753 888447	52	4	●		●		2	●	●	11 93		*	*
EMF Sequel £350	EMF Audio <i>The minimalist design of this amp ranges from its four source selection to discrete component, simple signal path circuitry. It sounds dynamically and spatially wide-ranging, though a touch edgy with phono signals.</i>	081 361 6734	50	5	●	●	●	●	●	4		●	6 94	**	**
Exposure XVII/XVIII £1525	Exposure Electronics <i>High-end British combination which makes music a thrill. Sets the foot tapping, head nodding and feet dancing. Minimal colorations include a slightly dull treble, but with a marvellously coherent midband.</i>	0273 423877	55	4	●	●	●	●	●	4			1 92	**	*
Harman Kardon HK6150 £199	Harman Audio UK <i>Lively, pleasant and natural-sounding on line-level sources with a slight thickening of the bass. Very good phono stage, even if bass lacked delicacy. Pleasant and unfatiguing.</i>	081 207 5050	30	5	●		●		2	●	●	6 94		**	**
Harman Kardon HK1400 £399	Harman Audio UK <i>Everything is laid bare, by this clean-sounding, sometimes overcritical amplifier. Its high-level driving capability reflects the emphasis on high power supply reservoir capacitance in the robust design.</i>	081 207 5050	40	7			●	●	●	2			6 94	**	**
JVC AX-662 £280	JVC UK Ltd <i>Big, powerful amplifier with lots of features. 'Differential' CD input reaps benefits of good detail rendition and a clear 3D soundstage. Sound closes in and hardens at high levels.</i>	081 450 3282	78	3	●	●	●		2	●	●	11 93			
LFD Zero £479	LFD Audio <i>Clarity and palpable stereo depth combine to give this fast sounding amplifier the degree of bite normally associated with pricier designs. Mosfets and solid core technologies are combined to good effect.</i>	0255 422533	50	6		opt	●		1			6 94		**	**
Linn LK100 £498	Linn Products Ltd <i>Compact, rugged and very well made, this stereo power amp, did not score particularly well in MC's listening tests. It was thought to lend a 'dry' effect, with a slight loss of ambience.</i>	041 644 5111	90	2					●	4			5 93	*	*
Linn Kairn £1398	Linn Products Ltd <i>Linn's versatile remote-control pre-amp sounded pure and well controlled on line sources, but with some loss of 'air' in the treble. The LP disc sound was not thought exceptional.</i>	041 644 5111		7	●	●	●	●					5 93	*	*
Marantz PM44SE £200	Marantz Hi-Fi Ltd <i>Strong midrange balance with startling detail retrieval. Woolly and muddled bass, coarse string sound and tinselly treble from CD input; phono input fares better. Imprecise stereo.</i>	0753 680868	42		●		●		1			●	11 93		
Michell Argo/Alecto £1879	Michell Engineering Ltd <i>Aesthetically stunning pre-/power amplifier featuring non-metal casework, upgradeable pre-amp power supply and low-noise integrated circuitry. Its valve-like, transparent midrange and treble solid blends with a powerful bass.</i>	081-953 0771	100	8			●	●		2			3 94	**	**
Meridian 605 £925	Meridian Audio Ltd <i>This monoblock power amp was 'a large step forward' for MC. It simply sounded 'more like the original, not the world's biggest amplifier in power or current, but a reference performer.</i>	0480 434334	150						●	4			1 92	**	*
MF Preamp/Typhoon £568	Musical Fidelity Ltd <i>Very different from MF's first product, The Preamp is fundamentally musical if a little rough round the edges. With the Typhoon it can produce solid bass, a clear midband, and fast, fatigue-free treble.</i>	081 900 2866	45	6	●	●	●	●	●				3 92	*	**

Amplifiers

			Power output (W/ch)	Line inputs	Phono m-m	Phono m-c	Tape monitor	Pre-amp	Power amp	Speaker outlets	Tone controls	Headphones	Date reviewed	Performance	Value
MF Preamp 8/MA65 £1174	Musical Fidelity Ltd <i>Pre-amp 8 has a somewhat soft bass and slight lack of overall transparency – but crisp treble detail. MA65 is workmanlike, and is as good as, if not better than, the MA50.</i>	081 900 2866	65	4	●	●	●	●	●				3 93	*	*
Musical Fidelity A1000 £1400	Musical Fidelity Ltd <i>A bigger A1 with more grunt and high-standard finish. Good imaging, focus, depth and width. Transparency and detail very good, as was the bass which had slam and articulation.</i>	081 900 2866	50	4	●	●			1				5 93	**	**
Musical Fidelity F22/F15 £1188	Musical Fidelity Ltd <i>The F22 all-tube remote control pre-amp for line level sources with warm characterful sound. The F15, 100W stereo hybrid, has fine detail recovery. Both are stylish and competent.</i>	081 900 2866	100	6	●	●	●	●	2				8 93	**	*
Musical Fidelity A1 MkIII £329	Musical Fidelity Ltd <i>Latest version of the 1985 original, and a sonic improvement: more transparent, deeper soundstage, sharper and more incisive. The A1 still captivates with its natural, unforced, unmuddled sound quality.</i>	081-900 2866	25	4	●	●	●		●				1 94	**	***
NAD 302 £180	NAD Marketing Ltd <i>More articulate than its predecessor, plus extra input and improved fascia. Easy on the ear sound, free of the grit and grain which dog many cheap amps. A good buy but nothing startling.</i>	081 343 3240	25	5	●		●		1	●	●		3 93	*	*
NAD 304 £240	NAD Marketing Ltd <i>Delicate, light touch that brings out intensity of musical performance. Neutral midrange clarity, finely structured bass and smooth yet sparkling treble. Coherent, dynamic presentation</i>	081 343 3240	72		●		●		2	●	●		11 93	*	**
Naim NAC 82/NAP 180 £3779.00	Naim Audio <i>The combination performed very well. The NAC 82 offers the luxury of a well-thought-out remote control plus a good slice of the rhythmic performance of Naim's flagship amplifiers.</i>	0722 332266	60	6	●	●	●	●	1				4 93	**	*
Naim Nait 3 £499	Naim Audio <i>Encapsulates all the famous Naim qualities: vibrant, strong rhythmical and a dry and analytical bass. Less revealing of minute detail and not as precise in imagery as some rivals.</i>	0722 332266	30	5			●		1				3 93	**	**
Onix OA21S/SOAP2 £700	Onix Electronics <i>Firm, dry and tight bass with plenty of weight and scale, while the midrange has neutrality and realism. The SOAP 2 power supply helps with difficult loads.</i>	0273 517358	50	4	●	●			1				2 92	**	*
Onix OA24/OA401 £800	Onix Electronics <i>On its disc inputs the pre-amp was well liked, though it had a slight glaze or hardness in the treble, while the OA401 lacked bass slam, with a balance on the bright side: could be fatiguing.</i>	0273 517358	50	4	●	●	●	●	1				6 92		
Papworth TVA50 £1425	Papworth Audio Technology <i>A descendant of the original TVA valve design (via Mentmore), this stereo power amp provides 'vintage' tube sound. The midband is sublime and the Papworth is warm, lush and big-sounding.</i>	0480 830345	50	2				●	4				6 93		
Orelle SC2000/SP150 £998.00	Orelle Electronics <i>Lacks the transistor edge of other rivals; airy, open and communicative, a dab hand at the minutiae of a performance, though large-scale orchestral music sometimes lacks expression.</i>	081 810 9388	100	7	●	●	●	●	2				4 94	*	**
Pioneer A300X £230	Pioneer Hi-Fi GB Ltd <i>While the old A-300 was a little too analytical for low cost ancillaries the A300X is open and pure, with a fine midband, soft and easy on the ear. Good match for budget CD players.</i>	0753 789789	40	5	●		●		1				10 92	*	**
Pioneer A-400X £300	Pioneer Hi-Fi GB Ltd <i>Bright, sharp and transparent upper midrange. Open and wide stereo soundstage that exceeds speaker boundaries. Lack of bass warmth. Restricted musical dynamics.</i>	0753 789789	47	5	●	●	●		1				11 93	*	**
QED Vector £250	QED Audio Ltd <i>Remote controlled active/passive line level pre-amp. Its impressive performance belies unprepossessing, small plastic case. In passive mode it maintained a sharp stereo focus and clean bass. Switching to active mode added bass punch.</i>	0276 4511666		5			●	●					5 94	**	***
Quad 606 (II) £690	Quad Electroacoustics <i>From the most famous name in British electronics comes a MkII version, providing a genuine improvement in sound quality over the original. Supremely competent, if not a high-end audiophile unit.</i>	0480 52561	140						●	2			12 93	*	**
Rotel RA935BX £225	Gamepath Ltd <i>Immediate and tactile presentation. Highly revealing nature ruthless to recording and source equipment characteristics. Striking dynamic range and fast transient capability. Vibrant and exciting.</i>	0980 317707	36	3			●		1		●		11 93	*	**
Rotel RC980/RB980BX £800	Gamepath Ltd <i>An endearingly clear midrange, with every detail standing out from a 'black' background. However, vocals could seem a little muddled due to a lower midrange coloration.</i>	0980 317707	120	3	●	●	●	●	2		●		6 93	**	**
Shearne Phase 2 £549	Shearne Audio <i>This low-feedback design produced an exceptionally musical performance: bags of fruity character, with a warm and rich bass, inviting midrange and smooth and sparkling treble.</i>	0438 740953	50	6	●	●	●		2				2 93	*	*

