

HIFI NEWS

FEBRUARY 1994 £2.50

RECORD REVIEW



RECORD OF THE MONTH

LEONARD SLATKIN CONDUCTS BRITTEN

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AUDIO RESEARCH
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 KLIPSCH, ANALYSIS,
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- 200 PRODUCTS**
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Audio Research founder William Z Johnson has now created a new all-tube reference amplifier system, comprising the LS5 line pre-amp and the incredible VT150 monoblock power amplifiers, surely destined for classic status. These products, plus the PH2 phono equalizer, are the subject of a double review by Martin Colloms, starting on page 30. Photography by Tony Petch

hi-fi
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 Eric Braithwaite
 Trevor Butler
 Martin Colloms
 Peter J Comeau
 John Crabbe
 Barry Fox
 Alvin Gold
 Steve Harris
 Ken Kessler
 Paul Miller

classical music

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 Nalen Anthoni
 Peter Branscombe
 Christopher Breunig
 Robert Cowan
 John Crabbe
 Robert Darling
 Kenneth Dommett
 George Hall
 Julian Haylock
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After music by mail, we have music by phone: but where does this leave the record retailer?

A reader's suggestion that we should all buy compact discs by mail order brought an angry response from at least one disgruntled record shop proprietor ('Views', January). I wonder how the remaining independent record retailers will feel about Musiclink, the new telephone CD ordering service?

Launched on 1 September last year, Musiclink sells at typical retail prices: so post and packing are free. You can place a credit card or debit card order by phone at any time of the day or night, as the phone lines are manned 24 hours a day, seven days a week. 'For the first time,' says Musiclink, 'artists and record companies can benefit from the consumer's initial impulse to purchase, invariably generated immediately following a song heard on the radio, or a performer admired during a late-night television programme.'

Customers who call the Musiclink lines (including 081-812 0812) are told immediately whether the title they want is in stock. 'If it's available, Musiclink can deliver' is the claim. Every member of the telesales team has on-line access to an extensive database, created using the full MCPS catalogue and other sources. Using the system's rapid search-and-locate routine, the telesales personnel 'can locate any title in the UK, even if the caller can only provide an artist, a song or part of an album name.' At the same time, the status of the title is identified as 'in-stock', 'temporarily out of stock', 'sourceable' or 'deleted'.

comment

According to Musiclink, around 65% of orders are for in-stock items and are delivered within three days, temporarily out-of-stock items are delivered within 10 days 'as a rule', while obscure or specialist titles in the 'sourceable' category still take 'less than three weeks'.

Managing director of Musiclink is businessman Ali Irvani, who founded the company in 1991. Its general manager is David Denyer (no relation to Celestion's sales manager, by the way!), who comes from the advertising industry, and Musiclink also draws on the experience of John Whitney, who is chairman of the Really Useful Group and of the BBC/Independent Radio audience research body RAJAR.

I can predict that in some quarters, MusicLink's telesales operation will be seen as just another way of 'creaming off' easy, Top 40 sales (which presumably make up most of MusicLink's quoted 65% of orders). On the other hand, for purchasers of what might be termed obscure material, the MusicLink telephone will at least give an instant answer as to whether they are 'sourceable' or not. And MusicLink should provide another way of getting hold of all those discs which just cannot be found in the high street.

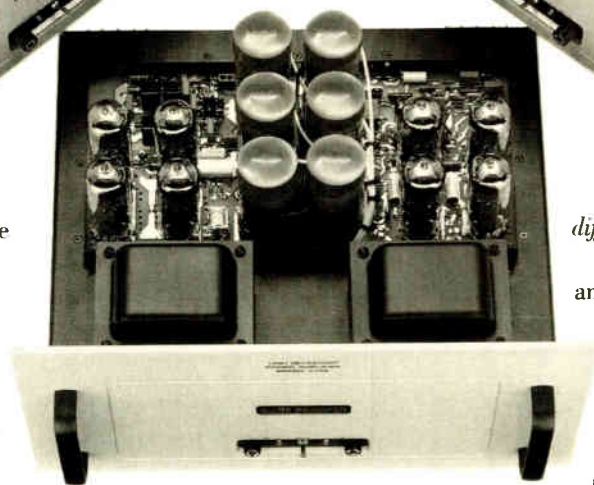
LATE PUBLICATION

We would like to apologise for the late publication of the November, December and January issues, which was due to changes in our production arrangements. We regret the inconvenience caused to readers who purchase the magazine from book-stalls and to subscribers. Production of the magazine is now back on schedule and we hope that the problem will not recur. However, any subscribers who have queries should call our Subscription Hotline number, which is 081-646 6672. (Please note that an incorrect number appeared in our fliers in the November and December issues.)

NEXT MONTH

Cover story for March is a UK exclusive review of the stunning Cabasse Atlantis MC-001 loudspeaker, a massive four-way active design using the French company's own unique 'eyeball' concentric drive unit system. Other key products reviewed included the PS Audio Reference Link digital control centre, the Naim NAIT III amplifier and the latest from QED. There will be a full report on the Winter Consumer Electronics Show in Las Vegas, while the music section will be headed by an interview with pianist Richard Goode. Don't miss the March issue, on sale Friday, 11 February. †

FUTURE CLASSICS



IMPROVE on a classic? Audio Research has done just that in its new

V-series amplifiers. Basis for these triode operation hybrids is the circuit topology proven as outstandingly musical in the Classic power amplifiers. Heart of the V-Series amplifiers is the KT90 tube, ruggedly built with the promise of increased dynamics and a more musical sound that the highly rated KT88 it replaces.

The V-Series power amplifiers (in 140 watt monobloc [V140], 70 watt [V 70] or 35 watt stereo [V35] configurations) offer a unique degree of resolution with new levels of musical performance guaranteed by improved component quality.

Serious enthusiasts looking for the best in solid-state design from Audio Research should audition the astounding D200, D300 and D400 MkII power amplifiers. These power amp can initially be used in conventional single-ended unbalanced mode with the potential for a later change to fully balanced working with only upgrading the interconnects.

As exciting are the new LS2B and PH2 line stage and fully balanced phono stage pre-amplifiers. The LS2B features all discrete, complementary push-pull circuits for performance nothing short of stunning from either quality digital or analogue sources; musical

detail explodes from a truly silent background. Performance astounds the reviewers: *"the LS2 is the most neutral and transparent line controller available today, and it take a commanding lead by a substantial margin. It is no mean achievement to beat a number of the best passive devices, while at the same time offering the advantages of superior bandwidth, better dynamic range and more consistent matching..."*—Martin Colloms *Hi-Fi News & Record Review* June 1992.

The PH2 phono preamplifier continues the Audio Research legacy of unrivalled analogue performance. For maximum detail retrieval and ultra low-noise operation the PH2 uses a fully discrete, fully cross-coupled balanced circuit design executed with state-of-the-art audiophile grade components. *"...the PH2's unique dynamic ease sets it apart from other solid state preamps. The PH2*

lets your music jump, and you'll be hooked from the moment you hear this difference..."—IAR Hotline No 66.

The LS3 solid-state line stage control amplifier is an exciting value-for-money introduction to the true audio high-end and is available in both standard and balanced XLR output forms. *"It simply sounded utterly neutral yet vivid, lively and incredibly informative... sets new standards at the price, and receives the highest possible endorsement—five stars for value as well as performance"*—Alvin Gold *Hi-Fi Choice* October 1993.

Audio Research's second generation digital products are yet more revealing and musically truthful. The DAC2 builds on selected 20-bit chip technology with jitter-free front end and analog output drawing on the latest power supply design.

Bill Johnson's definitive statement in fully vacuum tube design has materialised in the form of the VT150 mono fully tube power amplifier and the LS5 fully tube preamplifier. This overwhelming combination offers the highest musical performance values yet.

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Dear Sir,
Have you tried to leave of your senses?
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so-called in your
produce from o



A one-hour mandatory warm-up period may not seem very onerous but it implies that unless the user is prepared every time to switch on the equipment an hour before it is required, he or she has no alternative but to foot the bill for leaving it on permanently

WARM-UP PERIODS

Dear Sir, I consider John Crabbe's July 'Sidelines', where he (diplomatically?) quotes his friends concerning warm-up periods for amplifiers, one of his most significant contributions and I waited vainly for some response editorially and from readers.

For 'budget' amplifier designs it is reasonable to expect that cost considerations will preclude circuit sophistication. However, an amplifier that needs to run an hour or so to achieve performance stability in effect shifts the cost of a more complicated design from the manufacturer to increased running cost of the customer. Interestingly, Peter Comeau's review of eight budget amplifiers [*HFN/RR*, Nov] reveals that only for the Pioneer A-400X (£330) and the Rotel RA-935BX (£200) is an hour warm-up recommended, implying that for most budget amplifiers this is unnecessary.

In the same issue, Martin Colloms, reviewing the Wadia 7 and 9, says: 'Good electronics often take 50 or more hours of use to settle in after manufacture and transportation...the agent recommending a four-day interval, powered up, with a disc on repeat'. Since the Wadia 7 is a CD transport, perhaps the remarks should refer rather to good electro-mechanical devices? John Crabbe says 'There's certainly no excuse for any time-dependent shifts of overall sound character, and if

such a thing is experienced by a reviewer it should be incumbent upon him to establish whether the changes were once-only "running in" artefacts or persisted after every subsequent power-up. I regret to note that this hasn't always been made clear even in *HFN/RR*.' Quite so. For equipment priced at £21,785 this information should certainly be made mandatory, and highly desirable even for budget-priced equipment. For equipment in the Wadia price bracket I would expect any necessary post-manufacturing running-in to be carried out by the manufacturer.

Again in November, Ken Kessler's review of the £3595 McIntosh 275 valve amplifier (no budget design this) states: 'It warmed up to optimum in under an hour', which seems to imply both that he considers that to be a short time and that it *will be necessary whenever the amplifier is used*. If so, full marks to Ken, but for the amplifier designer the remarks quoted by John Crabbe apply, ie, 'What on earth are these people up to? Do they really not know how to employ stabilising techniques in such a manner that whatever thermo-temporal factors may be at work, they don't impinge on the audio performance?'

A one-hour mandatory warm-up period may not seem very onerous but it implies that unless the user is prepared every time to switch on the equipment an hour before it is required, he or she has no alternative but to foot the bill for leaving it on permanently. Thus the reviewer should also quote the standby power consumption rating, which may not be trivial for valve equipment.

Finally, the comments of professional electronics engineers and practitioners would be interesting. For instance, Tony Faulkner, in an article adjacent to John Crabbe's, discusses his experiences with microphones and speaks highly of the new Sony valve microphones C800 and C800G. Do these microphones have to be warmed-up before use? Come to that, does any professional audio electronic equipment have to be given hours of warm-up, especially after transporting to a recording location? **E W Shallow, Farnham, Surrey**

DETERIORATING STANDARDS

Dear Sir, I have been a regular reader of *HFN/RR* for many years but have regretfully decided not to renew my subscription.

Like the other hi-fi magazines I

used to read in England and abandoned, I feel that the standard of *HFN/RR* has deteriorated to a low point. My main complaint is the slang expressions used by Ken Kessler, such as 'twenty big ones' and 'rot gut freebie' cables, and the amount of valuable space devoted to ridiculous cables, dopey cones and stupid sticky artefacts.

When you decide to improve both quality and quantity, I may start buying *HFN/RR* again.

R G Bond, Valencia, Spain

BENEFITS OF DOUBLING UP

Dear Sir, Thank you and Chris Beeching for the article 'The Essential ESL' [*HFN/RR*, Nov]. I was surprised, however, that no mention was made of the protection clamps Quad introduced some time ago which effectively reduce the risk of overload (except for head-bangers!).

Also, am I the only owner who has discovered the benefits of doubling up on the EHT rectifier blocks, one for the bass panels and the other for the treble? When I first built my stacked pairs, it was obvious that all four speakers had varying degrees of treble output. Replacing the HT blocks with Quad's modern equivalents did nothing to improve matters. I suspected the audio transformers but Quad said it was most probably the bass units which were dragging the EHT down. Their suggestion was that I replace the bass units; but as they seemed to produce adequate clean bass and I couldn't risk a showdown with my bank manager, I tried doubling up on the EHT blocks.

And bingo! All four ESLs now sound identical, but just as important, there is better image stability and even more transparency than before.

May I add that Quad referred me to Rod Wilson of Coventry Hi-Fi, whose impressive knowledge and skills with ESLs extends to re-covering and heat-shrinking the polythene dust covers (a fairly hazardous task for the novice or faint-hearted!).

P H Jones, Shifnal, Shropshire

FOR FERROGRAPH FANS...

Dear Sir, Despite having been severely shaken by your recent Ferrographist correspondents [Mr Yeomans, 'Views' Sept and Mr Ellis' 'Views' Dec], I am in a position to give them a New Year present I think they will appreciate, and I gladly do so.

I have owned a series 75 Dolby high-speed Ferrograph since 1978, and cannot imagine my audio life

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without it. Having experienced no difficulty at all in having this superb machine serviced over the years, I was not, to be honest, unduly concerned when Mr Yeomans wrote, fully expecting a spate of correspondence – and indeed editorial comment – following in short order and putting his mind at ease. Then came Mr Ellis's heartfelt plea, which gave me a nasty turn! Clearly a spot of checking was indicated, it being three or four years since my recorder needed professional help.

As I have always sent (or on the most recent, and happy, occasion taken) the machine to Ferrograph HQ itself, yesterday I checked the telephone directories covering the company's home territory, and am delighted to report that only a change of address has occurred since I was last in touch. As of now, Ferrograph Spares and Service may be found at Suite 7, Cookson House, River Drive, South Shields, NE33 1JX.

I have rung the number (091-427 7774), and had a most pleasant chat with Mr Lee McFarlane, who assures me that the position regarding servicing has not changed in the last few years. I understand that for any of the later models everything except, perhaps, the odd item of casing metalwork is available.

Best of all, I was given confirmation that Ferrograph still makes the heads, so sleep well tonight, Mr Ellis!

Mr McFarlane seemed happy to make contact with *HFNR* himself to confirm the above: I suggested that an item for the 'News' pages might be a good idea. Whatever, I am sure your correspondents will be well looked after by Ferrograph: I was even told that in the more populated areas the company can arrange transport when the number of items to be picked up makes this economic. Now to see if they can be persuaded to market a 1990s' audiophile-tweaked Ferrograph...
Donald Trimby, Clitheroe, Lancashire

LEARNING TO LISTEN

Dear Sir, It seems to me that knowledge of the composer, period, style and formal characteristics of a musical work is helpful to full appreciation of it, especially of its finer points. But the main clues to how the music is meant to be listened to will be contained in the music itself, Bach's fugues lead the ear from one entry of the fugue subject to

the next and, whilst there is much else to which our attention may be drawn from time to time, even the inexperienced listener will not feel 'all at sea'. In a classical symphony the recapitulation in a sonata-form movement is unlikely to pass us by (except when Haydn is having one of his little jokes) even if we do not recognize the tonic key when we hear it. The composer will normally preface it with an obvious passage of preparation and repeat his opening theme with the same instruments, harmonies and dynamics as on its original appearance – in other words, he does not merely recapitulate but makes some effort to *tell* us that that is what he is doing.

Amongst serial composers only Webern directs our ears, in the way the music is written, to follow intricate motivic work (as well as complex canons and fugues) based on the 12-note series. He makes it easier not only by means of instrumentation and dynamics but also by subdividing his 12 notes into groups of three or four which are themselves permutations of each other. This does not necessarily make the music more interesting or beautiful – no good music reveals its riches to the person who only listens 'abstractly'. But Webern is evidently clear in his procedures and concerned that we should 'follow' the music.

Schoenberg presents greater difficulties for a number of reasons, and George Goodall ['Views' Dec] is wrong to suggest that he wrote (or intended his music to be heard) as an aurally recognisable manipulation of 12-note rows. He believed, perhaps wrongly, that use of the serial method guarantees an underlying unity to a large scale work of a kind achieved by other means in earlier music. But he did not believe that this need be evident on the surface of the music and was amused by scholars who went through his scores joining up the dots and tracing the permutations of the series. Once the composition was complete, the series had served its purpose and the result should be listened to 'as music like any other music'.

On the contrary Schoenberg suggests, though the shape of themes, phrasing and rhythms, that his serial works are an extension of late romanticism and should be listened to in the way we listen to Brahms or Strauss. The continual harmonic and chromatic density which arises from the way Schoenberg uses the

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Using a Milty duo-pad and a very small quantity of WD-40, I found it effective in shifting the most stubborn grunge from old LPs. The problem, however, was then how to remove the WD-40 from the record

serial technique, moving in directions which change so rapidly that any overall sense of progression is difficult or impossible to perceive, tends to get in the way of this and leads to a situation in which the listener reacts to the sensory overload by 'switching off', not from ignorance or reactionary philistinism but from resistance to a style of address which is, in some important respects, hectoring.

I have come to enjoy Schoenberg more by simply relaxing and not expecting my ears to follow everything in the way one may, up to a point, with Bach or Mozart. The rewards are considerable and, in my experience, well worth the effort. As to the wider question of whether or not Schoenberg will ever be popularly accepted as a necessary part of our musical experience, and integral to its history (in the sense that Bach and Mozart are), I have little to offer and am tempted to the view that what may be an interestingly contentious matter for future generations need not detain us now. It is better just to *listen* – after all, there are many composers far easier to cope with than Schoenberg (Shostakovich and Gorecki, for example) whose 'place in history' is already being as fiercely argued, one way or the other.

Tim Horrocks, Birmingham

WD-40 WARNING

Dear Sir, A few months ago, you published a letter about using WD-40 as an LP record cleaner. I also noticed the claim in a WD-40 advertisement and conducted some cautious experiments. Using a Milty duo-pad and a very small quantity of WD-40, I found it effective in shifting the most stubborn grunge from old LPs. The problem, however, was then how to remove the WD-40 from the record. Even using a succession of duo-pads didn't quite do the job, so I had to resort to other cleaners such as Discwasher and Permaclean.

Because of the peculiar properties of WD-40, there may be dangers in using it. What are the long-term effects on the vinyl? Will it damage the stylus by softening the glue that attaches the diamond to the cantilever? Because of its searching action, is there a danger of WD-40 climbing into the body of the cartridge itself if used in anything but the smallest quantities? Perhaps the safest answer is to reserve WD-40 for removing sticky patches from the

CD jewel boxes, which it does brilliantly. How about a detailed feature on LP cleaning?

Michael Wilcox, Hattwhistle, Northumberland

SONY TRACK RECORD

Dear Sir, The photograph of the tape recorder shown in 'Headroom', December, is of a Sony TC-766 ½-track with ¼-track replay. [Not the TC-755, which it was supposed to be – Ed.] I have used one since 1979 and the TC-755 (4-track) since 1975. Both still work splendidly. Owners know their qualities – most users don't know what they missed. The big brother TC-880-2 is a legend. I've only had to replace belts and pinch rollers and, on the '755, heads, once. It has been a privilege to use them. Alas, spares (relays, capstans, manuals for service) are almost unobtainable!

S Bowyer, Rothwell, Northants

HEADPHONES AND BEING THERE

Dear Sir, The use of headphones for listening to music in the home continues to attract attention ['Sidelines', March].

While there are considerable advantages, there are also disadvantages, such as sound inside the head and a too-wide soundstage. The latter effect manifests itself as 'squirting' of sound into the ears with some music sources.

To counteract this accurately requires processing the signal to achieve the attenuation in amplitude, phase shift and time shift as the sound from the left channel feeds to the right ear and *vice versa*. And it must do this with a varying dependence on frequency. It is of course much easier to sit in the concert hall and let the sound bend round the head to the two ears naturally!

However, since we must sit at home, I offer a simple circuit to aid the necessary processing of the sound. It is a gross simplification compared with the full requirements acting on the amplitude difference of the stereo signals only. Nevertheless, it narrows the unnatural headphone stage width between the channels and allows the brain to carry out the remaining processing!

The circuit should be enclosed in a small metal box and inserted in the tape monitor loop. I leave the amplifier tape monitor switch permanently set to tape and use the switch in the circuit to select source or tape. I am grateful to Rotel for some small circuit improvements. You should check

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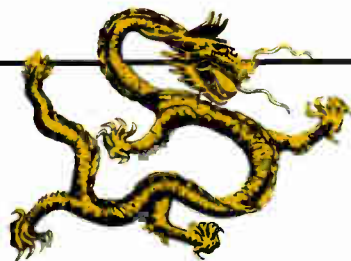
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Mr Kessler's review would have been more valuable if he had been able to identify which part of the improvement was attributable to the restoration of his deck to original factory specifications, and which was attributable to Mr de Paravicini's modifications to the original circuitry.

with your amplifier manufacturer if you are unsure about using the circuit with your amplifier. The variable R controls the width from near loudspeaker width to mono and you will need to optimise the value for each recording. The headphone-loudspeaker switch defeats the circuit and allows instant A/B comparisons of the effect. When comparing results you need to concentrate on sound at the extremities of the stage width and give your ears and brain time to get used to the sound.

I find that once the circuit is engaged and adjusted I can close my eyes, forget my electrostatic headphones, and I am there!
Dr David Morrey, Cardiff

SUMO PRODUCTS

Dear Sir, I wonder if you can give me any indication of what has happened to Sumo audio equipment, one praised in your magazine as affordable high-end components, or of Acoustic Gold, the importers I believe, of Sumo around 1988.

Roy Osborn, West Yorkshire

MISSING ATTRIBUTES

Dear Sir, I refer to Mr Kessler's review of the Tim de Paravicini modified Revox G 36 tape deck [HFN/RR, May]. I appreciate your running features on older equipment, as I collect and restore old tube equipment.

However, Mr Kessler's review would have been more valuable if he had been able to identify which part of the improvement he heard was attributable to the restoration of his deck to original factory specifications and which was attributable to Mr de Paravicini's modifications to the original circuitry. This is especially important where the modifier does not wish to share the details of his modifications with the general public.

The restoration of old audio equipment can involve three aspects, which I refer to as repair, updating and modification. In the first case, malfunctioning, worn-out or out of specification components are replaced, and the unit is recalibrated. Updating involves replacing certain functioning but dated components with improved modern components with improved modern components of the same specification, such as substituting metal film resistors for carbon composition types of the same value. Modification, the most elaborate step, is the redesign of

some or all of the circuitry.

It appears that Mr de Paravicini used all three approaches in modifying Mr Kessler's deck. Mr Kessler stated that every tube in his unit required replacement, and that Mr de Paravicini rebuilt the motors and transport, which are examples of repairs. Mr de Paravicini replaced the original RCA jacks with high quality modern components, and example of updating. He also removed the original monitor amplifier and speaker, and made certain proprietary changes to the active circuitry, and so modified the unit.

It would be valuable to anyone contemplating undertaking Mr de Paravicini's modifications to know how much of the improvement was attributable to each of these aspects of his work. This is especially important where, as here, some of the work done was merely repairs performed upon an admittedly out of specification deck, and some were proprietary modifications. A competent repair technician could perform the former work, while the latter can only be done by Mr de Paravicini. While I have no doubt that he is a skilled designer, and the result of his modifications is a first-rate tape deck, I might very well decide to forgo the proprietary aspects of his service, and just do a normal repair and updating locally, if that would get me 90% of the benefit at 20% of the cost. Unfortunately, there was no way of telling whether this would be the case from Mr Kessler's article.

I fully realize that there are practical limitations upon what can be done in a review context. I also realize that, in most restoration projects, two or three of the aspects of restoration I have noted are carried out simultaneously. However, the review as published gave the reader no idea as to the performance difference between a properly functioning original Revox G36 and one modified by Mr de Paravicini. It would be better, in future, to use a properly functioning, unmodified unit as a basis for comparison, for determining the value of proprietary modifications. Having said that, I must admit that I would prefer that you continue to run such articles on the same basis as Mr Kessler's article, especially on classic equipment such as the Revox G36, if the alternative is to not run such articles at all.

Robert Schneider, Illinois



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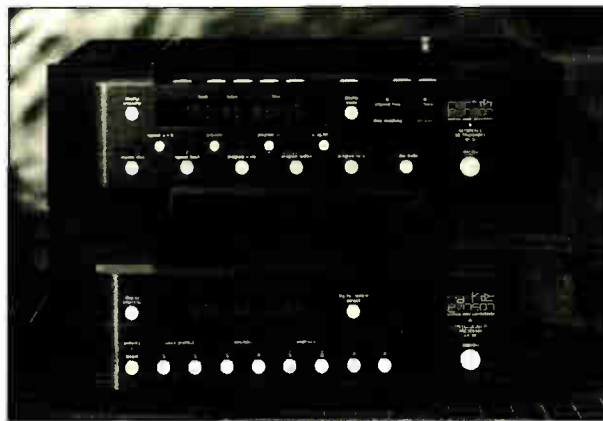
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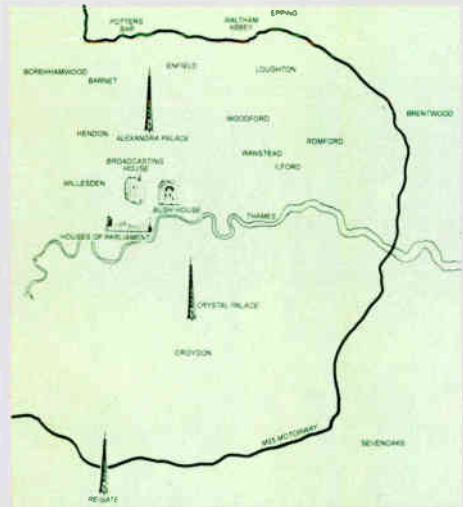
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*Digital audio
broadcasting is
now a reality following
recent BBC tests*

DIGITAL RADIO GOES LIVE



Auditioning on the DAB coach



*DAB service area
from three low-power
DAB transmitters*

The future of broadcasting has been demonstrated in an elaborate London-wide experiment showing the benefits of digital radio. The BBC mounted the demonstration to show its third-generation equipment which has been developed as part of the Europe-wide Eureka 147 project. The reality of usable DAB is now just round the corner.

Castles to keep

A new floor-standing loudspeaker has emerged from Castle Acoustics, the specialist Yorkshire company now run by former Wharfedale executives. Castle Howard is a grand name for a grand-looking speaker and brings the current range to six models: three stand-mount and three floor-standing.

Like the bigger Winchester, the Howard is a double quarter-wave horn design using two 150mm mid/bass units, one facing forwards, the other firing upward from the top of the slim column. This arrangement was conceived to increase bass extension and power handling, and improve stereo imaging. The tweeter is a 25mm aluminium dome.

The £999 Howard is available in mirror-image pairs finished in a choice of nine real-wood veneers. There's a price penalty of £100 for rosewood and yew. Castle, tel: (0756) 795333.

The BBC installed specialist equipment at three transmitters in Greater London, with Crystal Palace, Alexandra Palace and Reigate each producing 1kW, or 200W per service. Digital signals were transmitted in the old VHF TV Band III spectrum, around 226MHz, and could be compared directly with standard FM reception in a specially equipped coach.

A demonstration to members of the Radio Academy at its Birmingham conference in July 1992 confirmed that DAB offered a more robust signal than conventional FM, and was less prone to the effects of multi-path which manifest themselves as flutter and break-up when received in cars.

A similar experiment was staged as part of the BBC Research Department's Open Days in November 1992 at Kingswood Warren. Here a secondary transmitter was used to show that two signals could be received without the 'mixing' effect

found with FM. But the latest tests went a stage further, involving three single-frequency transmitters connected through stereo Nicam links.

Members of the Eureka project are keen to promote the advantages of digital radio in the hope that the system is widely adopted as a European standard. Germany is among countries aiming to provide an early service, with 1995 being discussed as a target date.

The London tests proved that DAB is spectrum-efficient, with five high quality, stereo programmes transmitted in a narrow 1.5MHz bandwidth using a single frequency for all the BBC's national services. There's also no tuning needed, just simple push-button selection. Radios One to Four were directly linked from their source at Broadcasting House to the Crystal Palace transmitter, with the R3 feed taken before the now obligatory Optimod compressor/processor and revealing the true quality possible.

Audio-T winner

The Ilford branch of the hi-fi dealer chain Audio-T has won a prestigious award. Named Electrical Retailer of the Year, the shop managed to beat all independent retailers to scoop this year's title. It was selected from over a hundred individual entries from across the country. The outlet's assistant manager, Andrew Fox, entered the competition on the back of a series of highly effective hi-fi demonstration evenings at the Gants Hill showrooms. The first prize of £2000-worth of travel vouchers is being shared among the staff.

DENON'S LATEST MINI

Mini systems are booming, and Denon is up with the leaders. The latest model to be announced is the £699 D-90 which features an RDS-equipped tuner, and may be supplied complete with two-way speakers sourced from Plymouth-based JPW for £740. Intended as a replacement for the D-709, the new model offers user-friendly features although the power output is limited to 30W/ch (into 8ohms). The CD player features Denon's proprietary Super Linear DACs, while the cassette recorder has a drawer-loading mechanism and features Dolby B and C - no DCC here! Contact UK distributors. Call Hayden Labs on (0753) 888447 for details.



ON THE RACK WITH ALPHASON

Stand specialist Alphason has addressed A/V storage problems creating the AV45 and AV45s to accommodate a TV, video and satellite system along with the hi-fi. The fully modular unit allows a degree of flexibility. Prices start at £170, with a swivel version at £200. Tel: (0942) 897308.



HOME CINEMA FROM POLK

American market-leader Polk has announced a new home theatre system of centre channel and surround sound loudspeakers. The RM5000 is being made available through the company's UK arm early in 1994. The integrated four-piece front-stage A/V system is based on the company's RM3000 subwoofer and satellite combination.

The £1099 package comprises two front satellites, centre channel and sub-woofer. The company paid particular attention to timbre matching the left, centre and right channels in order to preserve the depth and consistency of the soundstage.

A novel feature is the system's wiring which is fed from the amplifier to the subwoofer and from there to the other speakers. The subwoofer contains all the crossover elements for the complete system, together with a protection system to prevent overload. Further details available from Polk UK, tel (0272) 827311.



CHEAPER CD FROM LINN

Linn Products has aimed down-market with its latest digital product, a compact disc player with Delta-sigma conversion. At £800 the new Mimik (with remote control) undercuts the company's current CD player models by a substantial amount, making an entry-level Linn system available for £1600. Details from Linn's helpline, tel: 0500 888909.



Aura completes line-up

Aura has called on its parent company B&W to provide a loud-speaker to complete its system line-up. The £400 SP50 has been designed to match Aura's existing and forthcoming electronics, both visually and aurally. The full resources of B&W's design team were used to develop a new carbon-fibre cone for the bass-mid unit while a custom modified version of B&W's most expensive metal-dome tweeter (from the 801) covers the treble response. A £580 version is available, finished in mirror black. Aura, tel: (0903) 750750.



Tops at major conference...

Sony Corporation chief, Akio Morita, gave a video-taped address to a



Sony boss Akio Morita addressed the conference by video

prestigious conference held in London. The British Kinematograph Sound and TV Society organised the bi-annual international meeting at the end of November. Mr Morita (pictured) spoke about the future of the broadcasting industry in a changing society. Other speakers included Ken Davis of the Canadian Broadcasting Corporation, and vice president of SMPTE who gave the keynote address. Also presenting papers were Will Wyatt from BBC Network Television, Sir Paul Fox and Lady Elspeth Howe.

SHORT-WAVE PORTABLE FROM GRUNDIG

The Yacht Boy 500 is Grundig's latest short-wave radio – a portable which features up-to-date technology, side-band SW reception and stereo FM through headphones with switchable mono.

At around £190 it has many of the features found on the top-of-the-range Satellit 700 including RDS and continuous SW coverage from 1.6 to 30MHz. Apart from 40 user programmable memories, 90 pre-stored frequencies may be recalled. Nine worldwide radio stations may be set and received using the ROM chart supplied. There's also a timer (with 24hr clock) allowing two switch on/off times, and tone control with 'sound booster'. The package is compact, measuring 113x186x41mm.

Grundig has spent much R&D developing the Yacht Boy 500, though Radio Netherlands found the set over complicated and difficult to use, while it called into question the SW performance. Details from Grundig tel: (0788) 577155.



Rotel re-vamps amp

A new, high performance version replaces Rotel's RA960BX integrated amplifier. The £299 RA960BX2 looks the same, but features circuit enhancements and offers 60W/ch. Phone Rotel UK on (0908) 317707.

JVC GOES MINI

Aiming at the growing mini system market, JVC's new Adagio range uses Panoramic Surround Sound. Developed for JVC, it enables the listener to change the sound of the acoustic to one of five different 'venues', including hall, cinema and dance club. But this system differs from standard DSP enhancement, because the JVC Panoramic speakers move to the appropriate angle for the desired effect. They can even bounce the sound from adjacent walls and reflective surfaces to create a spatial sense. Six models are offered, spanning the £350 to £1000 price range. JVC, tel: 081-450 3282.

Jamo's rallying call

Sponsorship from Danish speaker company Jamo allowed two brothers to fulfil a lifetime's ambition. Tim and Michael Hackett, from Towcester, drove their Peugeot 205L6 GTi in this year's Network-Q RAC rally. It was the culmination of a five-year ambition to compete alongside the world's best rally drivers. In the event the pair failed to finish, but enjoyed themselves nonetheless. Jamo used its mobile exhibition bus to provide support services along the route.



MORE PRO DAT FROM HHB

Hot on the heels of last month's announcement that it had produced its own professional DAT recorder for portable use, supplier HHB has now secured distribution of Panasonic's SV3700. Already immensely popular in the USA, HHB heard that it was to be discontinued in the UK. Swift action by HHB's managing director Ian Jones, who made direct contact with Japan, found a lorry load on its way to London. Priced at £1399 plus VAT, the machine features XLR analogue connections plus AES/EBU digital in/outs. A shuttle wheel eases editing. An infra-red remote handset and a rack-mounting tray are supplied as standard. HHB, tel: 081-960 2144.

Mini festival

Harman's new Festival mini systems (£999 and £1199) offer CD, tuner and cassette sources in innovative packages. They promise the performance of the company's full size hi-fi components combined with a stylish design and intuitive ergonomics. A 13-button IR remote is part of the user-friendly package. Tel: 081-207 5050.



BRIEFING

AIWA has appointed 200 Elite dealers across the UK to stock and promote the brand's complete range. Tel: 081-897 7000.

COPLAND products in the UK are cheaper after stabilisation of the Swedish Kroner. Distributor Absolute Sounds is passing on the savings. Tel: 081-947 5047.

CLEARAUDIO products are available through Heatherdale Audio of Hove. The m-c cartridges span £400 to £5100, with m-m £73 to £320. Tel: (0273) 206456.

CREATIVE AUDIO of Shrewsbury has produced a 36pp hi-fi guide called 'The Works 2'. Tel (0743) 241924 for free copies.

ESOTERIC Audio Imports has signed the Electrocompaniet range of electronics. Phone: (0243) 533030 for details.

DAEWOO has established a UK base at Wharfedale Road, Wymorsh Triangle, Berks RG11 5TP to spearhead the brand in the country. Tel: (0734) 272272.

HI-FI EXPERIENCE has opened a branch in the north-east at Comscliffe Road, Darlington. Tel: (0642) 722438.

HI-FI GROUP - interested in historic sound equipment and audio technology? Contact Norman Wright on 081-692 8328 for details of a proposed group.

IMPULSE Audio Consultants of Westcliff-on-Sea now offers specialist advice on tube equipment,

home demonstrations, system analysis and a cable burn-in facility, plus cartridge demagnetisation. Tel: (0702) 465892.

MARTON MUSIC is relocating to Burnley, Lancashire where Tony Seaford may be contacted on (0282) 773198.

MANA ACOUSTICS is offering an upgrade to users of its existing stands. The £200 Soundstage may be used to enhance the Reference table and Isobarik stands. Phone for details on 081-429 0118.

SONY Broadcast International founder and chairman Ken Barratt took early retirement on 1 January, but continues to act as a key advisor.

SPENDOR LS3/5A monitors, 25 pairs of them, have been ordered by Sony Broadcast International for



use at the Winter Games. **THORENS** has reduced the price of the classic TD280IV turntable to £199.90 including TP35 arm and cartridge. Phone (0494) 890277.

DAVID WOOD, founder of the now defunct Revox UK, has formed Sinclair-Wood Associates to maximize business opportunities in the broadcast market. Tel: (0635) 873309.

EXTENDED SUB-WOOFER RANGE

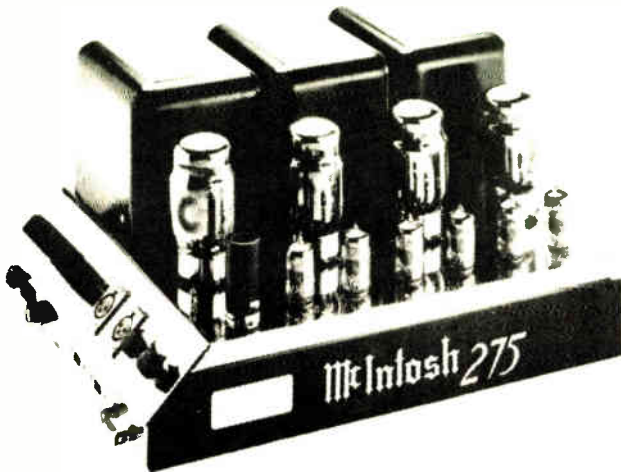
Richard Lord has added two new models to the REL range of subwoofers. At opposite ends of the price spectrum, the Strata and Studio are introduced flanking the existing Stadium and Stentor models.

All REL designs incorporate Active Bass Controller, a fine/coarse filter to tune the output to match the characteristics of any hi-fi or A/V system in any room. The Strata is a compact unit offering inexpensive bass from a £499 package which includes a 60W Mosfet amplifier. The £2995 Studio is the ultimate REL sub-bass system, offering craftsmanship and top performance. It combines two 25cm bass drivers with 300 watts of amplification. REL products are distributed by Harman. For full details, please contact, tel: 081-207 5050.



REL's new subwoofers, distributed by Harman

Fancy a Big Mac?



This special edition of the world popular McIntosh MC 275 power amplifier is being produced to commemorate the late Gordon J. Gow who was firstly Vice President and later President of Mc Intosh Laboratory from 1949 until 1989. The UK has been allocated just 25 units and these are offered on a first come first served basis.

So if you fancy a Big Mac don't leave it too long, its quite a tasty morsel. If you want to spice things up a bit then why not add a **Audio Research LS3 Pre-amp** or, if you really want to spoil yourself, the redoubtable **LS5**.

All these units are on demonstration at KJ's London showrooms, these together with a huge array of equipment from established brands make KJ the best place to shop. KJ boasts a positive Aladdins cave of hi-fi!

Some of the more significant additions to our range recently are the **ORELLE CD10T CD Transport / DAC** and the **CD160.2 CD Player**, the **ROKSAN Attessa CD Transport and CD Player** and the new **MERIDIAN 500 series** of amps, tuners and CD Players.