Amplifiers

Amplifiers			Power output (W/ch)	Line inputs	Phono m-m	Phono m-c	Tape monitor	Pre-amp	Power amp	Speaker outlets	Tone controls	Headphones	Date reviewed	Performance	Value
Sonic Frontiers SFL-1 £1295	MPI Electronic UK Ltd <i>The line-only tube pre-amp offered really low noise and a neutral sound quality. Just a hint of warmth and a very slight wooliness at the bottom end, but with effortless rhythm and subtlety.</i>	061 777 8522		6			●	●				4	**		
												93			
Sonic Frontiers SFS-40 £1495	MPI Electronic UK Ltd <i>Not as lush and warm as older valve designs, this model still offers exceptional detail and transparency, though subjectively it does not seem very powerful.</i>	061 777 8522	45	1				●	1			6	*		
												93			
Sugden A21aP £469	J E Sugden & Co Ltd <i>Not upset by difficult loudspeaker loads provided it was not pushed too near to its limits, this solid-state amplifier was reminiscent of the best features of 'valve sound', friendly and forgiving</i>	0924 404088	25					●	1			10	*	*	
												92			
Technics SU-A700 £250	Technics <i>Handles all types of music with panache, and high degree of control. But never fully lets go. As the SU-600 but with more power and remote. Has fine balance of musical attributes and versatility.</i>	0344 853943	55	5	●		●		2	●	●	9	*	*	
												93			
Tube Technology Prophet £1310	Tube Technology <i>Compact integrated tube amplifier with an excellent phono stage which produced good results from LP. There was, however a hint of a haze or veil on demanding CD textures.</i>	0932 850361		4	●	●	●					4	*		
												93			
Tube Technology Unis £1399	Tube Technology <i>This two-box tube pre-amp gave pretty convincing results. A good, deep, clear bottom end and sweet midrange were combined with a slightly bright treble.</i>	0932 850361	30	5					1			2	*		
												92			
Trilogy 901 £625	Trilogy Audio Systems <i>The Trilogy tube power-amp has a glorious, tactile three-dimensional midband and treble. The bass is just dry enough to sound well-balanced on most modern recordings.</i>	081 856 2499		6	●		●	●				4	**		
												93			

Loudspeakers

Loudspeakers			Drive units	Bass size (mm)	Sensitivity (dB)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions (mm, hwd)	Date reviewed	Performance	Value
Acoustic Energy AE-1 £764	Acoustic Energy <i>Difficult-to-credit levels of detail, and freedom from dynamic compression, characterise these state of the art metal dome/cone miniatures. Require expensive dedicated stands and lots of power.</i>	081 840 6305	2	130	88	8	200	Free	W	295x180x225	1 89	**	*
Arcam Delta 2 £300	A&R Cambridge <i>Firm, positive-sounding design with bold bass and mid and a firm grip on musical architecture. Little loss of refinement considering size and works best positioned away from a rear wall.</i>	0223 861550	2	180	88	8	70	Free	V	378x223x281	2 92	*	*
ATC SCM10 £995	ATC Loudspeaker Technology Ltd <i>Small but heavy true 'mini-monitor' that offers natural balance, good integration and a truly three-dimensional image. Needs hefty amplification but responds with a wide dynamic range.</i>	0285 760561	2	125	83	8	300	Both	W	380x180x255	6 92	***	***
ATC SCM20T £1999	ATC Loudspeaker Technology Ltd <i>Exceptionally analytical midband and overall neutral balance allied to stunning dynamics and remarkably well controlled bass. Needs medium to large room for a spacious and convincing sonic picture.</i>	0285 760561	2	165	86	8	350	Free	W	1023x239x333	8 93	***	**
B&W 600.I £180	B&W Loudspeakers <i>Refined musical balance, neutral string tone and very explicit treble detail. Mild lower midrange coloration and articulate, but not 'quick', bass. Open and airy soundstage.</i>	0903 750750	2	165	87	8	100	Both	V	352x204x243	8 93	**	***
B&W 2003 £200	B&W Loudspeakers Ltd <i>This tall stand-mounting speaker is prominent in both bass and treble which emphasises background hiss and sibilance. Perhaps balanced for a German audience? Mild midrange coloration.</i>	0903 750750	2	150	88	4	100	Free	V	425x210x235	12 93		
B&W 620.I £400	B&W Loudspeakers Ltd <i>High sensitivity, full bodied, strong lower midrange and impressive bass control, articulate and with genuine extension. Good dynamics and stereo imagery and sparkling treble clarity.</i>	0903 750750	2	200	90	6	100	Free	V	792x236x302	8 93	**	***
B&W Matrix 805 £845	B&W Loudspeakers Ltd <i>Compact studio monitor suitable for medium or medium/high volume monitoring. Refined, excellent imagery and lack of compression are key characteristics. Ultra-heavy, non-resonant enclosures.</i>	0903 750750	2	165	87	8	120	Both	W	333x334x210	3 90	**	*
Canon S-50 £350	Canon Audio Ltd <i>Designed to produce good stereo over wide listening area using reflected sound from upward-facing unit. Unfortunately highly coloured with poor treble clarity and dull presence range.</i>	0483 740005	1	110	89	8	100	Wall	V	310x250 dia	9 91		*
Castle Chester £650	Castle Acoustics Ltd <i>With quarter-wave bass loading, this large speaker could sound airy, detailed, dynamic and agile, but needs careful set-up and choice of ancillaries.</i>	0756 795333	2	165	90	8	100	Free	W	915x230x250	7 92	*	.