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Demonstrations are by appointment



SONIC LINKS

Link is the operative word with the latest products from Graham Nalty's SonicLink company. Two new interconnects

have emerged: Crimson, based on solid core technology, and Green Digital, a 75ohm coax for digital applications. Prices, for metre lengths, are £49 and £50 respectively. SonicLink, tel: (0332) 674929 for further details.



TOP MAN LEAVES KEF

In a surprise move, KEF's managing director, Colin Cartwright, has left the company to 'pursue other interests'. The announcement was made by public relations man, Andy Giles, who otherwise remained tight-lipped.

A prepared statement simply said that Frank Di Girolamo had taken over as MD. It is understood that he has been providing consultancy to KEF for some time. Before that, he was president at US speaker company Epicure, and also spent a considerable time with the massive Harman International.

Mr Cartwright left a senior position with the UK wing of Bose to join KEF, after it had been rescued by the giant Kinergetics group, which also acquired Celestion.

Shop-floor workers at KEF told how Mr Cartwright and his wife had been hosts at a staff party less than a week before. The pre-Christmas gathering was the last time some saw their managing director, who apparently gave no indication of his intention to quit.

EVENTS

10 JANUARY: IEEIE/IEE Colloquia Electromagnetic Compatibility, Forte Post House, Maidstone. 7pm. Tel: 071-836 3357.

20 JANUARY: IEEIE on Latest Developments in Batteries. Queen's University of Belfast, 7pm. Tel: 071-836 3357 for tickets.

30 JANUARY-3 FEBRUARY: MIDEM '94, Palais des Festivals in Cannes. UK tel: 071-528 0086.

18-20 FEBRUARY Sound & Vision '94 at Marriott Hotel, Bristol. Tel: (0865) 60844 for details.

27 FEBRUARY-2 MARCH: AES Convention, Amsterdam. Tel: (0628) 663725.

2 MARCH: IEE Cascading Audio and Video Data Compression colloquium, Savoy Hill, London. Fax: (0734) 731190.

4-7 MARCH: Le Salon Son & Image Electronique Grand Public, Palais des Congres, Paris. Tel: 010 33 1 45 57 30 48.

Arthur Radford

Another of the pioneers of British audio has passed away. Arthur Radford, founder of the company which bore his name, fought a long illness.

After studying at Merchant Venturers Technical College and Bristol University, Radford was involved in the manufacture of amplifiers, microphones and loudspeakers for public address systems. His interest in amateur radio led to a course in



electrical engineering where he studied valve amplifier design and acoustics, and where he began his lifelong involvement with transformer design. In the 1930s he became in-terested in loudspeakers, leading to his transmission line patent in 1964.

Having spent the war years working on communications and military projects, Radford eventually began the manufacturing of top-quality measuring equipment, produced alongside the loudspeakers and amplifiers for which he will be best remembered. Initially producing a Williamson-based amplifier, he soon developed his own circuits, as well as transformers which were used by other manufacturers such as Rank and Heathkit. In 1985, Arthur Radford received the HFN/RR Award for Achievement in Audio. Ken Kessler

Revolver folds

Turntable manufacturer Revolver has gone into voluntary liquidation. Founders Colin and Wyn Higham have taken the opportunity to retire. Fellow director Steve Ward, of Allison, has agreed to supply spares as needed. Phone: (0484) 603333.

FLUID MAKER TURNS TO CABLE

Kontak cleaning fluid has been so successful that the manufacturer is now putting its name to a range of digital and analogue interconnects. Link 502 is available in balanced or unbalanced form for £80 in half-metre lengths, £90 for one metre. Link 505, is a carefully designed interconnect for the transmission of wide bandwidths. It sells for £40 in half-metre lengths, and £50 for one metre. Phone Path on (0494) 441736 for details.



T-TIME FOR MICROMEGA

French electronics company Micromega has announced what it believes is its most important product ever released. The new year sees the arrival of the first stocks of the Stage CD players - in-house designed and built replacements for the Junior, Logic and Leader. Previewed at the HFN/RR-sponsored Hi-Fi Show last September, Micromega says its T-Drive and T-Dac combination is enjoying great success. The products feature a balanced AES/EBU digital connection and are priced at £1199 and £799 respectively. Contact UK office on 081-989 0692.



NEW TUBE RANGE

Synergy, the name of two new valve designs from specialist Tube Technology, is poised for production. Synergy I is a 150W/ch integrated, supplied with remote control for £3800. It features on-board bias adjustment, is 'fully dual mono' in conception and allows for five line-level inputs. Synergy II is a 150W/ch stereo power amplifier and will follow, at a price still to be announced. Both models feature Gold Aero tubes from the USA, a line now distributed by Tube Technology. Phone: (0932) 850361 for details.

KEF's latest Q model

KEF has added a top-of-the-range model to its recently launched Q range of loudspeakers which feature the company's Uni-Q technology. The £699 Q70 features two 160mm driven bass units in a full three-way design, and is magnetically shielded making it suitable for A/V applications. The 160mm Uni-Q unit operates as a midrange/HF driver in a sealed enclosure. The new model joins the existing Q10, Q30 and Q50. KEF, tel: (0622) 672261.



Conrad Johnson Score

The subjective scoring of the CJ Premier Eleven should read 'mid 20s', while the overall score is in fact 22, not 32. Martin Colloms points out that this is still an extremely good performance.

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While if you want something a little larger (and a little better and more powerful too) you can add another £500 for a pair of SCM100As.

In either case, however, you will have acquired definitively the best loudspeakers in the world – regardless of price.

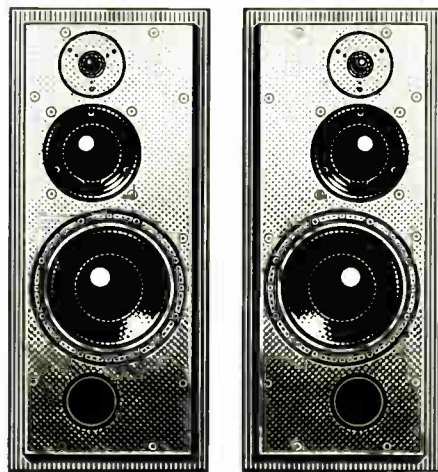
ATC speakers alone reproduce the entire dynamic range of live music without effort, audible distortion or 'artificial' colouration.

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Not surprisingly, such fidelity has earned ATC monitors pride of place in many of the top recording studios, film studios and music establishments in the world. (Users include EMI, Telarc, Warner Bros, Denon, Pioneer, the BBC, The Royal Opera House, The Sydney Opera House, The San Francisco Symphony Orchestra, The Royal Academy of Music, Pink Floyd, Sting and Neneh Cherry.)

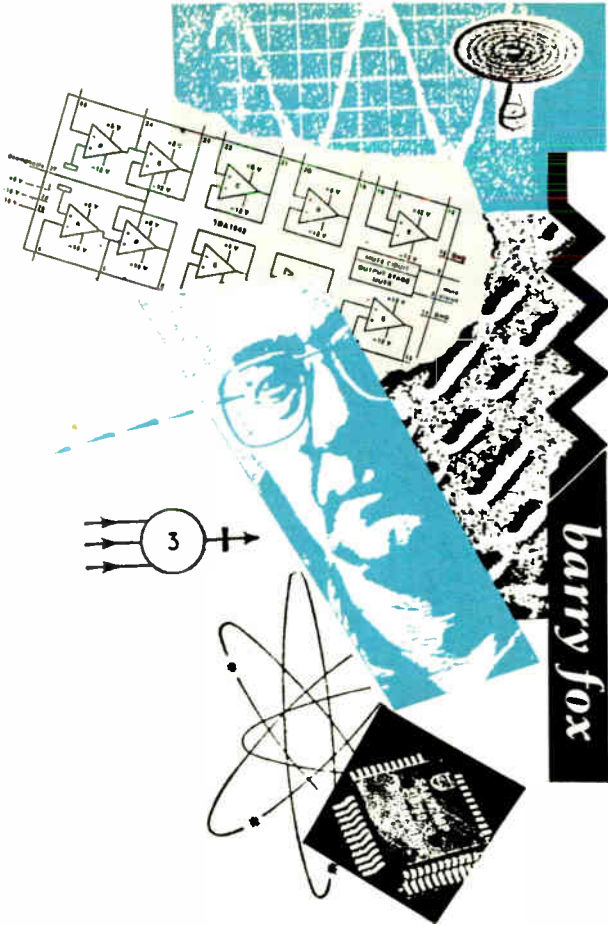
After all that, you may wonder why there are other speaker systems costing, in some cases, many times the price of ATC?

There's only one answer: Before you spend loads of money, talk a little sense with Ashley James on **0285 760561**.



ATC

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Sony now admits the shortcomings of DAT for professional use and has unveiled a studio version of MiniDisc

Sony is now offering a modified version of consumer MiniDisc to professional recording studios as an alternative to tape. The PCM 9000 will be available at the end of this year for around £25,000. Blank discs will cost around £100, and record for up to 100 minutes.

'We simply stole the technology from our consumer colleague's, says Andy Tait of Sony's Broadcast Division, cheerily. It's this kind of rapport with the professional audio and video world that has helped make Sony so successful in those fields.

Sony's studio recorder, to be called Master Disc or MSdisc, also borrows technology from computer magneto-optical disc recorders. But it is in no way compatible with either MD or any computer format.

Computer MO discs record blocks of data, which are read intermittently, so the disc can spread capacity over both sides. Also, computer discs rotate at a constant speed, or angular velocity, to arrange the data in pie-shaped sectors for easy retrieval. But this is an inefficient way to use disc capacity. And to mimic recording tape, suitable for transfer to CD, MSdisc must record over an hour of unbroken music.

The consumer MiniDisc format squeezes 74 minutes on a 64mm MO disc by compressing the digital code. But recording engineers dare not use compression on original master recordings because any compression errors are frozen into the recording for all time. Engineers also want to make recordings with a code which uses more than the 16-bit

words currently used by CD. So Sony has set a completely new standard for MSdisc. It is 133mm in diameter, and can record any digital word length of between 16 and 24-bits. Instead of rotating at constant angular velocity (like a computer disc), MSdisc rotates at constant linear velocity, like a CD or Mini-Disc. The rotational speed continually changes as the laser moves across the diameter of the disc, to keep the relative speed between laser beam and spinning surface constant.

For a 16-bit recording, the disc will record 100 minutes of unbroken music, for 24-bit recordings it will store 65 minutes, and for 20-bit recordings (currently the maximum encoders can handle), the recording time is 80 minutes.

'The best A-D converters available are resolving at 19-bits or less,' says Mr Tait.

COMPUTER TECHNOLOGY

The blank disc is housed in a protective cartridge, like a computer MO data disc. But the cartridge has been deliberately made just slightly larger than a data disc, to prevent people trying to use a single-sided music blank in a double-sided computer drive.

MSdisc differs from computer data discs in another important way. In a data disc recorder the signal to be recorded modulates the strength of the laser beam which heats spots on the surface so that they pick up the polarity of a fixed magnetic field. To make a new recording the disc must first be erased by scanning it with the laser at fixed strength, and then scanning it again to make a new recording.

Although acceptable for data recording, this is not suitable for music recordings where engineers want to 'drop' a few bars of newly recorded music into the middle of a previously made recording. So MS disc uses a technique called 'direct overwrite' which was developed for use with consumer MiniDisc. The signal to be recorded modulates the magnetic field, while the laser strength remains constant. This allows the player to directly overwrite to make a new recording, without the need for

a separate erase pass.

The MSdisc recorder plays another trick. It spins the disc at two-and-a-half times the velocity needed for recording. This speeds search access. Also, the laser can be rapidly switched between record and replay modes, to let the recording engineer check that a valuable music recording really is being captured on disc. The system can also playback discs at double-speed, to halve the time needed to transfer a music recording from one piece of studio equipment to another.

For multi-track recording, where more than two channels are recorded at the same time, the MSdisc recorder uses time-code to synchronize several recorders, each capturing two music channels.

'You just glue several machines together,' says Andy Tait.

Total data capacity is 1.3Gbytes on a single side. Only 1.2Gbytes is used for music recording, the other 0.1Gbyte is set aside in a separate area of the disc for recording auxiliary data, for example, an index of all material stored on the disc. Track pitch is 1.5microns, slightly finer than the 1.6microns used for CD and MiniDisc.

The blank disc is pre-grooved by pressing at the production stage. The groove wobbles with a modulated signal which keeps the laser guided along the spiral track and provides a time reference signal.

Editing accuracy is down to 30ms, equivalent to around one individual picture in a video or film sequence. The auxiliary track can also store information on non-destructive editing, so that as the disc plays back music, it skips between sequences to create the illusion of editing, without altering the original recording – playing out segments of music in a different order from the original recording.

Although some professional recording engineers now use DAT, Sony admits that the format had a domestic origin. 'We are finding that it is not as bullet-proof as it might be', said Mr Tait. †

Sony's £25,000 PCM900 is aimed at recording studios



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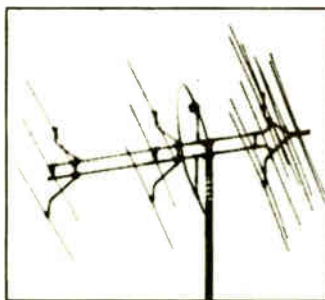


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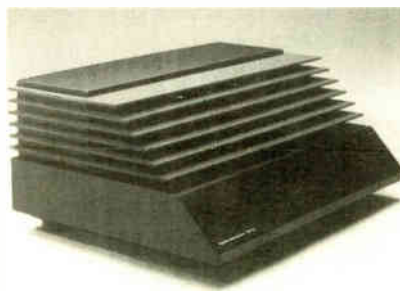
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trevor butler

How does the BBC regard its public service commitment? Recent changes suggest that the remit may have lapsed

I recall that the BBC was among those quick to adopt the 'U-turn' phrase after that fateful day during Mrs Thatcher's reign when the immortal words 'U-turn if you want to, the lady's not for turning' were uttered by the then prime minister during the 1980 party conference in Brighton. Auntie has now performed its own almighty about-turn, causing uproar in the process.

It is less than a year since the BBC published its *Extending Choice* document about the future of our national broadcaster. This made a clear commitment to youth, education and live music, yet many believe the BBC's plans to change Radio Five to a news and sport network will reduce choice. The announcement was not welcomed by those recently recruited staff at Radio Five who have produced a reasonably sized audience for the medium-wave-only service. In fact, it is the only BBC network with a steadily rising listenership.

Pressure groups, such as the Voice of the Listener and Viewer, say adult education output has been put in jeopardy, and fear that speech programmes for young people will be slashed, and result in school radio broadcasts being cut by almost half. The plan is that they will be re-scheduled on other networks, to times when, arguably, most schools cannot use them. A knock-on effect may be to upset Radio Three and Radio Four listeners, who are forced a diet of educational material at times when they have been used to

receiving something else. VLV says that changing Radio Five would be a mistake, and has called on the BBC to reverse its decision.

One of the most worrying aspects of the creation of a non-stop news and sport station is the lack of supporting evidence to back the move. A similar position arose over what many see as the casual axing of the BBC Big Band, which enjoys a world-wide reputation and brings enormous pleasure to millions of listeners on Radio Two.

The two decisions have been cited as an abdication of the BBC's public service remit, and have refuelled calls for a radical review of the role of the Governors when the BBC Charter is renewed. Many inside the Corporation expect Radio One to be sold as a going concern, while the future of the BBC's local radio service is once again in question. Many supporters of local radio, who once held key management posts at Broadcasting House, have either moved on, retired or been posted to one of the new regional centres. Some of their replacements obviously do not view the radio's community role in the same light. But an overnight announcement to disband the forty-odd stations would probably invoke a listeners' revolution, much as the earlier plan to condemn Radio Four's long-wave frequency to the rolling-news service did.

No, a more sinister plan is being rumoured by tireless local radio staff who believe that the credibility of individual stations will be undermined and audiences reduced, so that their loss becomes less noticeable in the communities they serve.

The creation of Three Counties Radio covering Bedfordshire, Buckinghamshire and Hertfordshire, is cited as one example where the limited resources of what was Radio Bedfordshire are spread more thinly across a much wider area, with a token reporter in small district offices often covering vast rural patches. And the present furore over the decision to amalgamate Radio Surrey and Radio Sussex is heralded as another example.

The fair people of Brighton had their own BBC local radio station, which came on-air twenty-six years ago. It soon grew to cover a coastal strip stretching to Seaford in the east and Worthing in the west. Then came the decision to spread further afield and encompass the whole of east and west Sussex. A studio centre was opened in Eastbourne to opt-out of the main programme strand and cover local issues affecting the east of the county.

Today, that operation lies abandoned, the vast resources in East-

bourne now used by only a couple of reporters to cover the radio and TV needs of the area. In fact the Brighton studios, too, are unused for much of the day as programmes are originated at the purpose-built facilities in Guildford – once home to Radio Surrey which was conceived as an opt-out of its Sussex parent. But after eighteen months on-air, it failed to attract sufficient listeners to justify the cost of survival.

Surrey's downfall wasn't of its own making. It was dogged by technical problems – its single transmitter covered only the west of the county around Woking and Guildford. The towns of Dorking, Reigate and Redhill in the east were catered for by the BBC Radio Sussex transmitter, carrying Sussex programmes of little interest to the inhabitants of leafy Surrey.

The powers that be in the BBC's new South region headquarters had a brain-wave. In the absence of sufficient funding to run two stations independently, they would combine the resources of ailing Radio Surrey with the ever popular Radio Sussex, using its strong following to bolster the average listening figure.

Local councils, the media and avid listeners in Sussex were outraged. They began a campaign over what they saw as a merger. Head of BBC's centre in Southampton, Nigel Kay, himself a one-time programme editor at Radio Sussex, was quick to deny that a merger had taken place. It was simply a move to make more effective use of the resources in Brighton and Guildford, he told listeners. Two days later, the stations assumed a common on-air identity of 'BBC Radio Sussex and Surrey'.

Since then more and more programmes have been originated in Guildford, with guests at Radio Sussex referred to simply as being 'in our Brighton studio'. The situation has got so bad that a hospital radio service based in Shoreham is making a bid to take-over one of Radio Sussex's medium-wave frequencies to provide what it says would be a true community service.

The picture is more rosy in Berkshire where the BBC local station began as an opt-out of Radio Oxford, providing peak-time programmes when not carrying the sustaining service. But the 'English Hollywood' has been rewarded with a fully fledged station, with resources for all-day programming. But why should one county be favoured at the expense of an existing service in Brighton? Is it because notable BBC Governors live there? Or is it, as many insiders believe, an attempt to dilute the effectiveness of local radio to provide a viable excuse to axe it? ♪

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SHOW REPORT

There were more people wearing silly helmets than tinkling the ivories on the grand pianos up on the balcony of the Islington Design Centre. Even so, Steinway sold two at over £30,000 apiece

CLASSIC MUSIC SHOW

Visitors to the Classic Music Show during the weekend of 22-24 November seemed to be more interested in virtual reality than real hi-fi from the likes of Quad, Meridian, Naim, Ruark and Roksan. Or real instruments. There were more people wearing silly helmets than tinkling the ivories on the grand pianos up on the balcony of the Islington Design Centre. Even so, Steinway sold two at over £30,000 apiece.

Through the *Star Wars* crashes and bangs seeped the strains of Beethoven's Egmont Overture. When the Trekkies were done, the reason for an array of Quad ESL-63s and Apple MacIntoshes became more evident.

Thirteen 63s, each powered by a channel of a Quad 240 professional amplifier and laid out like a real - virtual? - orchestra, were indeed playing Beethoven's Egmont, albeit synthesized, one section per speaker.