Loudspeakers

Castle Howard £1099.90	Castle Acoustics Ltd Very natural sound with articulate bass, evenly balanced tonal quality and well-focused stereo from this unusual three-way quarter-wave loaded, floorstanding design. Efficient, dynamic and involving.	0756 795333	2	300	90	8	100	FreeW	1045x260x410	4	**	**
										94		
Celestion 1 £110	Celestion International Ltd Needs close wall mounting to augment bass output. Natural and unassuming midrange blends well with smooth treble from titanium metal dome tweeter. Lush bass warmth countered by upper mid emphasis.	0473 723131	2	105	86	8	50	Wall V	274x160x215	11	*	**
										92		
Celestion 300 £1099	Celestion International Ltd Remarkably extended LF extension from transmission line loading. Clean and well balanced but not rhythmically fast; best suited to classical material. Mid can appear 'cloudy' and mid-treble 'hard'.	0473 723131	2	165	84	8	120	Free W	970x210x326	10	*	
										92		
Celestion 3 II £130	Celestion International Ltd Powerful bass performance and strong midrange presence gives impressive results. Efficiency is good for size and flatters budget amplifiers. Bass is lumpy and poorly defined below 150Hz.	0473 723131	2	130	88	8	75	Free V	310x185x215	10	**	**
										93		
Celestion 5 II £170	Celestion International Ltd Warm and coloured lower midrange and blowy, ill-defined bass is disappointing. Treble smoothness and clarity are to a high standard. Coloration adds 'honk' to male vocals.	0473 723131	2	150	88	8	90	Free V	350x206x250	10	*	*
										93		
Celestion 7 II £219	Celestion International Ltd Refined and capable performer with tight and controlled bass power. Clear, detailed and spacious mid with delightfully natural vocal qualities. Some wiriness to string sound and mild treble hardening.	0473 723131	2	180	89	8	120	Both V	453x245x311	10	**	***
										93		
Epos ES11 £395	Epos Acoustics Very low coloration and top-rate clarity and dynamics from a class-beating midrange, joined seamlessly to a smooth, sweet treble. Bass can be a little soft and slow but has sufficient power.	0705 407722	2	165	87	8	75	Free W	375x200x250	5	**	**
										91		
Epos ES14 £585	Epos Acoustics The original Epos model, which (perhaps deservedly) because it is almost a cult product, produces natural sound through simple, thoughtful design.	0705 407722	2	200	87	8	100	Free W	488x226x290		**	**
Goodmans Mezzo £499	Goodmans Loudspeakers Good value for money speaker, if lacking overall quality. Finesse is not a strong point here, with colorations and distortion evident. Poor soundstaging. Punch and loudness may suit the rock listener.	0705 492777	2	160	88	8	100	Free V	275x170x120	12	*	**
										93		
Harbeth BBC LS3/5A £499	Harbeth Acoustics Classic mini-monitor design functions well as home miniature with highly realistic vocal articulation and fine upper bass balance. Needs expensive amplification to avoid treble 'sizzle'.	0444 440955	2	130	82.5	8	50	Free W	300x190x170	12	**	*
										92		
Harbeth P3 £479	Harbeth Acoustics Speech and solo piano are outstanding, treble is smooth and natural and the delicate midrange well matched to a rich upper bass. Extreme low bass is lacking and good amplification is needed.	0444 440955	2	110	82.5	6	100	Free W	305x188x170	7	**	**
										91		
Harman Kardon LS 0300 £200	Harman Audio UK Combining high quality drive units from Harman's Audax factory, this can sound exciting and dramatic. Transient attack and life are commendable, but mild colorations intrude on the transparency.	081 207 5050	2	150	88	7	75	Free V	380x210x300	12	*	*
										93		
Heybrook HB1 Series 3 £259	Heybrook Hi-Fi Ltd Particularly well balanced bass and midband which offers space, depth and excellent resolution. Pitch and timing are of high order; treble can be slightly brittle. Needs dedicated stands.	0752 731313	2	260	90	8	75	Wall V	470x290x230		**	**
Heybrook Solo £189	Heybrook Hi-Fi Ltd High resolution and coherent midband offering unusually clear insights into dense and complex musical events. Treble is not ideally smooth or sweet and bass needs close wall-mounting and good stands.	0752 731313	2	150	87	6	75	Wall V	360x230x230		*	**
Infinity Reference 20 £230	Gamepath Ltd Compact system that goes loud and belies its size. Neutral balance, good LF extension and smooth treble but some colorations of the wooden and cardboard type intrude.	0908 317707	2	203	90	6	100	Free V	463x266x250		*	
JBL Ti2000 £1995	Harman Audio UK Very clean at high listening levels with a lean and dry bass that has excellent tunefulness and timing. Open and vital midrange with exquisite detail partnered by transparent and sweet treble.	081 207 5050	3	250	89	6	200	Free W	1050x460x350	8	**	*
										93		
JPW Sonata £135	JPW Loudspeakers The free-flowing midrange is a feature of a 'soft' but natural presentation. Stereo image is airy and open, portraying good depth and height. Classical music flows well.	0752 607000	2	140	86	8	75	Wall V/W	320x230x215	12	*	**
										93		
KEF 103/4 £1199	KEF Audio Remarkably smooth, neutral, sweet and creamy and sounding well balanced at low or high listening levels. Bass lacks punch; midband loses life and energy. Easy listening but soft dynamic expression.	0622 672261	4	160	91	4	100	Free W	900x215x305	9	**	*
										93		
KEF 105/3 £2095	KEF Audio Highly revealing and inherently truthful. Concentric driver principle maintains excellent soundstaging, while coupled cavity bass ensures good dynamics. Refined and rich sound.	0662 672261			93	4	300	Free W	1100x280x410	4	***	**
										91		

Loudspeakers

			Drive units	Bass size (mm)	Sensitivity (dB, 1m)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions (mm, h/w/d)	Date reviewed	Performance	Value
KEF Q10 £200	KEF Audio <i>Uni-Q implementation in a budget design. A 'speakerish' sound with throbby and pulsating bass which was ill-defined. Wooden colorations mar the sound of a flat image.</i>	0622 672261	2	200	90	8	100	Both	V	479x246x274	2 92	*	*
KEF Q60 £419	KEF Audio <i>Well-balanced Uni-Q design that produces a clean and open sound, somewhat dry in the bass, with high sensitivity and an easy amplifier loading characteristic.</i>	0622 672261	2	160	88	6	100	Wall	V	479x246x274	2 92	*	*
KEF Q80 £569	KEF Audio <i>Quick, detailed and firm bass is allied to a natural, open and articulate mid. Treble below par with scratchy string tone and loss of transparency. Stable stereo focus but lacks musical excitement.</i>	0622 672261	3	200	89	6	125	Free	V	275x190x240	12 93		
KEF K120 £169	KEF Audio <i>Smooth and well balanced, tidy and inoffensive. Lack of incisive midrange detail. Pleasant treble balanced well for CD but vocal sibilance shows a rough edge. Musically uninvolved.</i>	0622 672261	2	160	87	8	80	Both	V	340x205x246	8 92		
KEF K160 £329	KEF Audio <i>Disappointing muddy and congested midrange displays serious boxy 'wardrobe' coloration. Heavy and slow bass music of rhythm and dynamics. Stereo depth poorer than average.</i>	0622 672261	3	200	89	8	125	Free	V	750x260x246	8 93		
Klipsch Heresy £870	Midland Radio Supplies <i>A 'hooligan' of a speaker – loud, solid and palpable. High listening levels yield a vast acoustic presence with a bright sheen. Unrefined, vulgar and coarse but great fun at 116dB max!</i>	021 430 7817	3	30	96	8	500	Wall	W	543x394x337	8 93	*	
Klipsch Forte £1430	Midland Radio Supplies <i>Horn loading provides 35Hz from a design dating back to 1947. High efficiency provides ear-splitting levels. Mid and treble are smooth and clear but some colorations. Exciting, powerful, dynamic on rock</i>	021 430 7817	3	310	99	8	100	Free	W	900x420x310	2 94	*	
Linaeum LFX £650	Absolute Sounds Ltd <i>Big soundstage and magical coherence throughout mid and treble belie the tiny size. Bass is restricted and needs a powerful amp; treble is incredibly revealing yet ultra smooth. A classy mini.</i>	081 947 5047	2	5	90	80	0	Both	Both	250x162x175	10 92	**	**
Linn Kaber £2000	Linn Products Ltd <i>Floor-standing version of Linn Kan with commensurately deeper bass. Sound remains dry and forward to a fault, but careful choice of system components can bring rewards.</i>	041 644 5111	3	125	87	4	1000	Wall	W	900x192x280		*	
Magnepan SMGb £890	Absolute Sounds Ltd <i>Quasi-ribbon tweeter gives crisp, articulate upper mid and a natural, full balance to lively and dynamic midrange. Bass is compromised by panel size and lacks extension. Big stereo spread and depth.</i>	081 947 5047	2	470	87	4	150	Free	W	1200x460x48	6 93	***	***
Martin Logan Aeries £2000	Absolute Sounds Ltd <i>Crisp electrostatic character blends perfectly with well-tuned moving coil bass. Free from coloration but listening axis highly critical. Lacks air and sparkle in upper treble. Some midrange glare.</i>	081 947 5047	2	8	84	4	200	Free	V/W	1390x264x335	5 93	**	*
Meridian Argent 1 £995	Meridian Audio Ltd <i>Asymmetric shape and rounded edges reduce resonances and diffraction. More admirable than likeable. Lucid and transparent, with a balance that favours the treble.</i>	0480 434334	2	170	87	8	150	Free		325x275x275			
Mission 760iSE £150	Mission Electronics <i>Bi-wire version of the 760i comes on song. Neutral midband and treble, yet overwarm and little bass extension. Musical virtuosity combines with good detail and coherent midrange.</i>	0480 451777	2	135	86	6	80	Wall	V	295x180x200	12 93	*	**
Mission 751 £300	Mission Group <i>Small speaker with big speaker sound. Upper bass has fullness in balance which has tilt through the midband. Also, reticence and nasality in very top end. Midband is pushy and deep bass missing.</i>	0480 451777	2		89	6	75	Wall	V	320x185x268	2 94	*	*
Mission 753 £700	Mission Group <i>Neutral and well balanced with clean, sharply defined transients and striking dynamic presentation. Good bass extension and 'wallop'. Crisp, lightweight mid and treble with mild hardness.</i>	0480 451777	5	130	91	6	125	Wall	W	875x208x315	9 92	**	**
M A Monitor 1 Gold £190	Monitor Audio Ltd <i>Lively and informative miniature. Singing voices reproduced with good expression. Transients are crisply rendered. Stereo is well focused. Limited bass and modest maximum sound level.</i>	0223 242898	2	115	88.5	8	70	Free	W	240x152x160	8 92	*	*
Monitor Audio MA201 £249	Monitor Audio Ltd <i>Designed by Robin Marshall (ex-Epos), this vinyl-wrapped speaker utilises new driver technology to deliver detailed treble and taut, strong and lively bass. See-through clarity, albeit some nasality in the midband.</i>	0223 242898	2	165	90	8	100	Free	V	402x200x267	4 94	**	***
Monitor Audio 14 Gold II £470	Monitor Audio Ltd <i>Well balanced with the exception of absence of low bass. Sparkling, informative treble out-performs rest of frequency range. Some midrange boxiness but otherwise neutral and smooth presentation.</i>	0223 242898	3	165	88	8	120	Free	W	760x203x238	4 91	*	
Naim SBL £2250	Naim Audio <i>Exceptionally good at leading edge definition and bass and treble transparency. Some cone-type vocal coloration. Active version brings tremendous clarity and precision with superb dynamics.</i>	0722 332266	2	210	88	6.5	75	Wall	W	885x266x270	7 93	*	