From a yard or two back from the conductor's podium (inhabited by a MacIntosh Quadra 650 displaying a scrolling full orchestral score via which intrepid would-be Simon Rattles could change the tempo) there was a surprisingly realistic concert-hall ambience. The whole zany idea was dreamt up by London's Oscar Music, who synthesized the 'orchestra' and



synchronized the orchestral parts on the Mac VDUs alongside each loudspeaker using Notator Logic software.

Sound levels were not quite matched; the 'brass' section - trumpets and trombones combined, to cut down the number of Macs and speakers - needing more volume, for example. In reality, too, if you could walk between the orchestral sections, as the violins dropped a phrase and the cellos took one up opposite, you would hear more than in this synthetic version. It was distinctly uncanny to read several bars' rest on, say, the horns' score on the screen next to their loudspeaker - and hear nothing while the violins a few ESLs away were bowing happily. All the same, Oscar Music's exhibit proved to be an awesome experiment in walk-around sound that leaves surround-sound looking like a mere bagatelle. Four 24-track recorders, a hundred ESLs and the whole of the London Philharmonic next time, please.

While Quad was involved with a synthetic orchestra, Naim supplied active DBLs and a six-pack to back live dancers and *The Nutcracker* in the Performance Room, while displaying their SBLs, new Nait 3, 92 pre-amp, NAP 90.3 power and NAT03 tuner.

Meridian showed practically all the new '500' range, from the DSP 5000s down. Quad's remote-control electronics shared Studio 99's stand with Mission Cyrus and B&O, while around the corner was a static BADA stand showing off Roksan, AE, Ruark and Arcam. Some of the hi-fi companies were competing with record company Chandos, displaying their involvement with 'real' music: Quad's sponsored The Sixteen recordings on Collins, Naim's new orchestral recording on CD and Meridian showing off CDs mastered using the company's electronics.

Although some hi-fi companies expressed disappointment at the exhibition's attendance and a lack of focus, with blowable saxophones and scrapable violins mixing it with similar-shaped chopping boards and hatstands, Nigel Nathan from organisers Keynote was bullish. 'It's a long-term venture, growing in interest and support each year. We take a step forward each time; next year it's going to be three steps forward!'

Eric Braithwaite



'Hear each instrument from its own speaker!' A visitor follows the score on-screen while listening to the 'orchestra' of Quad ESL63s assembled by Oscar Music



Among the hi-fi companies exhibiting was Meridian with almost the whole range of new models from its 500 Series

WIN!

High-end performance usually carries with it the penalty of high-end prices, but at least one British company is aiming for the very best performance at a modest cost. Orelle aims to achieve this through careful design and thorough attention to detail at all stages of manufacture. Extensive listening tests are carried out before any new product is released. Since the launch of its first speaker model, Orelle has been able to offer complete systems. This month we can offer a unique chance to win the latest Orelle electronics in our mouth-watering, free-to-enter competition.

THE PRIZES

Our first prize winner will take home the stunning SC-200/SP-150 pre-/power amp combination. The £399 SC-200 pre-amplifier features optimised signal paths, DC offset protection, gold-plated input sockets on all seven inputs including the moving-magnet or moving-coil options. There's also tape monitoring and a buffered tape output. The highest quality components are used throughout including polypropylene capacitors and 1% metal-film resistors.

The matching SP-150 stereo power amplifier (£499) completes this exciting prize. It has been conceived to deliver an exceptional performance from a slim, compact design using high current bi-lateral Mosfet output devices. Attention to detail sees the use of van den Hul wiring throughout.

The £750 CD-160 CD player is a high performance product at an entry-level price. It's the second prize in this stunning competition. Featuring a Philips 16-bit 4-times oversampling 'Crown' chipset, it comes complete with a full-function IR remote with direct entry key-pad. Audiophile extras include a 'display off' mode and gold-plated audio output sockets. There's also a digital co-axial output.

Orelle's new budget beater CD player, the CD-480, is the tempting third prize. At £400 it offers a full-function remote and relies on high quality components including the renowned Philips CDM4 mechanism.

Finally, three runners-up will receive Orelle interconnects each worth £50.



ORELLE'S PRE/POWER

HOW TO ENTER

Simply select the most appropriate answers to each question and send your entry to Orelle Competition,

Hi-Fi News & Record Review, Link House, Dingwall Avenue, Croydon CR9 2TA, to arrive by first post on 28 February 1994.

THE QUESTIONS

- Which chipset does Orelle use for its CD-160?
 - Bitstream
 - Philips 16-bit S1 Crown
 - MASH
 - PDM
- What output devices are used on the SP-150?
 - Mosfet
 - Bi-polar
 - J-Fets
 - IGFET
- How many inputs does the SC-200 offer?
 - four
 - five
 - six
 - seven
- Where are Orelle products sourced?
 - Japan
 - England
 - Scotland
 - Korea

THE ANSWERS

1 2 3 4

Name and Address (caps please)

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The Rules

- The competition is open to UK readers only. All answers must be on the entry form provided. Photocopies will be accepted but only one entry per reader will be considered. No other correspondence may be included with entries.
- There will be no cash or other alternative to the prizes offered. The winner will be the first correct entry opened.
- Employees of Link House Magazines or associated companies, and of Orelle or their agents, will not be eligible.
- All entries must be received by first post on 28 February 1994, when judging will be carried out. The Editor's decision will be final and binding. No correspondence of any kind will be entered into regarding the competition.
- The prize winners will be notified by post and the results will be published in the May 1994 edition of *HFN/RR*.
- Entries become the property of Link House Magazines.
- Entry to the competition implies acceptance of the rules.

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automotive than audio, like posh Aeroquip hoses with in-line fuel filters. Aside from the daft name – proof that you should never name your products in another language – they're very slick and 'professional' but I couldn't tell you if the in-line filter made any difference vis a vis the unfiltered version of the cable as I had none of the latter.

They're designed only for use between the analogue output of a CD player or DAC and the pre-amp, which is where I used them, and I have to say they were damned fine . . . even at 700DM per pair. But that's not the point. What the Dig-A-Logs showed is that cables pre-fitted with filters (such as MIT, Transparent and those in question) do not benefit at all from after-market ferrite rings. Not that I needed the Audioplans, as I have at least two systems' worth of pre-filtered leads. But they were handed to me at the show and I didn't want to seem ungrateful.

Oh, and they look the biz.

As for the magazines which made my trip worthwhile, well, I never thought I'd live to see another 'underground' audio publication, what with the granddaddies of the genre having gone upmarket/mainstream/commercial and the rest not amounting to a hill of lentils. Which calls for a definition, I suppose, of what constitutes an 'underground' audio publication.

You could argue that high production values, professional writing standards, proper distribution, publishing regularity and anything else that smacks of seriousness, a business-like approach or commercialism would immediately disqualify a magazine as 'radical' or 'underground'. Me? I don't care if the thing's hardbound, comes out like clockwork, is printed in Italy and can be purchased in Harrods; if it has the right attitude, then it's underground. And right now, the only alternative to the mainstream hi-fi press is the peerless, nay, astounding, *Sound Practices*.

This Yankee organ is an 8½x11in, stapled, black and white affair running to about 40 pages each for its first four issues. Don't know a thing about those who edit or publish it, other than that they're mad geniuses and the main man is named Joe Roberts. My copies came via Audio Note, the company distributing it in the UK. And it's no surprise as to why Audio Note locked on to this journal: *Sound Practices* lives for analogue and tubes.

This no-holds-barred publication has, so far, featured articles entitled 'The Classic Williamson 1993 Style', 'The Search for Musical Ecstasy' (by

no less than the incredible Harvey Rosenberg of Futterman/NYAL fame), 'The Single 300B Amplifier: A Model 91 for 1992' and 'Triode-Connected Pentodes'. Get the picture? The magazine features wonderful archive reprints, DIY projects, readers' letters and everything else to create a home for wayward anachrophiles. It is everything that the former underground magazines used to be: a repository for the stuff that falls through the cracks in the mainstream. And we do need both, the newsstand mags for news and reviews, the rest for dealing with minority interests.

In other words, *Sound Practices* publishes the kind of material which you can get away with when you're not pandering to advertisers on every page [speak for yourself! – Ed] and/or can survive with a niche market small enough to qualify for government aid as a troubled minority. And its appeal is, most certainly, limited to the kind of tube crazies which even those at *Glass Audio* might find strange. Take the wonderful Vincent Gallo's amplifier feature in issue no 3, describing the various types.

I quote the opening to the paragraph on transistors:

'Solid State – I don't want to be heavyhanded and declare that all solid state amps suck. But I have no choice because they do all suck.'

Or how about Gallo on hybrids:

'Hybrid – Ha, ha, ha.'

Pulling punches is not part of the recipe. The whole magazine is a feast of unbridled audiomania, the kind of behaviour I haven't witnessed in at least five years. It's radical and addled, adventurous and warped. It is as close to a Captain Beefheart LP as any hi-fi journal can get. Phone Audio Note on (0273) 220511 for details, or write to the magazine at PO Box 19302, Alexandria, Virginia 22320, USA. Me? I'm subscribing. ↕



Hot from Budapest, some filtered cables with a silly name. And from the States, an underground magazine for tube freaks with attitude

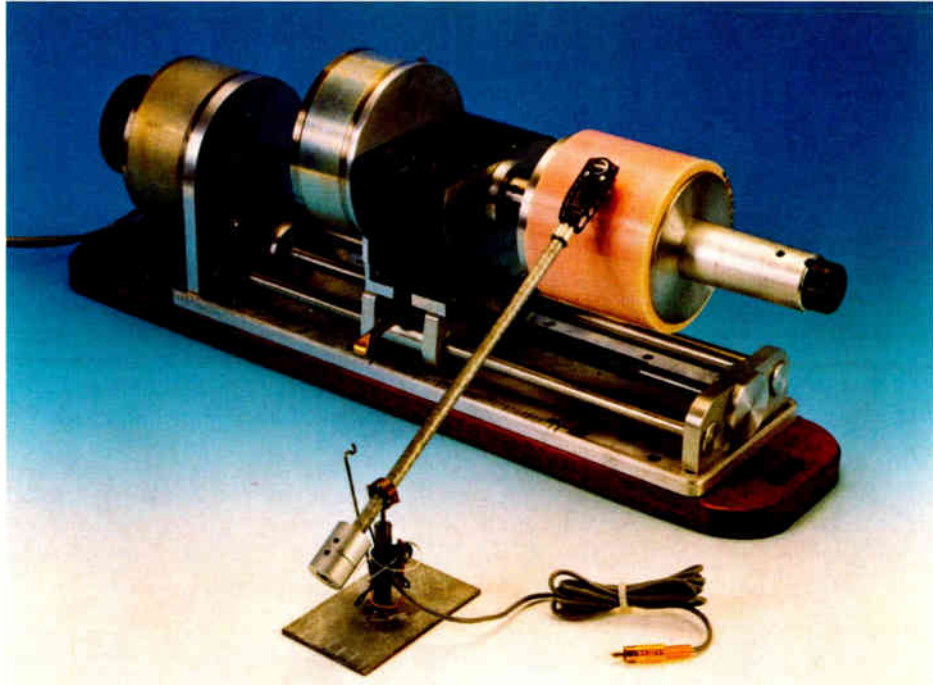
Among the goodies lurking in the bottom of my flight bag upon my return from the Hungarian High End Show were the inevitable leads and magazines. Ordinarily, the former are relegated to a large box of tweaks and accessories I will eventually give away to hard-up audiophiles mad enough to covet such *tchatchkes* while the others join the pile of 'things to read'. This time, though, I was inspired not to allow them to gather dust, and I'm glad. The magazines turned out to be the funniest things I've read since the last J P Donleavy novel, while the leads came in handy during some listening sessions I didn't know about before leaving for the Budapest show.

Yes, I did say that I wouldn't waste another word talking about cables, having reached the end of my tether with the damned things. . . and not just because they're among the most 'system-dependent' of all the items in the hi-fi chain. But the Dig-A-Log wires from Audioplan, in Germany, proved handy while I was working with the subject of next month's 'Headroom': RF filters. Specifically, the tasty, probably state-of-the-art items from VersaLab.

My German is limited to a few food names and curses, so I was not in an ideal position to find out what's inside the captive cylinders fitted to these cables. Because of the braided dielectric and the size of the cannisters (similar to the size of a one-sip drinks can handed to you in-flight) the Dig-A-Logs looked more

A Devon University is putting the finishing touches to an invention which dates back to the reign of Queen Victoria

by PETER J COMEAU



RESTORATION PLAY...



Pengelly Stringer Universal Electrical Cylinder Replayer Machine (top right) is being finalized at Plymouth University. Joe Pengelly is seen above with his equipment and his cassette made from cylinders of 'Cornwall's greatest singer', Richard Jose

Had you been a hi-fi enthusiast in the reign of Queen Victoria and resident in Plymouth, you would no doubt have regarded Pengelly's Talking Machine Dept as the haven of all that was fashionable in home entertainment. It was the love of Ernest Pengelly, the proprietor, for the new technology in sound reproduction that sparked the interest in historical recordings shown by his great nephew Joe. If you feel that we are currently in the midst of a war of the formats, with CD, DAT, DCC and MiniDisc jockeying for position, then take a look at the bewildering variety of equipment available to the Victorian enthusiast.

Edison first developed the original tinfoil cylinder 'talking machine' as a curiosity leaving Bell & Tainter to market a similar instrument, which they called the Graphophone, as an office dictation machine. Edison, momentarily side-tracked by

other more mundane interests such as electric lighting, recovered his enthusiasm once the Graphophone offered commercial competition and responded with his own 'Improved Phonograph'. Both devices used wax cylinders which recorded on the 'hill and dale' method, where the stylus cut into the wax surface producing vertical modulations of the groove.

The assault on the American office market proved a relative failure – the dictation machine was literally ahead of its time – and it was not until 1896 that the design and falling prices of both types of machines made them suitable for widespread domestic use.

Over the intervening years other inventors, and competitors to the American cylinder systems, had a chance to catch up with the developing technology in sound recording and reproduction. Ultimately what was hindering the adoption of the phonograph by the public at large was the difficulty of mass-production. Each wax cylinder had to be cut individually and, although a battery of recording machines and horns could be positioned in front of the performer, the musician or singer would have to repeat his or her performance for each batch of ten cylinders. Emile Berliner experimented with various methods of tracing an acoustic waveform on a surface which could be etched to produce a metal master, eventually alighting on the laterally modulated flat disc. If the early Berliner discs were inferior in quality to cylinders they were certainly louder, and they could be stamped out cheaply with the performers hired for only a short and stress-free recording period.

Meanwhile, by the 1890s, a French clockmaker by the name of Henri Lioret had devised a process for duplicating cylinders by an early form of metal mastering, and by 1900 was producing four-minute microgroove celluloid cylinders. These advanced recordings preserved forever performances which exhibit a degree of fidelity that is to be found nowhere else from this period.

1898 saw the introduction of the Columbia Graphophone Grand, incorporating a special mandrel to take a massive 5in diameter cylinder. Edison countered with his Concert Phonograph of 1899, which matched the increased diameter. Later the Pathé company, one-time agents for Columbia Graphophones in France, marketed their own machines which played not only standard sized cylinders but also an intermediate size called 'Salon' as well as concert size cylinders. Pathé even produced the giant Céleste cylinder, more than 8in long. Edison uniquely produced a giant size Blue Amberol Kinetophone celluloid cylinder which provided lip sync sound to his 1913 films running for some five minutes.

After Columbia abandoned cylinder production in 1908, only Edison remained as a large-scale producer of cylinders. In order to compete with the longer playing flat discs, the company introduced the 'Wax Amberol' cylinder which doubled the number of grooves to the inch from 100 to 200, and thus increased the playing time to four minutes.

Perhaps the ultimate in cylinder reproduction was achieved by the

Edison Opera and Amberola 1A machines. Introduced in 1909, the Amberola incorporated new mechanical features – the reproducer head was fixed to the bed plate whilst the mandrel supporting the cylinder both revolved and traversed, giving what Edison claimed the steadiest reproduction of all. A similar mechanism was later used in the table-top 'Opera' series, arguably the pinnacle of the Phonograph development and in its day undoubtedly the finest producer of recorded sounds anywhere. Not to be outdone by the rising tide of flat-disc competitors, Edison had by this time brought out his own Disc Phonographs and 'Diamond Disc' records, still cut in the hill and dale method. For a few months in 1929 he even produced lateral cut discs, but in this same year Edison ceased production of domestic machines. As a dictation machine, however, 'Ediphone' and 'Voicewriter' cylinder machines continued to compete with the Graphophone 'Dictaphones' until the advent of tape recording.

In this potted history of cylinder development I have only covered the major contenders in the market place – there was a huge variety of reproducing machines available, and all types of cylinder were manufactured and distributed throughout Europe and America by companies in the 'home entertainment' field. There was no such instrument as a 'universal' cylinder machine, and often no attempt at compatibility – the later Edison phonographs only played the four-minute cylinders of 200 grooves per inch. As one might expect from recording mechanisms which relied on hand assistance, speed consistency was rife with problems. As more efficient spring driven motors were fitted with improved governors, both Edison and Columbia settled down to an avowed standard of 160rpm, but they were not the only ones producing cylinders for the mass market. Home recordings were generally made at 100rpm, a legacy from the 'dictation machine' standard, whilst manufacturers in search of 'higher fidelity' for music reproduction promoted higher speeds. The fastest were Pathé, recording some cylinders at over 200rpm. Some of the slowest were Linguaphone – meant for replay at 100rpm, many cylinders dropped as low as 87rpm during the course of a lesson.

So that he can recover sounds from all types of cylinders, Joe Pengelly has developed a machine which is the closest one can get to a universal cylinder player. A Leverhulme Research Grant in 1983 enabled him to engage the services of the

Mechanical Engineering Dept of Plymouth Polytechnic (now the University of Plymouth). Joe referred back to those Edison machines which employed a traversing mandrel and stationary reproducer, the aim being to keep the stylus at right angles to the groove whilst using a pivoted arm.

In contrast, organisations such as the BBC and National Sound Archive make use of a radial tracking arm, usually based on the Revox design featured in their disc-playing turntables, traversing the revolving cylinder. Readers may remember that this arm relies on lateral movements of the cartridge to trigger a servo mechanism to 'drive' the arm along. When replaying valuable artefacts, as some of the rarer cylinder samples have become, Joe claims that a stylus searching for grooves to play can damage them. If any accident were to befall the servo mechanism, a unique piece of sound history might be lost forever.

Mike Stringer of Plymouth University is now putting the finishing touches to the Mk3 version of the touchingly named Pengelly-Stringer Universal Electrical Cylinder Replay Machine. Our photo shows it fitted with a concert size slip-on mandrel carrying a concert size Pink Lambert – this whole assembly being carried on the basic mandrel. Drive is provided by two DC printed armature motors with integral tacho generators such that individual servo amplifiers derive the speed of each motor via feedback from the tacho. Mandrel and cylinder are turned via a 5:1 reduction gearbox and speed of revolution can vary from 0 to 235rpm, whilst the feed screw which drives the cylinder traverse mechanism is fed from a 3:1 reduction gear to provide a transverse speed range of 0.1in to 3.6in per minute. The mandrel shaft and bearing are supported on two parallel slides, and engage with the feed screw via a pivoted half nut. This allows transverse drive to the mandrel to be engaged by lowering the brass handle at the front of the mechanism.

As you can see the pickup arm is free standing allowing the angle of incidence of the stylus to the groove to be varied over a wide range. The base of the arm is graduated so that deviations from parallel tracking are noticed immediately. In this way the cylinder groove content can be checked and all variations of groove pitch accommodated by the feed screw setting.