Loudspeakers

			Drive units	Bass size (mm)	Sensitivity (dB, 1W, 1m)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions (mm, hwd)	Date reviewed	Performance	Value
Orelle Orator £699	Orelle Hi-Fi <i>Orelle's first speaker is an honest-sounding design, capable of a tuneful bass: the midband is a natural extension of this, while the treble has fine qualities. Active crossover and pedestal will follow.</i>	081-8109388	2	170	88	8	100	Free	W	400x230x290	11 93	*	*
Philips OSS 930 £1300	Philips Consumer Electronics <i>'Digital' active loudspeaker displaying fine tonal balance and low coloration. Relatively weak, dynamically false bass. Lack of musical drive and rhythm. Bland and mildly compressed.</i>	081 689 4444	3	132				Free	W	575x220x325	4 93	*	
Rega Kyte £230	Rega Research <i>Large sound is achieved by an open and spacious midband. Bright, analytical performance with just-adequate bass, at least for small rooms. Low coloration allows transients to 'cut loose'.</i>	0702 333071	2	100	86	6	80	Wall	W	295x180x200	12 93	*	*
Rogers LS2A/II £230	Swisstone <i>Refined and capable transducer with a seamless mid/treble transition. Bass lacks power and extension but is highly tuneful. Very involving musically. Lively and rhythmically dynamic.</i>	081 640 2172	2	160	86.5	8	100	Free	V	356x236x208		**	**
Rogers LS4A/II £300	Swisstone <i>Clean and clear with excellent upper midrange detail resolution. Tonal colours are naturally and vividly presented. Fine stereo focus and imaging. Bass breathes naturally nearer to rear wall.</i>	081 640 2172	2	210	88	8	100	Free	V	430x255x245		**	**
Rogers Studio 5 £699.90	Swisstone <i>Refined and smooth, the Studio 5's strongest suit is its imaging. While bass was well extended, it was less forceful than others. Unobtrusive in size, build and character, should suit many systems.</i>	081 640 2172	2	170	87	8	100	Free	V	475x245x252	5 94	*	*
Rogers Studio 7 £880	Swisstone <i>Delightfully smooth mid and treble, with free and spacious stereo image. Very transparent and 'open' with low coloration throughout mid and treble. Bass firmness depends on stand choice.</i>	081 640 2172	2	210	89	8	150	Free	W	635x305x305	6 93	**	**
Rogers P24a £1800	Swisstone <i>An even frequency response is aligned to extended bass giving an impression of smoothness and refinement. Stereo resolution is weak and cluttered. Colorations intrude and dynamics are constrained.</i>	081 640 2172	3	210	85	4	250	Free	W	1040x250x350	8 92		
Ruark Talisman £699	Ruark Acoustics Ltd <i>Clarity and articulation are of high order. Impressive extension and tunefulness from controlled bass. Midrange can become shrill at very high SPLs. Presence and vitality are plus points.</i>	0268 728890	2	165	88	8	100	Wall	W	840x230x320	5 93	**	**
Ruark Equinox £1749	Ruark Acoustics Ltd <i>First in a new range of stylish speakers. Fell into set-and-forget category. Real high end at a sensible price from a British company. Sounds warm, cuddly, natural and life-like while being smooth, and sweet.</i>	0268 728890	2	165	87	6	150	Free	W	880x340x250	1 94	**	*
Sequence 30 £250	Sequence Loudspeakers <i>Slim panels to hang on the wall or stand on the floor. Strong bass and a fast treble. Midband is smooth with mild tendency towards spit. Best when levels kept in moderation.</i>	0943 864 930	2	130	87	8	100	W/F	W	850x250x70	1 93	**	***
Shahinian Arc £1675	Pear Audio <i>Semi-omni dispersion gives believable images over wide listening area. Seductive sound comes from a solid, architectural bass which is matched to an open, dynamic mid/top.</i>	0665 830862	3			6	150	Both		700x360x250		**	*
Solid Ovale £300	B&W Loudspeakers <i>Eye-catching satellite and subwoofer combo with bright, detailed midrange, sparkling treble and firm, if not particularly tuneful, bass. Lower midrange is slightly muddled by subwoofer.</i>	0903 750750	2	130	88	4	100	Free		450x195x340	11 92	*	*

THE GOOD HI-FI GUIDE

Technical details and price information contained in this guide are compiled from information obtained from the suppliers and as far as possible are correct at time of going to press. While every care has been taken, the publishers cannot accept liability for any inaccuracies in the published data. With regard to the performance figures given for loudspeakers, please note that these have been taken from review test results where applicable. The description of sound quality given is based on HFN/RR's own assessments, as are the performance and value ratings: these are based on the standard achieved by current products in the marketplace, and will thus be subject to revision from time to time. Suppliers please note: changes to product data should be sent to Penny Keogh, Editorial Secretary.