One of the attractions of the free arm is the access to tracking weight and stylus alteration, and the ability to adjust all the variables freely

'until the sound is right'. Of necessity such a judgement must be subjective but one that can be related to the sound of known instruments. Although celluloid cylinders are very robust – in coin-operated 'Cylinder Juke Boxes' a celluloid cylinder would take 3000 playings without undue wear – it is often necessary to let the stylus ride in an unworn or unscored portion of the groove to achieve the best fidelity, especially with wax cylinders.

Both feed and rotational motors can be reversed thus allowing the stylus to play the groove backwards and so capture transient information that might not show so clearly played in the normal mode. Joe has a huge range of styli for fitting to his Shure cartridge, provided to his specification by Expert Pickups, and can thus find the radius which gives the clearest signal. Perseverance is the answer.

Also pictured are the variations in cylinders that the collector is exposed to, and alongside the slip-on mandrel sleeves to accommodate them. Joe Pengelly owns a representative collection of historical interest, and is often sent cylinders for transcription to tape from owners who respect his achievements.

The specification of the Pengelly machine gives little idea of the calibre of sound obtainable from cylinder recordings. Certainly I consider the fidelity superior to many 78 discs, with the cylinders exhibiting much lower surface noise and greater dynamic range, and not far behind some early vinyl pressings. No wonder Edison stuck to cylinder reproduction, even when he was forced to go into disc machine manufacture, but I doubt if even he would be prepared for the remarkable quality that Joe Pengelly coaxes from his cylinders. †

Certainly I consider the fidelity superior to many 78 discs, with the cylinders exhibiting much lower surface noise and greater dynamic range, and not far behind some early vinyl pressings

Cylinders vary enormously in size: the Pengelly Stringer machine will accommodate cylinders up to 6.5in diameter by 6.7in long





AUDIO RESEARCH REFERENCE SERIES

At last, Audio Research has completed its all-tube Reference amplifier system: this, the first part of a double review feature, covers the stunning VT150 power amplifier

by MARTIN COLLOMS

The inputs are a pair of Sovtek 6922, a military-grade wide-band double triode derivative of the excellent ECC88. Altogether there are 12 triodes per channel and a total of six regulators

After some 25 years in the business, Audio Research founder William Zane Johnson decided to forego fashion and create an all-valve (tube) reference product echoing the class and character of his original creations, the legendary D79 series amplifiers which in their time put truly high sound quality on the map.

Against the comparatively sleek satin alloy fascia design so favoured in recent years, the appearance of the costly VT150 (£14,500 a pair!) is something of a shock to the system. All black and box-like, each resembles an industrial heater for a factory or warehouse more than an item of domestic equipment. Add their 1960s plastic control knobs and DIY-style home constructors' meters, and they score zero for style. However, their great weight and bulk

does hint at some serious purpose behind all the metalwork. There are also indications of real seriousness at the business end, as the amplifier chassis boasts an array of heavy-duty gold-plated posts (including 4mm sockets) and a wide range of output matching options. The massive captive three-core mains lead is adjacent and is decently long. Audio input is balanced only.

Two of the aforementioned plastic knobs are placed on the front panel, one on each side of a small moving-coil meter. One switches the amplifier from 'listen' mode to bias monitor, the other allows setting of the bias level of one output valve (after the prescribed warm up time), further switch positions providing for checking of, but not adjustment of, the other three. If differences emerge, it is time to replace the output tubes, which come in matched sets.

This external control of bias or standing current in the output stage allows some control of valve life. At 80mA bias, the sound is considered optimum, but with a likely 20-30% reduction in the nominal 1500-hour life. Conversely, for long-term, less critical background listening you can set '50mA' and those glossy Sovtek 6550s should burn merrily away for 5000 hours on average. Such niceties are the prerogative of a highly tuned classic reference design!

TECHNICAL DETAILS

Beneath the slotted top cover, which must be left in place due to the high voltage present, is an array of glassware. Two 6550 power tubes are used in the regulated power supply, an unusual quality feature, controlled

by a 12AX7 double triode. The reservoirs are huge, occupying a sixth of the unit's volume and comprising six paralleled connected 400µF, 450V Philips screw-terminal electrolytics, each bypassed with two levels of selected film capacitors.

The inputs are a pair of Sovtek 6922, a military-grade wide-band double triode derivative of the excellent ECC88. Then comes a pair of higher-power triodes, these being GE BH7As in cross-coupled differential mode. The output drivers comprise another pair of BH7As, allocating a cathode follower for each output tube grid. Altogether there are 12 triodes per channel and a total of six regulators. Long tails are provided for the differential stages by using a separate -300V supply. This also feeds the drivers, where a very high swing is required due to the local feedback at the output. All stages are regulated, while the massive tube regulator with paralleled 6550s is for the screen grids of the output valves. These are operated in Audio Research's preferred configuration, using a balanced, centre-tapped output transformer where additional output windings are each incorporated in a local negative feedback loop by wiring the cathode circuits of each output valve through them in push-pull. The screen grids are also allocated their own windings. This very high local feedback (50%) endows the stage with a low output impedance at the anodes, allowing for a low leakage very wide bandwidth output transformer to be combined with good valve efficiency. The paralleled push-pull output stage is said to be good for almost 150W into a matched load before significant distortion sets in.

When the load is connected via the 'balanced' terminals then full matched symmetry is attained for the output, for 16, 8 and 4 ohms. Since speaker connections are free or floating this is of no consequence. The amplifier will also drive the 'unbalanced' connections, at 4, 2 and 1 ohm matching with slightly impaired maximum output and fidelity. This connection is grounded at the negative and may be connected to other equipment which requires such a facility, for example, some active sub-woofers.

Overall negative feedback is set at a low 15dB, and is symmetric, applied in double differential at the input stage and summed with the differential DC servo signal.

SOUND QUALITY

An interesting selection of loudspeakers was available, ranging from the Wilson WATT 3/Puppy 2 to the Quad '63, from the Celestion SL700



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MODEL L5B

GAIN

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TUNER
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LINE DRIVER

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VIDEO
LINE DRIVER

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TAPE 2

PHONO
TUNER
VIDEO
AUX

MONITOR
SOURCE
OPERATE

PHONO
TUNER
VIDEO
LINE DRIVER

AMPLIFIERS

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AUDIO RESEARCH VT150

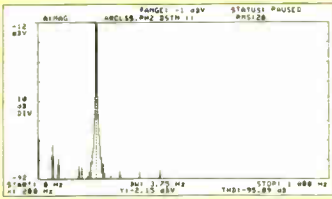


Fig 1. Audio Research VT150: supply modulation test. The signal is 37.5Hz at two-thirds rated power into 4ohms

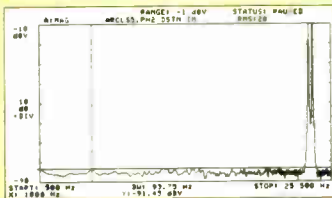


Fig 2. Audio Research VT150: intermodulation, 19kHz/20kHz tones at full output

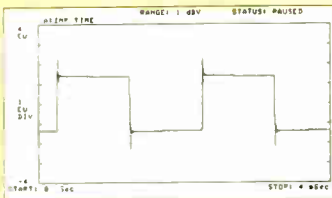


Fig 3. Audio Research VT 150: square wave response, load 2µF/8ohms



Test results Audio Research VT150

Rated power	8ohms, 130W; 21.1dB/W*		
Measured power (at 240V AC 50Hz)	20Hz	1kHz	20kHz
Continuous 8ohms, 1 ch (dB/W)	21.2	21.3	20.9
Continuous 4ohms, both (dB/W)	16.0	16.1	15.9
Burst 10ms			
8ohms (dB/W)	-	21.6	-
4ohms (dB/W)	-	16.8	-
2ohms (dB/W)	-	13.1	-
Output impedance (ohms)	0.6	0.6	0.68
Harmonic distortion			
Rated power 8ohms (dB)	-50	-52	-46
at OdBW 8ohms	-64	-67	-62
Intermodulation distortion (19/20kHz 1:1)	rated -58dB, OdBW	68dB	
Peak current via 1ohm 2.2µF			
2m sec pulse		+8A;	-8A
Signal-to-noise	rel. OdBW	rel. full level	
22Hz-22kHz	-78dB	-102dB	
'A' wtd	-77dB	-102dB	
Input impedance	200k-ohm (100k-ohm per phase)		
Input sensitivity	202mV IHF, OdB/W		
	2.5mV for programme clip		
DC offset	none		
Frequency response	-0.5dB, <10Hz to 74kHz		
	-3dB, <10Hz to 170kHz		
	202mV IHF, OdB/W		
Dimensions (whd, mm) each unit,	370x350x560		
Typical retail price (inc VAT)	£14,500 per pair		
* where OdBW = 2.83V, equivalent to 1W, 8ohms			

LAB REPORT

Philosophically, the VT150 represents a return to an earlier, all vacuum tube technology but with a technical performance which is accurate and consistent and holds no surprise in terms of load matching, odd distortions or a skewed frequency response.

A 1 watt 8 ohm loaded response of 2.2Hz to 195kHz -3dB is a truly wide-band result by any standards. Equally extraordinary are the -3dB points before clipping referred to the full 'rated' power of 130W and which averaged 12Hz and 75kHz.

Flat out, on a test 242V AC input the amplifier delivered 140W of power per channel into 8 ohms. Hardly any loss was seen at the band extremes of 20Hz and 20kHz. Applying 4 ohms to the 8 ohm tap resulted in a drop of 5dB. I generally preferred the 4 ohms balanced output with its higher current delivery of ±11.4A (±8A on 8 ohms) for the Wilson speakers. On the 8 ohm tap the output impedance was 0.6 ohms, a reasonable figure of 13 for damping. An 8 ohm load on the 4 ohm tap got a damping factor figure of 18.4, better in terms of bass speed and definition.

At rated power the harmonic distortion was quite low, typically 0.3%, and improved to typically -66dB,

0.05% at 1W and below. Even at 20kHz it bettered 0.1%. Low level distortion was 1W at 200Hz, 8 ohms, and only 3rd harmonic at -68dB, with nothing else visible even below the measurement floor at -90dB.

Tested for supply modulation [Fig 1] the only signals of significance were pure harmonic distortion, 50Hz related components conspicuously absent. For high frequency intermodulation the result was close to 0.1% at full power and 0.033% at 1Watt, both fine results [Fig 2].

The stability margin was excellent. The result for 2µF/8 ohms is shown, but this varied little whether the 8 ohms was applied or not; the risetime is very fast, the overshoot was unusually small and it barely rang at all. Here is an electrostatic-load driver par excellence [Fig 3]. On the 8 ohm output, peak current was good for a tube design, ±8A rising to 16A for the 2 ohm output.

Signal-to-noise was very good - better than 100dB weighted or unweighted. Input impedance is 200K ohms [100k per leg] with a normal sensitivity of 2.5v for clip [1.25v single ended]. No DC offsets were present and the monoblock design meant that channel separation was limited only by the sources.

This Audio Research is unquestionably the best yet. It overhauled the company's solid state models by an embarrassing margin, with an unmistakable lead in vitality, stereo presentation and transparency

to the Klipsch Forte II, their sensitivities ranging from 83 to 97dB/W, and representing a range of different loadings.

While the amplifier did begin to sound decent after a five-minute warm-up period, it continued to improve steadily over the first hour or so from a cold start. There was little doubt that bias settings towards the upper limit, 70 or even 80mA accurately balanced between the two channels, gave the most focused and the purest sound. Once run in for the requisite 30 hours or more, the Sovtek 6550 used in this design performed very well, and substitutes do not offer any overall advantage.

This Audio Research is unquestionably the best yet. It overhauled the company's solid state models by an embarrassing margin, with an unmistakable lead in vitality, stereo presentation and transparency. It had the classic Audio Research 'High Definition' sound, highly revealing and satisfyingly detailed, all this seemingly achieved without effort. The VT150 never sounded forced, its detail and definition not marred by false compression or spurious tonal effects or colorations.

Once warmed up and checked for bias balance, the amplifier attained a very high score, on my usual subjective rating scale, of 27-29 marks, the range allowing for some variation in load matching and its effect on different loudspeakers. This is a reference-grade result, and is strengthened by the very fine balance of all the sonic aspects which together determine a musically satisfying performance.

With the VT150, musical performances were recreated, not as a perfect facsimile of the original, but nevertheless with each re-creation standing on its own merits. Very few valve power amplifiers are wholly neutral. It is inevitable that their higher output impedances will impart changes in timbre within an overall perceived frequency response.

Wilson WATT3/Puppy 2 speakers were primarily used with the VT150 and always sounded very good. However, it was instructive to explore the valuable output impedance options offered by the VT150 in the form of a wide variety of output matchings. The lower-rated values give a lower output impedance, in theory more like a solid state amplifier with a higher peak current capacity but less voltage; the latter generally corresponds to a lower maximum loudness.

It is rather like changing gear. The lower setting (a lower gear?) provides more torque and acceleration, a tighter, more responsive bond between the engine and the drive,

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while a high gear seems to lengthen the connection but conversely has the potential for a higher speed.

With a valve amplifier and a given speaker, the lower impedance settings are likely to give the most accurate tonal quality, the finest bass, and the best slam and dynamics, but may not play quite so loud. Higher impedance settings may result in a softer, slower bass and some mild limiting of dynamic peaks plus a change in tonal quality, perhaps with mild coloration. On the plus side there may also be an increased feeling of ease, superior headroom and a better sense of scale.

For example, with classical programme on a grand scale, the VT150 drove the Wilson WATTs best on the 8ohm setting. For less densely textured, fast rock material the 4 ohm setting gave the best tonally balanced and rhythmically paced result. On 2 ohms, a still further gain in neutrality was noted but the amplifier did not sound as graceful and the loss in maximum loudness was too great, except with very sensitive speakers.

With the Wilson speaker, the amp set to 4 ohms balanced, the VT150 showed a mild boxiness, an extra richness in the lower midrange together with a slight emphasis in the upper treble, something which could be mistaken for 'grain' or edge on rougher-sounding programme. These characteristics were more noticeable with the 8 ohm output but were close to inaudibility with the 2 and 1 ohm trials.

With an investment on this scale, it would be wise to audition the VT150 with your choice of speaker and find out exactly what is possible. Certainly, this amplifier had character, and not just because of speaker load interaction. It had a pure clean and easy sound, one which speaks of short signal paths, top quality film capacitors, linear amplifying stages of high dynamic range and amplifying triodes (if not at the output stage) and low overall negative feedback. There was a natural richness, which made it distinguishable from the more clinical aura of most solid state designs.

Compared with the best solid state, it could be described as a little soft. The bass was softer and rounder, and yet still remained rhythmic, involving and full of informative detail. And it still went deep. Unlike several other amplifiers of this class and type, the VT150 did not lose its composure on heavy low bass. At the other extreme the upper treble was open and sparkling; no valve-like 'sweetness' here. Nor were these strengths achieved at the expense of the vital midrange, the

region where a good valve design has the potential to beat solid state, where absolute naturalness for voices and on acoustic instruments is paramount. The VT150 had an excellent midrange: liquid, focused, articulate and very, very natural.

Fine dynamic gradations were superbly expressed and the sound was both lively and unfatiguing. A massive stereo sound stage was possible with the Wilsons using appropriate source material, showing superb depth and width plus very good focus. Turning down the lights in the evening, it was easy to imagine the concert hall and orchestra laid out in front of you. Certainly, I am prepared to concede the unique level of midrange magic (but generally only available in the midrange) which is possible from such devices as single ended Class A 15W triode (a Western Electric 300B or similar), in favour of the well-balanced global achievement of the VT150. You do not need to make any excuses for this design, you just let it get on with the job of creating musical experiences.

Its very high quality actually presents some difficulties. Great care is needed with system selection and matching if the full VT150 performance is to be realised. My best results were obtained with the Wilson speakers and no pre-amp, direct-coupling the digital sources to the power amp. Obvious contenders are those which have internal low-loss control of volume such as the PS Reference Link or the Wadia 9.

CONCLUSION

There are some good valve power amps out there, some with still better midrange tonality and detail than this, but they are often prejudiced by a second rate build quality, limited bandwidth, low power and/or high output resistance and poor load matching. In contrast the VT150 is a complete and comprehensively engineered design. Its appearance is wholly functional, but inside the engineering, electronic design and build are superb, complemented by a first rate sound. The sound is Audio Research's best yet, one which financially well-endowed enthusiasts will find very hard to resist. The VT150 is a true classic, not least because it re-created the quality of those first memorable experiences of audiophile valve-based sound. It sets a new standard for amplifiers combining the purity and grace of the vacuum tube with the precision and constancy of the solid state. The VT150 is a tour de force for William Z Johnson and I wish it long and successful run. ♪



To cater for unbalanced sources, Audio Research offers two active converters, the BL1 and BL2. These are fully-fledged, carefully-built pieces of electronics, which provide a beneficially high source impedance for normal sources and which deliver a balanced output

*Working in true
balanced mode
throughout, the all-tube
LS5 line pre-amp and
solid-state PH2 phono
equalizer form Audio
Research's reference
pre-amplifier*

by MARTIN COLLOMS

Balanced is the current high-end buzz word: we are rapidly reaching the absurd point where a new audiophile component is not considered credible unless it offers balanced facilities. Be that as it may, the Audio Research Corporation's new top-of-the-range line pre-amplifier, the LS5, is all-balanced and also all-tube: a combination which is an industry first.

Most practitioners of the art concede that variations in the noise performance of valves, both when new and continuing during their lifetime, make the design of low-level disc input stages problematical. So the Audio Research PH2, like the existing PH1, is a solid state design using tried and tested FET circuitry.

The PH2 comes with a bag of resistors to help the dealer set the desired input loading. This is nominally 47k-ohms, suitable for a moving magnet or a high output moving-coil cartridge. Any conceivable value may be soldered into position, though this procedure does make the selection of the optimum cartridge loading by listening to it a complicated process. PH2 has fixed gain; the output range for available pickup cartridges exceeds 10:1 or 20dB, which is quite a lot of volume control rotation to allow for at the line stage.

At the back of the PH2 you are confronted by four XLR connectors which means that the turntable con-

nection for the input is potentially seven-wire. Certain procedures must be observed if the PH2 is to work at all and if they are not realised then the result is frustratingly high levels of hum and hiss. You can't use normal coaxial arm output cable since it is unbalanced; the negative cartridge signal usually goes to the outer braid of the coax without the benefit of further screening. Ideally an Audio Research custom Litz cable is used, fully balanced and externally shielded, leading directly to a 5-pin miniature plug of the tonearm variety. Complications inevitably arise with units such as the Linn and similar suspended sub-chassis turntables where the specific fixing and compliance of the tonearm cable is a feature of the suspension design.

Two main controls grace the traditionally-styled LS5. The input selector is on the right, letting you choose from six named options: tuner, video, phono, CD, Aux and tape. The volume control is on the left, continuously variable but with finely-spaced mechanical detents. There is no balance control or mono/stereo switching.

To cater for unbalanced sources, Audio Research offers two active converters. BL2 is the latest adaptor unit and looks like a slimmer pre-amp. Costing £1675, it is an almost mandatory accessory for the LS5, and may be stacked beneath the larger unit: the LS5 runs too hot to put anything on top! The BL2 adds a host of unbalanced input connections, with a selector switch pre-sorting them before finally converting them to balanced mode.

TECHNICAL

The LS5 is an all tube design, with the qualification that balance and stabilisation for DC is achieved by a pair of cross-coupled integrated circuit amplifiers (TL071). There are differential amplifier stages for the positive signal, one following the other and leading to a cathode follower output. This whole circuit is then repeated for the negative signal phase. Each 'phase' has its own negative feedback loop, and the feedback ratio is relay controlled for the 30dB and 12dB gain settings.

The subtlety begins where the two signal phases are cross-coupled with the negative phase of the positive channel fed to the negative phase and vice versa. Thus the whole circuit block of four sets of double differential triodes works in unison, maximising the common mode rejection ratio and signal handling symmetry. The first differential uses 6DJ8 valves for low noise and gain; the second differential employs the higher power 12BH7 while the out-

BL2 is the latest adaptor unit and looks like a slimmer pre-amp. Costing £1675, it is an almost mandatory accessory for the LS5, and may be stacked beneath the larger unit: the LS5 runs too hot to put anything on top! The BL2 adds a host of unbalanced input connections, with a selector switch pre-sorting them before finally converting them to balanced mode

As with the LS5, the fully-balanced nature of the PH2 means that four phono equalizer channels are present instead of the usual two. Each equalized 'channel' comprises junction FET input in common source mode direct coupled to the cartridge. This is the first stage of a fairly powerful 11-device feedback amplifier, ending in a Class A push-pull output stage using MOS FETs

put followers are also 12BH7. Thus 10 triode sections serve one channel. With 10 double triodes in all it is no wonder that the LS5 runs hot!

As with the LS5, the fully-balanced nature of the PH2 means that four phono equalizer channels are present instead of the usual two. At the core of the circuit is a differential stage and it is at this point that the two signal phases are cross-coupled to generate a truly balanced result.

An astonishing and perhaps unnecessarily wide bandwidth is specified, -3dB relative to RIAA equalization at 0.5Hz and 150kHz. The balanced differential gain is given as 48dB and it is capable of a spine-tingling 100V RMS into a 20k ohms output load for less than 0.5% distortion. Input noise is given as -77dB IHF, ref 1mV input. The figures suggest that moderate-output moving coils such as Linn and Ortofon types might not be compatible.

SOUND QUALITY

Assessing the sound quality of these products was one of the hardest review options I had to undertake in 1993. The presence of XLR sockets only, and their true balanced nature meant that there was no dual identity for balanced and unbalanced domains.

Many tests and comparisons were necessary until I felt sufficiently confident in the various arrangements, the siting of the units, their grounding and their power supplies. At one stage there were five Audio Research units up and running: BL1 and BL2 balance converters, the PH2, LS5 and the VT150. At last some order was achieved, the system began to stabilise and the review could begin in earnest!

After all this, I am sorry to say I was a mite disappointed. Make no mistake, in the end it proved to be a fine system and the main components - the LS5 and PH2 - both set high standards. Yet for me, they failed to 'catch fire'. To a degree, Audio Research's own high standards can be held responsible for this: with the LS3 delivering a remarkable performance at relatively moderate cost, the LS5 really has to sing to justify its position.

In my system, and using my usual subjective marking scale for the listening tests, the LS5 scored 20, an eminently respectable result. It does come, as promised, with the mid-range liquidity and tonal accuracy of the famed but long superseded SP10, and indeed the sound is highly neutral and unforced over the whole audible range. The numerical rating implies a 'very good' or bet-

ter qualification for standard sound quality aspects such as stereo focus, image depth, stage width, detail and transparency. However, I was bedevilled by a feeling that the LS5/PH2 did not focus quite as sharply as I would have liked, nor did it sound as transparent as I had anticipated. Another aspect concerned communication and involvement. Here this balanced system was felt to take a step backwards in terms of excitement generated: it did not sound as dynamically expressive as the unbalanced equivalents.

Musical 'timing' did not sound as tight, nor did instrumental lines in the bass, mid and treble did not hang together as well as they can and should do with components of this anticipated class. Each strand was well defined in itself but the whole was not felt to be sufficiently driving and rhythmic. Rock sounded more 'polite' than it should, paced too steadily. Less frenetically-paced classical material fared rather better, and here the harmonic accuracy and fine feeling of power and perspective helped produce good stereo effects with top class recordings of major works. Natural vocals and a solo acoustic instrument were particularly effective and choral material was also handled well.

The PH2 was not thought quite as neutral as the LS5 and contributed a slight thinning to the upper midrange. Despite this, though, the main midrange was considered to be very accurate and the balance between cello and flute was nicely judged. Both bass and treble extremes of the PH2 were considered neutral, even, and free of coloration or audible distortion.

There is no infrasonic filtering, so the turntable arrangement needs to be well specified if the system is not to suffer from unwanted excitation at sub-audible frequencies. Fortunately on my new concrete-loaded listening room floor, the Mana twotier supports showed good low frequency stability used with the Linn LP12. As an isolated unit the PH2 was rated on my listening tests at 18 points, little different from the unbalanced alternative the PH1, though I fancy that the latter sounded a touch livelier even if it was not quite as neutral as the PH2.

There is also the matter of noise. While a balanced system has the ability to reject external noise (hum and the like), a mild hiss was evident with the Wilson speakers, and still more with the Klipsches. In other words, the LS5 was not totally silent except with lower-sensitivity speakers. It sounded best on the 30dB gain position, but this unfortunately also drove the volume control

to rather low settings in normal use. On the 12dB gain switch setting the hiss level was actually increased and the sound was felt to be not as open and relaxed. Moving from 'silent' CD sources to analogue disc, the PH2 also contributed some hiss, even with my exceptionally 'loud' Koetsu Rosewood Signature II sample. Pre-amp hiss was generally a little above disc surface noise or recorded tape hiss levels. On the great 180 gram reissue of the Decca Albeniz *Suite Espanola* [Alto High Fidelity SXL6355, see 'Accessories Club' in this issue, the PH2 was a touch noisier than this fairly quiet 1969 tape master.

In an ideal world, the high operating levels afforded by balanced operation should in theory banish hiss from electronics. In practice, however, the PH2 is configured for the higher output moving coil or moving-magnet cartridges with no adjustment save soldered-in resistive loadings, while the LS5's all-valve design results in a significantly higher hiss level than hybrid FET or bipolar technology.

CONCLUSION

These units are truly balanced throughout, and this is partly reflected in the high cost. True balanced operation also means that compromises are not possible, and the main components of the matching system must also be balanced. Auxiliary sources may be patched in via the special accessory BL1 or BL2 normal-to-balanced units, which come at additional expense.

The sound was unforced, open and highly neutral, lacking any trace of identifiable distortion, grain, fizz, roughness or hardness. The bass was also particularly clear and firm. Hum was banished when the system was properly installed.

Despite all this good news I was still left with the feeling that the LS5/PH2 combination distanced the listener from the musical performance. In a series of trials, I confess I remained not wholly convinced by this balanced system of which the LS5 and PH2 were the key components. Although not immediately to hand, my recollection of the great sound of the LS3 Classic 60 combination remains undiminished. If you think this conclusion sounds cautious, you are right; the review process was hampered in this case by the difficulty of finding a secure basis for comparison between familiar 'normal' references and the balanced equipment on trial. These units must be seen and heard, when the technical skill of the dealer will be on trial, but only the customer can make that final decision. †

The sound was unforced, open and highly neutral, lacking any trace of identifiable distortion, grain, fizz, roughness or hardness. The bass was also particularly clear and firm

LAB REPORT

With high voltage supply rails, the LS5 and PH2 circuitry has very good headroom, while the generous levels of negative feedback ensure high input impedance and fairly low output impedance plus high precision in respect of gain matching and operating bandwidth. The LS5 was flat within ± 0.01 dB 10Hz to 30kHz, and was capable of a phenomenal output into its rated power amplifier load, 100k-ohms (+50k, -50k), of 80V RMS before clipping. Even when grossly loaded with 600 ohms it could deliver a 3.5V output before distortion set in.

Two graphs are shown for distortion, both including the PH2 and the LS5 in the signal path. In [Fig 1] a 200Hz signal was applied at a healthy 10mV input, 2V output level, loaded by 100 k-ohms. The fundamental has been raised 10dB for clarity yet there was no distortion visible at all. The comparison spectrum is for high frequency intermodulation. Frequency responses were so flat as to be barely worth plotting!

The PH2's RIAA equalization errors were wholly negligible. Output impedance was 700ohms balanced while the basic input impedance was 49k-ohms across the input

terminal pair, the load effectively seen by the cartridge before ferrite resistors were applied. It had a phenomenal overload margin.

Against this must be set the noise performance, where the LS5 was certainly not state of the art, measuring in the late 70s of dBs IHF, depending on weighting; balanced CD sources will typically beat 110dB, and the LS5 did produce a slight audible hiss with the most sensitive speakers. The PH2's moving-magnet-referenced signal-to-noise was fine at 73dB CCIR, 77dB weighted, with virtually unmeasurable hum. However, referenced to the IHF m-c level, 0.5mV, itself recognised as quite generous, the measurement was just 58dB, CCIR, using a low impedance, matched termination. Thus mild input hiss is a fact of life with the PH2 and really low output m-c cartridges are best avoided.

The PH2's overall gain was 48dB, which meant the tape output of the LS5 would generate just 150mV from a nominal 0.5mV m-c input, insufficient for a number of recorder inputs.

With full gain from the LS5 added, the overall gain lifted to +78dB, in this case delivering 4.5V, enough for any power amplifier.

AUDIO RESEARCH LS5/PH2

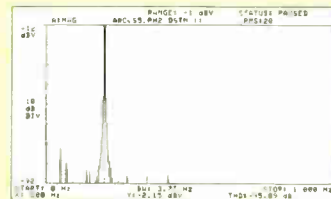


Fig 1. Audio Research LS5/PH2: harmonic distortion spectrum; no measurable harmonics

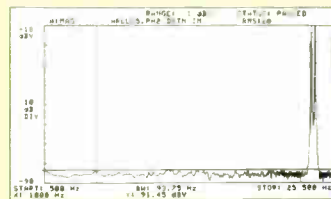


Fig 2. Audio Research LS5: high-frequency intermodulation, 19kHz/20kHz tones at 200mV. Difference and other distortions wholly negligible

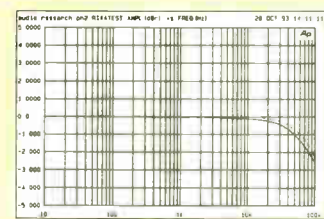


Fig 3. Audio Research LS5/PH2: RIAA equalization accuracy. Solid trace, RIAA and line; dashed trace is line stage only

Test results	Audio Research LS5/PH2		
Distortion	20Hz	10kHz	20kHz
Total harmonic distortion, aux	> -80dB	> -80dB	> -80dB
Intermodulation, 19/20kHz, aux	> -86dB	> -86dB	> -86dB
disc (m-m)	> -86dB	> -86dB	> -86dB
disc (m-c)	> -86dB	> -86dB	> -86dB
Noise			
Disc input (IHF, CCIR weighted)			
m-m	-73dB		
m-c	-58dB		
Aux/CD input	-74dB		
Residual, unweighted (volume control at min)	-80dB		
DC offset, L/R	< 0.1mV / < 0.2mV		
Input overload	20Hz	1kHz	20kHz
Disc (m-m) input (IHF)	42dB	43dB	> 40dB
Disc (m-c) input (IHF)	62dB	63dB	60dB
Aux/CD input (IHF)	> 30dB	> 30dB	> 30dB
Stereo separation			
Disc input	> 86dB	66dB	48dB
Aux input	> 90dB	> 83dB	> 75dB
Input data	m-m	m-c	AUX
Socket type	XLR	XLR	XLR
Sensitivity	see text	250mV	
Loading	see text	200k-ohms	
Outputs	80V max (100k-ohms)*		
Disc equalization error, 30Hz-15kHz	+0.03dB, -0.03dB		
Dimensions (whd, mm)	each unit, 480x134x300		
	LS5, £5290, PH2 £2895		
Typical price (inc VAT)			

* into 100k-ohms; 3.5V into 600ohms

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*It's been a long time
coming but Musical
Fidelity's FCD seems to
have it all*

by ALVIN GOLD

The FCD's top end is more neutral and extended than the Tubalog, but the bass end warmth is much as in the junior model. There is a definite 'step' in the bass response which may just be audible on wide band systems, but which added just a flicker of warmth and grace to the sound when using Mission 753s

One of the things that used to make me angry was the schizophrenic, if not actually duplicitous, attitude certain British hi-fi manufacturers had towards compact disc. At the very moment they were decrying the system as fundamentally unmusical, many were hard at work developing their own designs which in some cases turned out to be inferior to major-name commercial offerings at a fraction of the price. And let us not forget there were those, both in the press and in the public at large, who swallowed this nonsense uncritically.

Not all early digital equipment was culpable though. An honourable exception was the Cambridge Audio CD-1. It was one of the first two-box players – arguably the first designed that way purely for musical reasons – and the first with switchable filters, an idea whose time is only now about to come.

One of the very few other pieces of digital hardware that could be described as truly interesting in those early days was the Musical Fidelity Digilog, a popularly priced stand-

alone D/A converter, very similar in concept to the A&R (now Arcam) Black Box. Unlike the Black Box, which has remained available through a string of improved versions, the Digilog was poorly distributed, and after a relatively short time it disappeared, despite some excellent notices. Heaven knows why Musical Fidelity didn't follow that model up, but the fact is, until quite recently, the Digilog was the only Musical Fidelity digital product.

Uncharacteristically, Musical Fidelity's return to digital audio has been slow, even hesitant, and has suffered some reverses along the way. There were one-box integrated players of some 'me too' value but no other great distinction. Then came a more fruitful period in which Musical Fidelity started to couple CD-playing hardware to tube-based output stages. For Musical Fidelity's Antony Michaelson, tubes were his first love, and an area of the market then being re-explored after a long absence.

The products concerned were the CD-T player and the Tubalog D/A converter. Both used a unity gain valve buffer stage on the output to add distortion – nice, benign low-order tube distortion – whose effect was to mask the digital artefacts produced by the chipset. Stated baldly in this way, the idea sounds like a disaster on wheels, but in practice it was a thoroughly pragmatic solution to a real problem, and it worked, even though it had the purists tearing their hair out by the roots.

Clearly, Musical Fidelity's current amplifier product mix demands a

compact disc player of higher performance and price than anything currently in the range, and this brings us to the present day, and the £1500 FCD. The new model shares the same strong and highly successful styling as the F series pre- and power amps (by common consent the best from this stable since the A1 amplifier) and features a ribbed alloy extrusion for the front panel with cleverly integrated (if not very practical) handles, and brushed top metalwork.

The player that Musical Fidelity developed to fit inside used an improved implementation of the ideas that had already seen service in the CD-T and Tubalog. Hardware changes from the Tubalog (the most recent, and until now the best Musical Fidelity digital product) are quite extensive. Where the Tubalog uses a little-known Sanyo chipset, the FCD is built around a Philips DAC7 BitStream DAC. The power supplies are elaborate and well endowed, being based on the topology of the F22 pre-amp. There are separate regulators for each channel, and very low noise HT and heater supplies designed to keep output stage noise at a minimum. The tube stage itself is a single-ended Class-A unity gain buffer, using ECC88 triodes, and again the idea is to subsume the distortion signature of the digital hardware in the distortion fingerprint of the tubes. The difference is that because the underlying hardware is significantly better than in the Tubalog, much less of this masking is required.

Turning to fixtures and fittings,

the FCD is designed more or less according to the book. All standard play controls are available on the front panel, along with a very simple display capable of showing track and index numbers alongside elapsed track time. The traditional disdain in which Musical Fidelity holds the trapping of audiophilia is offset by an even greater disdain for unnecessary gadgetry, and the FCD ends up with no off switch for the display, no headphone socket and no optical output.

Still, all the usual facilities are available on the remote control, and the back panel roll call goes a little further than some. In addition to the usual phono-based analogue outputs and a digital electrical S/PDIF output, the FCD includes XLR-based balanced outputs. Even this betrays no covert tweakiness on Musical Fidelity's part. It is there in accordance with the view that cables shouldn't (not don't, as Quad says) make any difference to the sound. The use of balanced cables eliminates some cable-related artefacts through common mode rejection, in effect reducing sonic differences between cables. This said, I have not noticed Antony Michaelson messing around with el cheapo Tandy cables in his systems. For balanced operation he prefers Mandrake. A case of do as I do, not as I say, methinks. As a bonus, balanced mode operation yields a 6dB signal/noise advantage – in theory at least.

SOUND QUALITY

Starting with some comparisons, in the test system (Musical Fidelity F22 pre-amp, F18 power amp, Martin-Logan CLSIIzII panel speakers and Mission 753 floor-standing dynamic speakers) the FCD sat comfortably alongside a Micromega T-Drive and T-DAC and a Roksan Attesa, sounding different but at least equally valid. I felt the FCD was the Micromega's equal overall. Although the T-Drive was palpably one-up on the transport section of the FCD, a finding reinforced when the T-Drive was used via its AES/EBU balanced output into an appropriately equipped DAC (the T-DAC), the FCD's converter stage offered more grace, clarity and poise, perhaps in a slightly rose-tinted form, and easily redressed the balance. The Roksan has rather different virtues, and although it is capable of exquisitely fine analysis and has a more neutral overall balance, the FCD scored with greater presence and solidity.

Somehow the FCD seems capable of placing the instruments it is reproducing in a solid space, and of rising to any challenge. The final sec-

tions of Schoenberg's Gurrelieder (Ozawa) and Mahler's 2nd (Rattle) figured among the test discs, and in both cases extracted a powerful, surging and expansive performance with no sense of constriction and no loss of dynamics. At the other end of the scale, the FCD was in its element with small-scale material, neatly complementing some fine Brahms lieder from Marjana Lipovsek with what I am tempted to describe as a fine singing voice (if readers can cope with the anthropomorphism).

The FCD's top-end is more neutral and extended than the Tubalog (which was objectively, though not always subjectively, lacking in this department), but the bass end warmth is much as in the junior model. There is a definite 'step' in the bass response which may just be audible on wide band systems, but which added just a flicker of warmth and grace to the sound when using Mission 753s – which extend about as far in the bass (and do so as expansively) as most people will ever wish to go.

There's no doubt about it then: if you want absolute neutrality you should look elsewhere, but unless you happen to be using a system which is wide open down to about 20Hz (which probably means you're one of the few with a THX system), or your system is grossly lacking in LF control (less likely than it once was in these days of digital audio) the FCD's propensity to romanticise the bass is not taken to excess and will not embarrass you in front of your friends. In context, there is less real boost, and certainly much less overhang, than you would expect from, say, a record player, unless that record player happens to be a Townshend Rock.

The only problem encountered on test was a modulation of the error correction process, where muting of a marked disc tracked the dynamics of the music itself. I reported this to the manufacturer who tells me that the effect has already been identified, and traced to acoustic feedback. A solution in the form of a non-perforated top-plate has been introduced into production players, and is said to offer a complete cure.