Loudspeakers

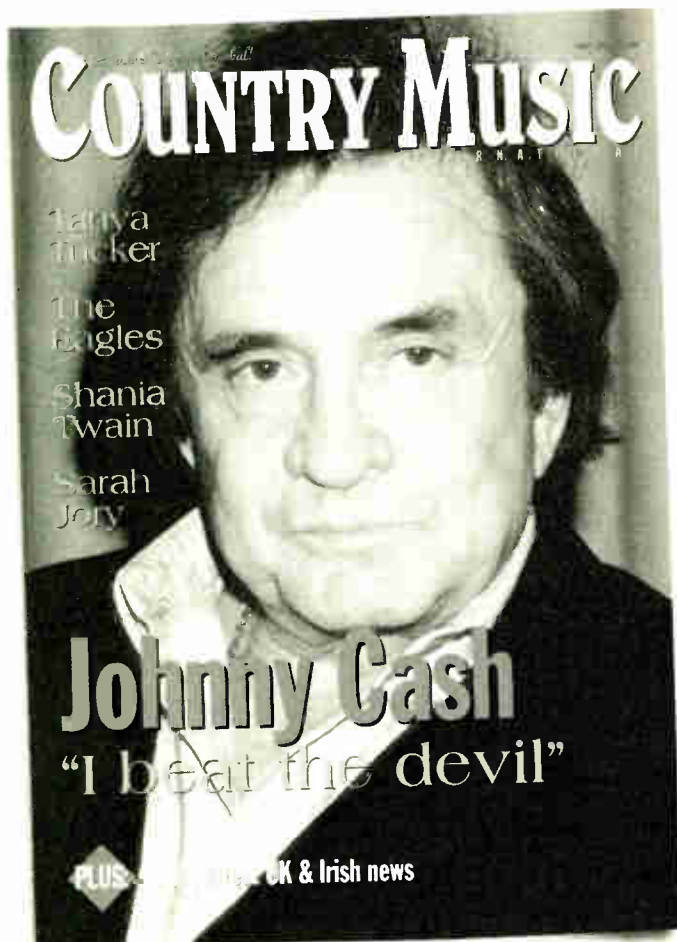
			Drive units	Bass size (mm)	Sensitivity (dB)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions-mm (hwd)	Date reviewed	Performance	Value
Spendor BBC LS3/5A £539	Spendor Audio Systems Ltd Classic mini-monitor design functions well as home miniature with highly realistic vocal articulation and fine upper bass balance. Needs expensive amplification to avoid treble 'sizzle'.	0323 843474	2	130	82.5	8	50	Free	W	300x190x170	12 92	**	*
Spendor SP2/3 £930	Spendor Audio Systems Ltd Evolved from the SP2, and thereby from the famed BC1. Spendor's new version of classic BBC construction has improved on the articulation of the SP2, with excellently-integrated treble. A 'big-sounding' monitor quality speaker.	0323 843474	2	210	87	8	150	Free	W	545x275x330	5 94	***	**
Tannoy 605 II £170	Tannoy Ltd Mk II version of this six-sided design has a warm balance, slightly dull with a midrange response dip. Bass from port makes rhythmic timing less easy to follow. Good stereo spread and focus.	0236 420199	2	140	86	8	90	Free	W	400x276x190	12 93		
Tannoy 607 £220	Tannoy Ltd Very detailed midrange and treble with seamless integration. Bass is tight and well controlled. Imaging is pinpoint; treble smooth and grainless. Speech can take on a slightly phasy quality.	0236 420199	2	200	88	8	100	Free	V	500x320x230	10 91	**	***
Tannoy D700 £2100	Tannoy Ltd Fine dynamics and high sound levels are allied to deep and controlled bass with real slam. Mid can sound forward and treble grainy, both ameliorated by good amplification and careful positioning.	0236 420199	3	26	93	5	200	Free	W	1165x460x430	7 93	***	**
TDL 0.5 £500	TDL Electronics Ltd Power-hungry transmission line bass has very good weight, power and slam. Tonal balance teeters on the edge of brightness. Careful matching and positioning allows good bass to treble transition and avoids tizz.	0494 441191	2	135	85	6	100	Free	V	200x304x655	1 91	*	*
TDL Studio 1M £899	TDL Electronics Ltd Transmission line bass offering transparency and air with bass performance exceptional for the price. Higher- efficiency polyprop version is £700.	0494 441191	2	185	83	4	100	Free	W	770x230x335	11 93	**	**
TDL Studio 4 £1500	TDL Electronics Ltd Eminently smooth and civilised with exceptional bandwidth offering good neutrality and low listening fatigue. Bass can be overpowering and slow but is terrifically extended. Too polite for rock.	0494 441191	3	300	87	6	200	Free	W	270x438x1125	6 92	*	
TDL RTL 1 £200	TDL The smallest of TDL's RTL range sounded rather forced, leaving the midrange reticent. Evidence of transmission line qualities shone through though from this small box, but sibilance was enhanced.	0494 441191	2	170	87	5.5	80	Wall	V	390x200x220	2 94		
TDL RTL2 £300	TDL Floor-standing member of the RTL range. Against the wall the lower octaves warmed. But the bass was not the typically exaggerated transmission line lumpiness. Accommodates wide range of music.	0494 441191	2	170	88	6	80	Wall	V	750x200x220	2 94	*	*
TDL RTL3 £400	TDL Largest of the RTL models, it is well balanced with smoothly integrated upper midrange and treble matched by a deeply extended, if not ideally controlled bass. But hollow nature predominates, obscuring detail.	0494 441191	2	170	89	6	120	Wall	V	920x200x375	2 94	*	**
Thiel CS1.2 £1219	MPI Electronic UK Ltd Ultra-smooth, unfussy and musical with a rich bass that is solid and taut. No rough edges to sound and highly transparent to musical detail. Expansive stereo image. Can lack incisiveness.	061 777 8522	2	170	87	4	150	Free	W	915x265x265	6 92	**	

Tuners

			Number of presets	Preset scan	Wavebands	Signal strength meter	Manual tuning	RDS facilities	Automatic tuning	Remote control	Mono button	Switchable IF bandwidth	Date reviewed	Performance	Value
Accuphase T108 £1599	MPI Electronics Ltd Exceptional sound quality combined with excellent standard of design and mechanical construction plus near perfect lab results. One of the best audiophile tuners.	061 777 8522	16	F	●	K			●	●	●	9	***	**	
Adcom GFT-555II £399	Celestion International Ltd An unfatiguing sound is a plus, as is robust construction. However, a midrange suchout, while not detracting from the Adcom's bass and liveliness on rock, rather spoils vocals.	0473 723131	8	MF	no	B		●	●	●		4	*	*	

Tuners

			Number of presets	Preset scan	Wavebands	Signal strength meter	Manual tuning	RDS facilities	Automatic tuning	Remote control	Mono button	Switchable IF bandwidth	Date reviewed	Performance	Value
Arcam 150 TV Tuner £230	A&R Cambridge Versatile stereo television tuner producing high grade video and Nicam audio. An audiophile product finished to the usual high standard. Now a bargain.	0223 861550	8	U	B				●	●	●	6 92	**	**	
Arcam Delta 280 £350	A&R Cambridge More neutral than the Alpha, more refined and less cluttered sound. Stereo image a little narrow and shut in. Extended top, clean mid and warm bass.	0223 861550	20	●	F	●	B	●	●	●	●	7 93	**	*	
Audiolab 8000T £700	Cambridge Systems Technology Sound inspires confidence, natural yet maintaining a power and translucence that reveals a wealth of depth and detail. Vivid stereo and unsurpassed bass quality.	0480 52521	39	●	MLF	●	K/B	●	●	●	●	5 93	***	**	
Aura TU-50 £300	B&W Loudspeakers UK Sales A good starting point, it ranks among the best in the price range. Audibly favouring non-classical material, it has solid bass, good stereo but dull on some live material.	0903 750750	16	F	B	●			●	●	●	3 91	**	**	
Denon TU260 £120	Hayden Laboratories Basic design producing good, open sound with excellent ambient detail from classical recordings. Good sense of width and depth despite depression in mid-treble.	0753 888447	20	MLF	B	●			●	●	●	5 91	*	**	
Denon TU580RD £220	Hayden Laboratories Denon's first RDS tuner works well, given a strong signal. Sounds natural and detailed with good bass weight. Treble is clear and precise, midrange free of blemishes. Handles most programme types.	0753 888447	30	●	MF	●	B	●	●	●	●	11 93	*	**	
Harman Kardon HK9400 £300	Harman Audio UK Poor relation to TU9600 which will fit happily into moderately priced systems. Muted ambience and lightweight bass a disappointment in a generally competent design.	081 207 5050	24	MF	●	B	●				●	3 91	*	*	
Kenwood KT-3050L £170	Trio Kenwood UK Kenwood's first RDS tuner is up with most good Japanese designs. A warm balance aids speech. On music too the Kenwood sings, with good imaging in a wide soundstage. Tight bass and detailed top.	0923 816444	39		●	B	●	●		●	●	11 93	*	*	
Linn Kremlin £1779	Linn Products Ltd Highly engineered, highly priced all-British design. Lack of strong driving bass and shallow soundstage hard to forgive at this level, but otherwise a good performance.	041 644 5111	80	●	F	●	B	●	●	●	●	1 92	**	*	
Marantz ST-72L £299.90	Marantz Hi-Fi Ltd Easy-going sound, plenty of detail in a wide soundstage with good depth. Mellowness to the spoken word. A musical winner with basic RDS: good scale and decent weight.	0753 680868	59	●	MLF	●	B	●		●	●	4 93	**	**	
Nakamichi ST-2 £400	B&W Loudspeakers UK Sales Ltd Ergonomic exterior plus good construction produce open, spacious and well detailed sound. Good bass and treble extension but lack of image depth.	0903 750750	30	F	●	K/B	●		●	●	●	2 93	**	*	
Onix BWD-1 £420	Onix Electronics Hand-built, well thought out design which benefits from external SOAP psu. A serious audiophile tuner with unusual tuning modes: hard to beat.	0273 517358		F	●	K			●	●	●	7 92	***	**	
Pioneer F301-RDS £200	Pioneer High Fidelity (GB) Ltd Well thought out: competent tuner with high level of RDS facilities. A lively bass added warmth while the mid tended towards dullness, resulting in a mediocre sound.	0753 789789	36	MF	●	B	●	●			●	2 93	*	**	
Quad 66FM £532	Quad Electroacoustics Ltd A British winner usable only with Quad's system remote. Good, strong bass lines, natural mid and smooth, velvety treble helped convey good stereo.	0480 52561	19	●	F	●		●	●	●	●	5 93	***	**	
Rotel RT-950BX £225	Gamepath Mixed FM performance. Voices closed in and nasal. Large classical forces appeared ragged and muddled lacking depth and lucidity. Rock and pop well presented.	0908 317707	20	MLF	●	B	●		●	●	●	3 92	*	*	
Sony ST-505ES £250	Sony Consumer Products UK Sony packs a lot into this advanced RDS tuner. The sound is full-bodied and rounded with good definition. Stereo image is superb, the soundstage three-dimensional. Bass is tight, treble first-rate.	0784 467000	30	LMF	●	K/B	●	●		●	●	11 93	**	***	
Yamaha TX-350L £130	Yamaha Electronics UK Ltd Chic styling but disappointing sound. Soft bass, muted treble and loss of ambience marred an otherwise fair performance from a no-frills tuner. A little ragged round the edges.	0923 233166	40	●	MLF	●	B	●	●	●	●	8 91	*	*	
Yamaha TX-670RDS £240	Yamaha Electronics UK Ltd Yamaha's first RDS tuner, with optional remote control. A well-balanced sound, controlled bass, good dynamics and solid imaging. Includes a good MW section, too.	0923 233166	40	●	MLF		K	●	●	●	●	4 94	**	**	