CONCLUSION

The reason for my being just as enthusiastic about this player by the end of the test period as I was when I first saw it is that, along with all the virtues already outlined, it offers a tremendous sense of 'being there' – an overworked phrase, but no less valid for that. Musical Fidelity's recent digital products seem to have been building up to the FCD, which just about has it all. ♪

MUSICAL FIDELITY FCD

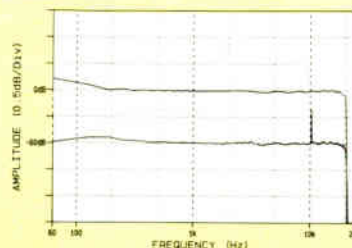


Fig 1. Musical Fidelity FCD: frequency response at 0dB and at -60dB (0.5dB/div)

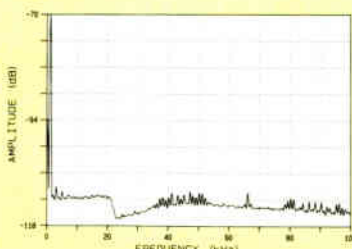


Fig 2. Musical Fidelity FCD: spurious output to 100kHz resulting from 1kHz tone at -70dB dithered

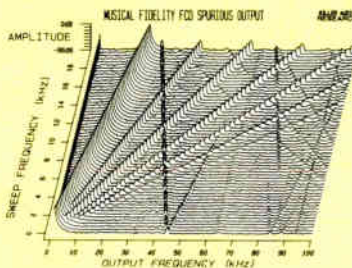


Fig 3. Musical Fidelity FCD: spurious output to 100kHz resulting from 0-20kHz sweep tone at 0dB

Test results	Musical Fidelity FCD		
	20Hz	1kHz	20kHz
Channel balance (dB)	0.03	0.07	0.07
Channel separation (dB)	68.1	86.3	63.6
THD vs level, 0dB	-51.4	-58.7	-55.4
-30dB	-74.7	-75.2	-74.5
-60dB	-52.2	-44.5	-48.0
-80dB	-28.5	-27.0	-27.8
-90dB	-14.0	-22.5	-19.0
Dithered, -100dB		-16.5	
Dithered, -110dB		-6.50	
Resolution at			
-60dB		+0.04	+0.04
-80dB		+0.73	+0.38
-90dB		+1.42	+0.88
-100dB		+1.90	+2.90
Peak output level, L/R	2.66 1V/2.64 1V		
Relative output level	+2.5dB		
Output impedance	100ohm		
Radio frequency spurious	10mV broadband		
1Hz noise modulation	+3.5dB		
CCIR MD, 0dB	-76.1dB		
Suppression of stop-band IMD	60.9dB		
De-emphasis accuracy, 1kHz	+0.01dB		
5kHz	+0.04dB		
16kHz	+0.05dB		
Signal-to-noise ratio			
With emphasis, OLSB	102.9dB		
Without emphasis, OLSB	103.4dB		
Without emphasis, ILSB	100.3dB		
Digital output	XLR (balanced), Coax & Toslink		
Track Access Time (99)	3.5secs		
Typical retail Price (inc VAT)	£1500		

LAB REPORT

The test sample was apparently a very early or pre-production machine, whose display, logic and main board all bear a resemblance to SAA7350-based bitstream players from TEAC. The circuit board still contained its original analogue stage (and phono sockets!), hard-wired into MF's unity-gain triode output buffer. Carelessly, the left and right channels were reversed.

Furthermore, this latter stage is responsible for the high 0.12–0.27% peak-level THD, visible as 2nd–6th harmonics on the 3D plot, while the V-shaped stopband images are released by the 8x digital filter (an SM5840 from NPC). Below -30dB, both distortion and linearity are perfectly consistent with Philips' SAA7350 DAC signal-to-noise ratio. The response is boosted by some +2dB at 20Hz but shows no premature roll-off at higher frequencies. Do watch the high 2.7V output, especially during A/B demonstrations.

Paul Miller

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*The 750 Ordinal DAC,
with its interchangeable
digital filters, brings
Pink Triangle into
the 1990s!*

by PAUL MILLER



PINK TRIANGLE ORDINAL



PT's various 8-times filter options all introduce a subtle seasoning of their own, even if the basic flavour of the Ordinal always seems able to shine through. Allied to either a TEAC P-10, P-700 or Theta Basic CD transport, this flavour is clear enough, a lemon-fresh sound

Pink Triangle goes digital! A few years back this headline would have made front-page news, but along with Naim, Linn and Roksan, PT's acceptance of commercial reality is simply a sign of the digital times. And so the 750 Ordinal DAC was born, a streamlined and cost-effective version of its original Da Capo outboard converter.

Like its costly stablemate, the Ordinal will accept one of three interchangeable digital filters (four if you include the up-and-coming SAA1307 from Philips), permitting instant upgrades to the on-board double-differential DAC7 converter. All this plus a variety of optical and electrical (BNC) digital inputs furnishes a DAC that's considerably more flexible than its plain wooden carcass would suggest.

SOUND QUALITY

Sure enough, PT's various 8-times filter options all introduce a subtle seasoning of their own, even if the basic flavour of the Ordinal always seems able to shine through. Allied

to either a TEAC P-10, P-700 or Theta Basic CD transport, this flavour is clear enough, a lemon-fresh sound that relishes the bite of percussion or the sizzle of strings without grating on the ears. Indeed, any tendency towards sharpness is offset by the slightly warm and fulsome quality of its bass which is neither as articulate nor sharply focused as the mid or treble.

An 18-bit digital filter: this is the quietest-sounding option, its reduced dynamic range reflected in a uniformly smaller but often very much tidier picture of musical events. Julia Fordham's 'Swept' is an ideal proving ground for, in 18-bit mode, her voice adopts a more compact proportion, the trace of natural sibilance contributing to a slight fuzziness rather than any hint of aggression.

With a 20-bit digital filter: this, by contrast, is a tauter-sounding but slightly colder option, a combination that sounds larger and sharper in focus while also being a two-edged sword, for the sheer 'blackness' of its backdrop only highlights any glint

of sibilance, and emphasise the brittleness of brass percussion.

A 22-bit digital filter: unfortunately, in a purely fiscal sense, this costly option is also the most refined, combining the warmth and easiness of the 18-bit filter with the sharper focus and detailing of the 20-bit iteration. Fortunately, it also succeeds in ridding the Ordinal of the softness and restricted dynamics of the former, while simultaneously rejecting the harsh and occasionally gritty overtones of the latter.

Poulenc's interpretation of 'Chansons Françaises' (French Folk Tunes) sounds appropriately cheeky with this 22-bit filter, as the delicate whispers of soprano ascend to the highest vaults of Snape's Maltings leaving the basses and tenors to strike a deeper and richer ambience. Above all, the voices are so beautifully balanced, fresh, sharp and articulate that the twisting harmonies and staccato punctuation of 'Clic clac danse sabot' flow quickly and confidently from the speakers, flitting from left to right

with a swiftness that belies their momentum.

Switch instead to the 20-bit filter and this fleeting confidence is exchanged for a harder and more ruthless impatience, one that accentuates the leading edge of the soprano at the expense of subtle echo and decay. The impression of extra detail and accuracy is purely superficial: in truth it's simply more forthright, a bluff revealed by the fatigue of extended listening. Then there is the 18-bit filter which belies this eagerness to impress but, in turn, restricts the freedom and scale of the performance as a whole. It's certainly the more comfortable option but one that teases rather than fulfils.

CONCLUSION

Pink Triangle is an unconventional outfit at the best of times and this is reflected in the typically eccentric design of its Ordinal converter. There are various technical quirks yet to address, but even these cannot obscure the inherent signature of its alternative 18-, 20- and 22-bit filter algorithms, filters that will inevitably polarise opinion one way or the other. For the record, both 18- and 22-bit options get my vote at £750 and £1000 respectively.

So the ability to switch from one digital filter topology to another makes for intriguing listening, especially when this offers variations on a proven and thoroughly recommended theme. Clearly Pink Triangle's three-pronged approach provides three opportunities to entice every potential customer! ↕

PINK TRIANGLE ORDINAL DAC

LAB REPORT

The Crystal CS8412 input receiver's output clock is divided by two to 128xP, selected by PT's input logic and then multiplied by 3-times to 384-times. This buffered data is then re-clocked using a sub-20Hz PLL before reaching the chosen filter module.

These screened modules include a combination of either Yamaha YM3414 (18-bit), Burr Brown DF1700 (20-bit) or Yamaha YSF-201 (22-bit) 8-times oversampling filters in conjunction with a Philips SAA7350.

Incidentally, as the SAA7350 accepts a maximum of 20-bit words, the output of the YSF-201 must be noise-shaped from 22- to 20-bits.

Either way, the SAA7350 provides an additional 48-times oversampling, truncating the data to a single

bitstream with 3rd-order noise-shaping. This bitstream is then addressed to twin-differential TDA1547s (DAC7s) which are allied to a gentle 3rd-order analogue filter and very low impedance output buffer.

It is this combination which determines the slope and pattern of ultrasonic noise seen on the -70dB plot [fig 1] whose excellent response to dithered signals is common to all three digital filters. Moreover, the simple analogue stage cuts the first 8-times oversample image by just 42dB, leaving a 17mV residue at 352.8kHz with all 18-, 20- and 22-bit filters.

Similarly, the poor signal-to-noise ratio of the DAC is restricted by transformer noise and not the digital filters (save the 18-bit option). These extended mains harmonics amount to -75.1dBV (-81.6dB rel to peak output), reducing the A-weighted S/N ratio

still further to just 93.7dB on the left channel.

The extent of this noise, along with a sequence of discrete 15.7Hz spikes (a PSU/DAC7 intermodulation), is clearly revealed on the expanded plot of a 1kHz/-90dB tone [fig 2]. Hum also penetrates the low-level (-60dB) frequency response to provide a warning 'bump' which, along with the -0.45dB treble cut, remains consistent from filter to filter.

Nevertheless the noise shapers appear to be disabled until a 2LSB offset is reached whereupon the 'real' S/N drops to just 87.7dB, suggesting a dynamic range closer to 15 than 16 bits when using the basic 18-bit filter. Signal-to-noise and dynamic range improve with 20-bit filter though noise modulation also increases accordingly. There is no appreciable variation in low-level linearity, however.

The 22-bit filter achieves a better balance between mod noise and dynamic range, though its peak-level THD increases from 0.00028% (18-bit, 20Hz) to 0.0038% and 0.0005% (18-bit, 1kHz) to 0.0046%. Otherwise the 3D distortion plot, with its freedom from all stopband noise, is common to all filter options.

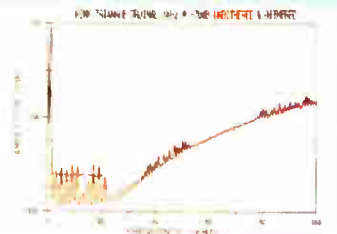


Fig 1. PT Ordinal: 1kHz trace at -70dB. Black dithered, red undithered.

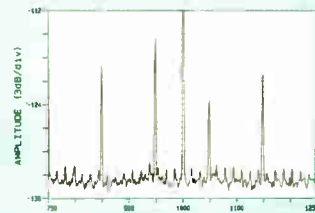


Fig 2. PT Ordinal: 1kHz at -90dB with 22-bit filter

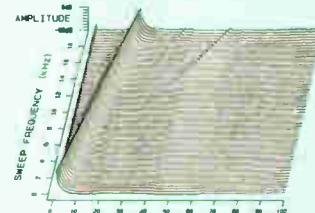


Fig 2. PT Ordinal: spurs to 100kHz from 0-2-kHz sweep at 0dB (22-bit filter)

Test results

	Pink Triangle Ordinal Outboard O/A Converter		
	20Hz	1kHz	20kHz
Channel balance (dB)	0.06	0.06	0.13
Channel separation (dB)	118.0	118.5	124.7
THD vs Level 20bit:			
0dB	-103	-101	-80.1
-30dB	-86.5	-81.5	-60.6
-60dB	-59.2	-53.1	-30.5
-80dB	-28.2	-29.5	-10.1
Dithered, -90dB	-15.2/	-21.3	-0.15
Dithered, -100dB		-17.3	
Dithered, -110dB	No Signal		
Resolution (18-bit/20-bit/22-bit):			
at -60dB	-0.01/+0.01/-0.01		
at -80dB	-0.08/+0.03/-0.16		
at -90dB	-0.33/-0.27/-0.75		
at -100dB	+1.18/-0.65/-1.40		
Peak output level L/R	2.076V/2.090V		
Relative output level (dB):	+0.35		
Output Impedance	<10hm		
RF spurs	16mV at 352.8kHz		
1Hz noise modulation (dB): (18-bit/20-bit/22-bit)	+2.3/+8.9/+6.4		
CCIR IMD, 0dB:	-102.5/-99.5/-93.5		
Stop-band rejection (0dB)	>105/>105/>105		
Signal-to-noise ratio (A-wtd) (dB):			
w emp, 0LSB	99.1/99.2/99.0		
w/o emp, 0LSB	99.1/99.1/99.1		
w/o emp, 2LSB	87.7/99.1/98.7		
De-emphasis accuracy (dB):			
1kHz	+0.16		
5kHz	+1.42		
16kHz	+0.74		
Digital input	BNC with Toslink/AT&T options		
Typical retail price (inc VAT)	£745 (inc 18- or 20-bit filters) plus £250 for 22-bit filter		



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Paul Klipsch has been building speakers in Hope, Arkansas since the President went to school there. The Forte has been around only since Nixon was in the White House...



by MARTIN COLLOMS



SOME LIKE IT LOUD!

With 200W of peak programme per channel, an almost ear-splitting level can be obtained, easily filling larger rooms. Quite honestly, decently loud levels can be reached with just 25W per channel

Klipsch is a name with a long history. This Arkansas speaker company was founded by engineer Paul Klipsch in the late 1940s with the Klipschorn, a three-way horn-loaded design based on cinema practice. This is still in production and has undergone only relatively minor changes over the years. While the cinema designs were free-field and massive, the relatively compact Klipschorn uses the room corner to continue and massively enlarge the mouth of the bass horn section to provide a still astonishing combination of 35Hz low bass and exceptionally high sensitivity, setting an industry record for a consumer product. This design has a patent dated 1941.

Back in the mono days, these horns were sold singly: stereo Klipschorns require a sizeable room where two reasonably symmetric and unobstructed corners can be devoted to the speakers. Where the spacing has been too wide for the best central focus, it has been customary to place a third, smaller Klipsch in a central position, its blended mono output run at a lower level to provide some reinforcement of the centre image (shades of Dolby Surround Sound practice here but 30

years earlier; the centre-fill idea dates back to Bell Labs in the 1930s).

You definitely need the right (large) room for the £4000-a-pair Klipschorns, and their super-high sensitivity (104dB for 1W at 1m) can cause matching problems with system noise and a limited volume control range, but the company produces a number of other models. If some loss in low bass is acceptable, the components and main specification of the Klipschorn can be obtained in the La Scala model at just over £2000 a pair in plain black. The smallest floor-standing model is the Heresy [reviewed by KK, *HFN/RR* Sept '93], an affordable £910 in real wood finish. The Heresy is a baby by Klipschorn standards, yet it kicks-off with a large 310mm bass unit and both mid and treble units are high output horns. Heresy remains the highest sensitivity speaker available anywhere for the money. The only explanation for these moderate prices is the decades of low factory gate inflation at Hope, and the very long design lifetimes for these models.

Somewhere in the middle of the Klipsch range there is a well-sized floor-standing speaker of classic 1960s appearance, which seems to

offer an intriguing performance combination at a cost of £1430. Black or real walnut or light oak finishes are available. First introduced in the mid 1960s, the Forte II stands 900mm high; it is unfashionably wide at 420mm, but still manages to look quite well-proportioned due to a modest 310mm depth.

Efficiency (sensitivity*) is a serious matter in loudspeakers. In general, efficiency costs money and manufacturers often boast of over-size energising magnets in the quest for high sensitivity. The most common type of speaker is a two-way using a wide-range cone driver covering bass and midrange, leading to a small dome tweeter, 20/25mm in diameter. At best, the dome tweeter has a 91dB/W sensitivity while many average only 86 to 88dB. Likewise, if reasonable bass is to be obtained from a moderate box volume, the bass/mid unit generally has to have a pretty heavy cone and hence a moderate sensitivity, typically 86dB/W. Some of the smaller wide-range systems (such as the Celestion SL600 or the BBC LS3/5A examples using the smaller Dynaudio or Morel drivers, including the new BBC miniature LS5/12A) are even poorer, with

sensitivities down to 80 or 81dB.

Loudspeakers exhibit dynamic compression. Many areas are involved including limiting at the bass extension maximum, compression in reflex port or ABR systems as their limits are reached, magnetic saturation in the cores of crossover networks, heating effects in loudspeaker motor coils and increasing distortion in the magnetic circuits of loudspeakers. A neat generalisation, espoused by Klipsch, is that distortion is proportional to input power. Thus low distortion and low compression both result from high-efficiency designs which require little electrical power. As a bonus, large and costly power amplifiers are rendered unnecessary, even when high sound levels are required.

The Forte is a three-way design of very high (rated 99dB/W) sensitivity, a rated 8ohm loading and a nominal 32Hz to 20kHz frequency response, ± 3 dB. Capable of operating well on as little as 10W, its 100W rated capacity (500W peak as defined in the US) means it is capable of producing a really loud 119dB at one metre, or 114dBA for a stereo pair in a typical listening room – seriously high!

Bass is provided by a 310mm pulp-cone steel-framed woofer, ABR loaded by a 380mm (15in) heavy pulp-cone passive element, filling the entire width of the rear panel. Crossing over at 800Hz, the midrange is based on a Tractrix design, a relatively short horn which was developed to reduce time delay and provide a better control of off-axis responses over a wide four octave effective bandwidth. The Tractrix horn flare shape combines a narrow exponential section at the throat with a short conical region, leading to a curvilinear hyperbolic mouth of high expansion rate. This blends into a rectangular face-plate, which mounts cleanly on a standard baffle.

Coming in at 6kHz, the treble horn is less complex in view of its narrower bandwidth. This also has a rectangular face plate exit, its polar response tailored to match the mid unit. A phase corrector at the diaphragm ensures a smooth response to 20kHz.

Built of 20mm board, the enclosure is quite lively and is unbraced; but the panel areas are chosen to avoid unfortunate resonance coincidences. The high quality crossover uses laminated iron-core inductors and horn matching transformer, together with plastic film capacitors. The system is single wired with 5-way binding posts.

The review pair of Fortes was quite new and needed 20 hours or so of running in before an initial

tightness in the lower bass was dissipated and a more natural balance obtained. Even before this happened, the overall tonal balance was felt to be satisfactory and rang no alarm bells. I admit to a preconception that the Forte would sound rather loud and 'forward' with an obvious horn-like signature, but while I cannot give it top marks for low coloration, my reservations were swept aside on first hearing.

SOUND QUALITY

Certainly this speaker has an 'old fashioned' quality about it, a degree of 'woody' sound from the enclosure, for example. It would be only too easy to critically analyse this area, compare it with modern low-coloration examples such as a KEF 103/4 or a Celestion SL700, and then dismiss the Forte out of hand. In practice, while you know the mild coloration is there, strangely it did not interfere with the music very much; it was like having a speaker nearer to the floor or a wall than it should be. I found that I could live with this mild boxy coloration, where a similar honk or hardness from a plastic-cone midrange would be unacceptable.

For those unfamiliar with the benefits of a high efficiency speaker, the Forte is a great hearing experience. High efficiency confers an exceptional dynamic accuracy, and you can't really understand what that means until you hear it. Moreover, you don't need loud sounds to recognise it. The Forte was just as 'dynamic' on soft sounds as on peaks; and those peaks were magnificent. The natural dynamics of subtle transients, from small percussion sections to plucked instruments and pizzicato playing were particularly rewarding. Small low-efficiency speakers sound compressed and constrained by comparison. When the going gets tough the Forte excels.

With 200W of peak programme per channel, an almost ear-splitting level can be obtained, easily filling larger rooms. Quite honestly, decently loud levels can be reached with just 25W per channel, this including valve (tube) electronics. My choice would be a Conrad Johnson Premier Eleven or perhaps an Audio Research Classic 60.

The mid and treble sounded smooth and clear, and, while stereo focus was unspectacular up close, in a larger space, listening at 4 metres or so, the output sounded well integrated with pretty good focusing and good depth. The room sound was not particularly ambient, presumably a result of the controlled horn directivity.