Johnny Cash's return to splendour. Canada's country export **Shania Twain**. The **Eagles** back on the road in 1994. Why **Tanya Tucker** is never out of the headlines. Honky tonkin' in **Austin**, Texas. Plus: The **Cactus Brothers**, **Kelly Willis** and **Jimmie Dale Gilmore**.

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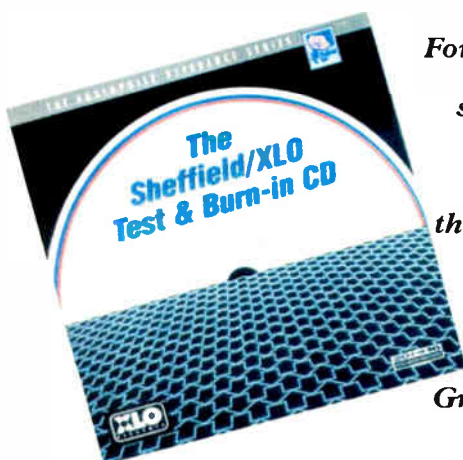
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BURNED IN AND EXORCISED



*For the ultimate in
system set up,
nothing beats
the Sheffield/XLO
burn-in CD
and the
Gryphon Exorcist*

It was impossible to resist...especially after reports came back from hardcore tweekers in the USA that the Sheffield/XLO Test & Burn-in CD worked with the Gryphon Exorcist demagnetiser. No foolin': two brilliant ways to demag one's system and they're actually complementary. Anyway, after reporting on the CD in July's 'headroom', we decided that we just had to offer it in the 'Club, too. In case you missed that issue, the collaborative Sheffield/XLO Test & Burn-in CD features Sheffield Lab's Doug Sax and XLO's Roger Skoff talking you through an array of tests including the usual channel ID and phase indicators, plus listening tests designed to help you assess the quality of your components and, especially, the set-up.

One of the star exposés is the 'walkaround' recorded in a large, 'ambient' room. It's among the best I've ever heard for conveying three-dimensionality and a system's worth at sound-stage recreation. And included in the five 'real music' tracks from the Sheffield catalogue are stereo and mono mixes of one song, which will reveal more about your set-up than you might care to know... But, as I pointed out in July, the features which make this disc a standout are the 'burn-in' and demagnetising tracks. Gryphon's Exorcist, the hardware solution to the problem, appears to enhance the work done by the CD, so play the disc first and then use the Exorcist afterwards. The result is a clean-up reminiscent of the effect of phono cartridge demagnetising: lower noise, better bass and other gains too numerous to mention. But follow the instructions to the letter — please.

And then there's the burn-in track itself, 12 minute's worth of noise and tones which will put your system through its paces in record time. The instructions tell you how to use these tracks for maximum benefit, and the burn-in function means that you will, at last, get to use the track repeat facility on your player. (I recommend this feature of the CD to caring retailers who wish to ensure that the gear they demonstrate is working at its best, while manufacturers might find it a truly cost-effective, time-saving method of pre-shipping QC.)

So brilliantly produced is this CD that the notes talk you through everything, explaining both 'how' and 'why'. If you're even marginally neurotic — and, hey, let's face it: only neurotics tweak — then you owe it to yourself to pick up the Sheffield/XLO miracle. It'll prove to be the most useful, confidence-inspiring £29 you've ever spent on your system.

Note: For those of you who've yet to buy your Gryphon Exorcists, we've decided to run a special offer — also available to visitors at the Hi-Fi Show '94 at the Heathrow Ramada — which enables you to save some shekels. The Exorcist sells for £69 on its own; buy an Exorcist and the Sheffield/XLO Test & Burn-in CD together and you get the two for £89 inc P&P.

Ken Kessler

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Absolute Sounds.....	6, 38	Kronos Distribution.....	54, 56, 64
Acoustic Arts.....	16	Micromega.....	14
ATC.....	32	Morel UK.....	58
Audio Amateur.....	18	Musical Fidelity.....	11, IBC
Audio Consultants.....	78	Musical Images.....	82, 84
Audiofreaks.....	40	Naim Audio.....	4
Audio Illusions.....	10	Nottingham Analogue.....	18
Audio Note.....	50, 110	Oxford Audio Consultants.....	22
Audio Synthesis.....	22	Papworth Audio Technology.....	50
AVI.....	38	Path Ltd.....	12
Bury Audio.....	22	PM Components.....	8
Celestion.....	IFC	Pure Sound.....	32
The Chord Co.	16	Radford Hi-Fi.....	50
Connections 90 Travel Ltd.....	20	Radlett Audio.....	40
Country Music.....	102	Ramada Hi-Fi Show.....	88
Definitive Audio.....	24	The Record Connoisseur.....	112
Elvins Acoustics.....	24	Riverside Hi-Fi.....	18
Heatherdale.....	24	Ron Smith Aerials.....	20
Heinitz T Mr.....	24	Rotel UK.....	OBC
Hi-Fi Confidential.....	52	Sound Illusion.....	78
Impulse Loudspeaker.....	32	The Listening Rooms.....	52
Kinshaw Electronics.....	24	Wire & Insulation.....	20
KJ West One.....	20	Wollaton Audio.....	54

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WADIA 8 TRANSPORT MINT £1750, Wadia 64.4 (latest spec) £2000. ATC SCM50A active monitors £2000. Dems available. Offers considered. Tel: (0272) 877617 (after 7pm). J17

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STAGE 60 BLOW YOUR MIND & WALLET MEGA. V.G.C.	£6995	s/hand £12,600
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AUDIO RESEARCH 070 MK2 POWR AMP. MINT	£895	s/hand £1,929
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AMPS. BALANCED SUPERB V.G.C.	£3,995	s/hand £15,000
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MICROMEGA TRIO CD2
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MC2000H (£145-£245)	AT-OC5 (£45-£67)	ERONKA (£35-£45)
MC200SUPREME (£115-£155)		OTHER MODELS (£POA)
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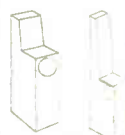
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G.E. Bowman Feb 1994
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Like many English words, Decca means something different in the USA. Now that Matsushita-owned MCA is reviving the name, the Decca story should be told

We've become so accustomed to caution and retrenchment in business that it's worth remembering how 60 years ago, in times far worse than our own, a captain of British industry set up a company in the United States which is still one of the big four players in the record business.

The Decca Records story began in England in balmy times. In 1928, Barnett Samuel & Sons Ltd, musical instrument makers, copyrighted the name 'Decca' for a line of phonographs; although no one now remembers what 'Decca' might have meant.

The company was duly floated on the stock exchange, and the issue was handled by a young stockbroker, E R Lewis. But while the shares were on offer, Lewis heard about the imminent collapse of Duophone Records which owned a pressing plant. Lewis thought he could make the share offer more attractive if the company had a line of records to sell alongside its phonographs, so in January 1929, he formed a syndicate to buy the factory, and then buy the Decca division of Barnett Samuel.

Decca Records was launched in England in June 1929. First off the presses, patriotically enough, was 'God Save The King'. Then in April 1932 Lewis was approached by Warner Brothers in the United States, the owners of Brunswick Records. At this time Warner was doing its best to get out of the record business — in fact Warner was to stay out until 1958.

So Lewis bought the British Brunswick franchise and, during the two and a half years he represented

the label, he forged a working relationship with Brunswick's American A&R man, Jack Kapp.

Lewis also tried to buy the American Columbia label in 1934. He boarded a ship for New York with cash and promissory notes at the ready but was pipped to the post by another company, ARC. Sitting at Kapp's house in July 1934, Lewis decided to form American Decca. Kapp also wanted in on the deal, and was fairly certain he could get Bing Crosby to come over.

Lewis was virtually alone in seeing the Depression as an opportunity. The launch of Decca in the States was part of an aggressive strategy based on the assumption that business would turn around and that he would be well positioned when it did. To give American Decca a head start, he lowballed the price of the records to 35 cents instead of the usual 75.

For two years, American Decca survived only by infusions of cash from England. Crosby and Guy Lombardo sold well, but the label's biggest seller was a novelty record, 'The Music Goes Round and Round,' by the Riley-Farley Orchestra. Later, Decca signed the Mills Brothers, Bing's brother Bob, the Dorsey Brothers, and launched jazz,

R&B, and country divisions. Louis Armstrong, Louis Jordan, Ernest Tubb and Ella Fitzgerald became part of a rich and diverse catalogue.

Shortly after England went to war in 1939, scientists at Decca's radio division began developing a new navigational tool, RADAR (an acronym for Radio Detection And Ranging).

The American Navy wasn't interested in the idea, and the British Air ministry thought it was too complicated, but Lewis sent a team over to the States to work out the bugs. When the scientists came back to England in 1941, the government showed more enthusiasm and soon afterwards radar went into production. 'When D-Day arrived,' Lewis later wrote proudly, 'the Decca Navigator was there, guiding the leaders of the minesweeping flotillas and then guiding the first landing craft.'

Lewis had sold his entire stake in American Decca by 1942 to gain funds to develop radar and reduce Decca's massive debt load. Jack

Kapp assumed control of the American company shortly before the label scored its biggest-ever hit, Bing Crosby's 'White Christmas'.

Kapp died in 1949, and, after a complicated series of stock swaps with Universal Pictures, Universal/Decca was bought out by MCA in 1971. The Decca logo was dropped in the States two years later because Lewis still held the name for the world excluding the Americas.

Lewis re-entered the American record business in 1947 when he started London Records in New York. By then, Decca scientists had developed what they called Full Frequency Range Recording, which captured a wider range of frequencies than had been possible previously. This breakthrough was trumpeted by the now famous logo of an ear cupped to 'ffrr'. Unfortunately, this ear wasn't attuned to the Beatles (Decca failed to sign them) or much else that happened from the '60s onwards. [The Stones? - Ed] Terrific pressings, though. Perhaps the best mass market records.

In 1980, Lewis sold off Decca Navigation and Decca/London Records to Racal, which promptly turned around and resold the record division to Polygram. MCA has recently reactivated the Decca logo in the United States, and what was once Lewis's little company now occupies a tower in the Universal City complex.

And who owns MCA today? Of course...the Japanese.

Colin Escott

DECCA DATES

1929: Edward Lewis buys the Decca Gramophone company and launches Decca Records.

1930: Decca acquires UK rights for German Polydor label.

1933: Decca buys Edison Bell Co.

1934: Decca Record Company (USA) is formed, purchases Warner Brothers' Brunswick record plant.

1942: Lewis sells stake in US Decca.

1944: 'FFRR' launched, giving up to around 12kHz on 78rpm discs. It was based on Arthur Haddy's 1940 work on high-frequency recording for military use.

1946: Ansermet's *Petrouchka* becomes a landmark classical 'FFRR' issue.

1948: British Decca starts exporting 33.3rpm LPs to the USA, competing with Columbia LPs. (British Decca's products labelled 'London' in USA.)

1950: Decca is the first to market 33.3rpm LPs in Britain.

1958: stereo records launched with the slogan 'Full Frequency Stereo Sound' (FFSS)

1971-4: MCA gains control of the American Decca company. Decca name dropped in USA.

1980: Decca UK merges with the Philips/Deutsche Grammophon group to become part of PolyGram. Sir Edward Lewis dies.

1992: MCA purchased by Matsushita Electric of Japan.

1994: Decca name reintroduced in USA.

[with acknowledgements to Robert and Celia Dearling's book *The Guinness Book of Recorded Sound*]



Decca's founder Sir Edward Lewis



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