Tonal balance was also good, with

a pleasing character on classical strings. Some coloration, present on the lower register of piano, did not obstruct the notes or intrude on the musical component of the performance. Piano dynamics were excellent, a difficult feat.

On rock the Forte had something special on offer. Exciting, powerful, dynamic, free of confusion even with thickly textured scoring, its trump card was terrific involvement brought about by first-rate rhythm, timing, and pace. The music raced along, perhaps confirming the association between high sensitivity and a dynamic, rhythmic sound.

You might not buy the Forte for absolute accuracy but you might find it hard to resist for its natural unforced ability to involve the listener. On rock you can play it as loud as you like, neighbours permitting, and it never shows any sign of strain.

The bass is unusual, certainly with boxy associations, nor does it go very deep. However, it is redeemed by the gut-wrenching power on tap, by its speed, attack and its obvious sympathy with electric bass guitar and acoustic bass instruments.

CONCLUSION

The Forte II provides a fascinating and entertaining insight into the sounds of natural dynamics, and offers a superb dynamic range at an affordable price, especially if you consider the moderate amplifier power that is required to make it perform. In context, its exceptionally high efficiency was barely compromised by the lower than average impedance or amplifier load factor. Such high sensitivity also endows it with great clarity and ease, with audibly lower distortion than comparable low sensitivity systems.

On the debit side, it could prove difficult in smaller rooms and its coloration and stereo focus was not on a par with smaller reference systems. Notwithstanding, it gave a very musical result with classical material, while its delivery on rock was impressive. Quality of pace, rhythm and dynamics were first-rate; it was powerfully involving and could take you a big step closer to a live performance, this not just a consequence of the very high maximum sound levels it could generate.

A blanket recommendation is inappropriate here – a safer bet would be the respectably efficient Tannoy D700 [HFN/RR, July '93] – a more complete performer – and yet the Forte II has real class in a classic mould and is well worth seeking out. In fact, for some instinctive listeners an immediate bond may result, uncomplicated by any need for analytical thought. ▶

A neat generalisation, espoused by Klipsch, is that distortion is proportional to input power. Thus low distortion and low compression both result from high-efficiency designs which require little electrical power

**These two terms tend to be used interchangeably. Strictly, efficiency is the effectiveness with which the speaker converts input power into sound, which could be expressed as a (low) percentage; sensitivity is defined as the sound level obtained from a given voltage input, usually 2.83V, at a specified distance from the speaker (usually 1m), which will depend on the speaker's impedance as well as its inherent efficiency – Ed.*

KLIPSCH FORTE II



Fig 1. Klipsch Forte II: on-axis 1m response, with LF correction shown. Note separate additional traces for bass, mid and treble; dot/dash trace is near field correction



Fig 2. Klipsch Forte II: forward response family with 3rd-octave weighting; solid trace axial, dotted trace -15° below, 30° lateral (dashed), 45° lateral (long dash). Axial response is now normalised to flatness for clarity. Dot/dash trace is LF correction



Fig 3. Klipsch Forte II: room averaged response in third octave. Dashed traces show impedance on a scale of 2ohms per division, baseline zero

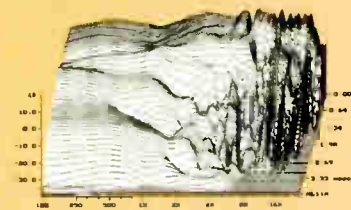


Fig 4. Klipsch Forte II: MLSSA waterfall display of energy decay, 25dB dynamic range, 0.1ms filter risetime

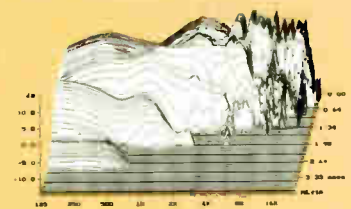


Fig 5. Klipsch Forte II: MLSSA waterfall, display of energy decay, 50dB dynamic range, 0.2ms filter risetime

Test results	Klipsch Forte II
Size (hwd, mm)	900x420x310
Recommended amplifier power per channel	100W
Recommended placement	free space on floor
Frequency response, ±3dB at 2m	80Hz to 20kHz
LF rolloff (-6dB point at 1m)	48Hz
Bass frequency extension (typical in-room)	40Hz
Voltage Sensitivity (ref 2.83V) at 1m	97dB/W
Approximate maximum sound level (pair at 2m)	115dBA
Impedance drive characteristics (ease of drive)	good
Typical retail price per pair (inc VAT)	£1450

Quality of pace, rhythm and dynamics was first-rate; it was powerfully involving and could take you a big step closer to a live performance, this not just a consequence of the very high maximum sound levels it could generate



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B14 4PB. Tel:
021-430 7817.

LAB REPORT

The full specified 99dB sensitivity was not attained for a broad-band pink-noise signal, though the mildly elevated mid treble was loud enough to account for the manufacturer's rating and for that matter the subjective sensitivity. 97.5dB/W was the book value, somewhat compromised by the impedance: while rated at 8ohms (a fair reading over much of the range) it fell to a 3ohm minimum at 150Hz. The ABR was tuned to 40Hz, the practical lower limit of this system. This should not pose any problem for transistor amplifiers, while valve models would be better off on a 4ohm transformer tap if available. Conversely, the sensitivity was so high that even 15W of unclipped power from a small but good amplifier will result in serious 105dBA in-room sound levels!

One would expect the outputs of the drivers in this large speaker to be less well integrated than usual at a 1m measuring distance. With the mic on the mid/treble axis the treble range was tidy, ignoring a proximity notch at 5.2kHz. The bass driver is further away from the mic and hence on this graph its level is depressed.

Given some allowance for

proximity, the Forte will meet ±3dB limits 80Hz to 20kHz [Fig 1]. The bass was definitely over-damped, quite extended but noticeably dry. The -6dB point was at 48Hz, outside the specification, but in practice room gain ensured good bass levels down to 40Hz. A virtue of the massive bass system was the high linearity. Distortion at 96dB was negligible over the entire frequency range, 0.1% or better. Even at 50Hz the bass distortion was orders of magnitude lower than for the smaller, lower sensitivity competition.

Nearfield measurement indicated that the pulp-cone ABR did radiate acoustic energy from inside the enclosure in a series of bumps from 200Hz up, the largest present (at 420Hz) just 8dB down on the primary output at 47Hz.

Looking at the off-axis responses, at 15° below axis the notch at the lower crossover point deepened (800Hz) while the upper mid and treble horns remained in very good control. Likewise the 30° and 45° lateral responses nicely stepped, indicating consistent sound over a range of forward axes, unusual for the size of speaker [Fig 2].

The MLSSA waterfall representation of

energy decay was confused by the driver delays. Nevertheless the impulse weighted 5dB per division graph [Fig 4] looked quite presentable. Turning to the more frequency-conscious 10dB/division display [Fig 5] the longer term resonant behaviour was clearly rather complex with lower level horn cut-off modes, edge transition ringing and the like. In this region the Forte was measurably inferior to a number of low coloration models.

In the room-averaged response [Fig 3], the result was distorted by the proximity of the 310mm bass mid unit to the floor, exaggerating the floor reflection effect. While the Forte was a touch lumpy in the low range, this graph made it look worse than it really was. The low bass was quite extended but depressed relative to the midrange, while the 170Hz prominence was audible.

Conversely, the range above 1kHz was well controlled to 20kHz and sounded like it.

Pair matching of the Forte II was fine at typically ±0.5dB and the grille was found to have little effect thanks to the deliberately directive horn drivers. But some 0.5 to 0.7dB of treble loss was present; Klipsch might well investigate a more acoustically transparent fabric.

PAUL KLIPSCH
There can be few hi-fi companies



with a longer record of continuous production and unchanged ownership than the one founded in 1946 by Paul Klipsch.

Born in Elkhart, Indiana, on March 9, 1904, Klipsch began developing his own speakers in the 1930s, but was interrupted by the war in 1941.

In the mid 1950s, pursuing the idea of a centre channel set-up for stereo, Klipsch came up with the Heresy.

'I didn't invent the horn loudspeaker, I just folded it so you could get in the same room with it!' he says. Always ready to give credit to others where due, Klipsch names Paul Voigt and WB Snow of Bell Labs as two major influences in his own development of a full-range horn-loaded loudspeaker. ↵



Transmission line speakers have the reputation for free and easy production of floor shaking bass. But large cabinets do not fit in with everyone's idea of domestic harmony, nor does the expense of such extensive woodwork meet with the approval of every purse. TDL's answer is a truncated line, which even allows for a 'bookshelf' size design

REFLEX ACTION: TDL's RTL RANGE

Associated with large transmission line loudspeakers for many years, TDL has now brought out three relatively Lilliputian designs: the Reflex Transmission Line

by **PETER J COMEAU**

Each year, at hi-fi shows, visitors are intrigued by waves of low frequency emanations wafting down the corridors. Locating the source, they end up in the exhibition room of TDL, hosted by John Wright. Wright's design pedigree is in transmission line speakers, their

often gargantuan cabinets enclosing a folded 'pipe' that gradually attenuates the rear output of the bass drive unit.

A true transmission line would ensure no reflection from the end of the line, partially achieved in practice by opening the line at its extremity and allowing the largely unattenuated lowest frequencies out into the room. As the sound pressure wave moves from a high pressure area to

RTL1



LAB REPORT

Forward responses are none too even throughout the midrange. TDL's bass driver has a broad area of depression below 1kHz, resulting in an average 3dB loss of power between 300Hz and 900 Hz. Beyond this the cone is in breakup and the output is evened out by the action of the centre phase plug, this also ensuring a smooth transition to the treble unit at 3kHz. Bass recovery below the depressed midrange is managed by lively resonances from driver at 95Hz and port at 50Hz. The room averaged response shows near rear-wall loading (best subjective result) where bass integration is lumpy.

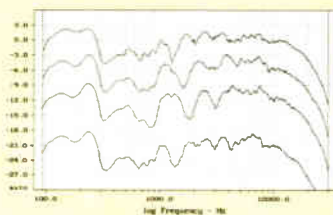


Fig 1a. TDL RTL1: response family, 1m. From top: on-axis; 15° vertically off-axis; 30° vertically off-axis; 30° laterally off-axis

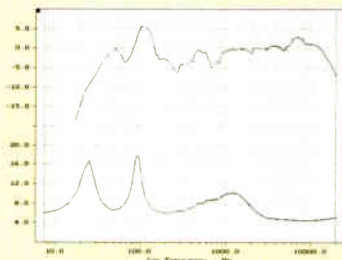


Fig 1b. TDL RTL1: room-averaged response at 2m, 1/3 octave weighting. Lower trace shows impedance, 4ohms/div

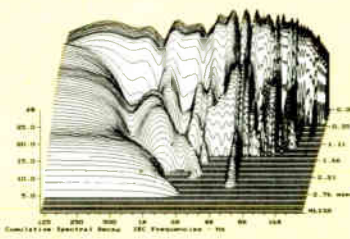


Fig 1c. TDL RTL1: MLSSA 'waterfall' display of cumulative spectral decay

Test results	TDL RTL1
Power suitability	20 to 80W
Recommended placement	10 to 15cm near rear wall
Response consistency	poor
Bass frequency roll-off (-3dB point in room)	25Hz
Sensitivity (for 2.83V or 1W, 8ohms, 1m)	87dB
Impedance (minimum/typical/ease of drive)	4.4ohms/5.5ohms good
Dimensions (hwd/mm)	390x200x220
Typical retail price (inc VAT)	£159.95

Supplier:
TDL Electronics Ltd, Unit 2, Pilot Trading Estate, High Wycombe, Bucks HP12 3AB.
Tel: (0494) 441191

standard room pressure, the phase of its internally reflected component is reversed, enhancing low frequency back-loading of the bass unit. Transmission line speakers have the reputation for free and easy production of floor shaking bass.

Large cabinets do not fit in with everyone's idea of domestic harmony. Nor does the expense of such extensive woodwork, much of it internal, meet with the approval of every purse. TDL's answer is a cabinet loading that it calls 'Reflex Transmission Line'. By shortening the line well below the length called for, to approximate to the 'quarter wave loading' under which conventional transmission lines operate, the cabinet begins to act more as a Helmholtz resonator and has much in common with a port-loaded speaker. On the other hand, the conventional reflex cabinet commonly suffers from distortion due to the high air velocities encountered in smaller diameter port tubes, and a fair degree of midrange coloration is released from what is essentially an opening into the cabinet interior. The reflex transmission line has to be made large in diameter due to its considerable length, so air velocity and corresponding distortion is low, while the attenuation of mid frequencies, by bends in the line, ensures only bass is produced from the line exit.

This technique has allowed TDL to construct smaller and cheaper speakers, preserving much of the extended bass performance for which the company is renowned. TDL refers to the RTL1 as a 'bookshelf' model. RTL2 and 3 are floor standing designs, with the latter more suited, given its increased height and depth, to the larger room.

TECHNOLOGY

All three share similar drive units: a 170mm polypropylene coned bass unit sourced from Elac and Vifa's excellently smooth 19mm soft dome treble unit. The bass cone is deeply flared, and finished at the centre with a Cobex phase plug. A rubber surround terminates its outer edge. Impetus comes from a two-layer voice coil, given the freedom of a long throw via a 'bump back' or domed rear plate on the substantial magnet. RTL3 boasts a Kapton voice coil former for higher power handling.

Bass units are built on a wide flanged steel chassis, surface mounted (using wood screws) on the baffles, while the treble units are recessed flush. A cloth grille covers the whole front of the speaker. Finish is vinyl over high density chipboard, with black ash and an attrac-

tive rosewood colour on offer. Both floor-standing models can be equipped with spikes to order (as reviewed), which screw into sockets in the 30mm high plinths that grace the bases.

Almost identical second-order crossovers are used in each speaker, the main difference being the lack of a treble attenuating resistor in the RTL3 to accommodate the extra efficiency of two bass units. Crossover frequency is 3kHz, the second-order slope being steepened by the natural roll-off of the bass unit, smoothed by the phase plug. A vertical divider in each, in conjunction with a short shelf, forms the 'reflex transmission line'. Whereas the original *Wireless World* Bailey transmission line design used graded amounts of long-hair wool throughout the line to attenuate and slow down the rear radiation from the bass unit, a stuffing of BAF wadding in the cabinet suffices in the RTL models. This is laid out more as an absorbent, particularly at mid frequencies, than the 'fibrous tangle' required for slowing air movement. However, a layer of wadding placed over the entrance to the line provides some damping of air flow. The exit of the line is split into two rectangles filled with reticulated foam to make sure there is no tendency to 'chuff'.

TDL RTL1

Although the dimensions of the cabinet allow shelf mounting, in practice the depth and height of the RTL1 is better suited to support on a pair of rigid stands about 48cm tall. The speakers are balanced for bass and lower midrange reinforcement by a rear wall, and can be pulled away by 10 to 15cm if the bass is considered too full in smaller rooms. Only a single pair of terminals is fitted to the crossover, there being no provision for bi-wiring in this model, but these are at least on 19mm centres unlike the other two models.

SOUND QUALITY

A full bass does not a great speaker make, at least not all by itself. The RTL1's bass seemed rather forced, which required a corresponding increase in treble power to compensate, leaving the midrange reticent as a result. Pipe organ, that beloved tester of transmission line speakers, came across well with an emphasis to the reed stops, and a free-breathing quality to the pedal notes that was admirable in a small speaker. Percussion was similarly treated, and brass given a pleasingly rasping texture without the annoying brightness that sometimes accompanies this effect from less controlled tweeters.

RTL2

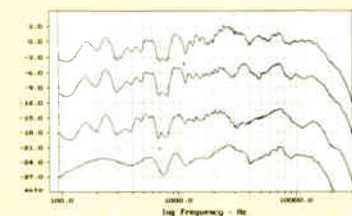


Fig 2a. TDL RTL2: response family, 1m. From top: on-axis; 15° vertically off-axis; 30° vertically off-axis; 30° laterally off-axis

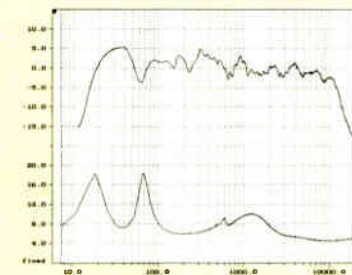


Fig 2b. TDL RTL2: room-averaged response at 2m, 1/3 octave weighting. Lower trace shows impedance, 4ohms/div

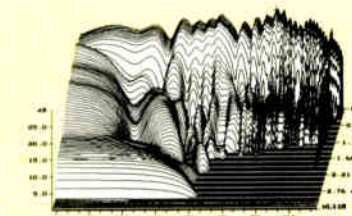


Fig 2c. TDL RTL2: MLSSA 'waterfall' display of cumulative spectral decay

LAB REPORT

Of this group, the RTL2's test results indicated the best aligned set of responses, despite a small elevation in level through the crossover region. Although the output below 1kHz still showed some depression, the room averaged response shows how rear wall loading helps restore power in this area, producing an overall balanced output throughout the room. The impedance graph clearly shows the first major cone breakup mode at 600Hz, and also the reflex action of the 'line'. This was better damped than the RTL1 and gives a strong bass output around its tuned 40Hz. The MLSSA 'waterfall' of cumulative decay is relatively clean, though the lower midrange suffers from some extended overhang. Impedance is an easily driveable 5-6ohms.

Test results	TDL RTL2
Power suitability	20 to 80W
Recommended placement	near wall
Response consistency	good
Bass frequency roll-off (-3dB point in room)	30Hz
Sensitivity (for 2.83V or 1W, 8ohms, 1m)	88dB
Impedance (minimum/typical/ease of drive)	4.5ohms/6ohms good
Dimensions (hwd/mm)	750x200x220
Typical retail price (inc VAT)	£249.95

Switching to vocal renditions, however, the midrange imbalance was thrown into relief. Sibilance was noticeably enhanced, and treble voices given prominence over other choisters. String tone was too light, so that cello lost out in its fight with both violin and double-bass.

You will have gathered that there was little to excite the listener. Apart from low bass power and sparkling treble, there was little attack or incisive detail to command attention. The balance was unobjectionable and encompassed the softness and niceness that lulls you into a peaceful repose, but there was nothing here to set the nerves a-tingle.

TDL RTL2

Designed as floor-standers, the RTL2s seem altogether too diminutive to act as transmission line designs. Two points save them: one is that the crossover integration is good enough to enable a consistency of performance over a wide listening angle, including moving off axis vertically. The height of the treble unit, an impossibly low 65cm above floor level, means that for true on-axis listening one has to slouch down in a position that is guaranteed to provoke back problems. But the speaker does seem to have been balanced for a higher listening axis, retaining its treble sweetness and midrange integration from a more normal seating posture.

The second point concerns the restriction of the line to a narrow slot bending its way along the back and base of the cabinet, leaving most of the internal volume to absorb output from the rear of the bass unit. The line tunes this volume to resonate around 40Hz, filling in the lower reaches of the bass unit admirably. It doesn't attempt to emulate the incredibly extended bass of the TDL transmission line models, so the restricted cabinet size is no real detriment to low frequency performance.

SOUND QUALITY

Nor is the bass much like the typical exaggerated lumpiness of many commercial reflex port designs. Thankfully TDL have avoided the temptation to overpower the listener with an excess of low frequency power, preferring instead an understated bass performance which moves air only when called upon to do so. With good amplification the bass was well proportioned and free breathing, due to the lack of boxiness and distortion provided by the good air flow and high degree of midrange attenuation from the 'reflex transmission line'.

Unexpectedly I was able to move

the RTL2s back against a rear wall to 'warm up' the lower octaves without much sign of an over endowment of LF.

In this position the RTL2s proved themselves to be good domestic musical partners, accommodating a wide range of music, and diverse equipment too. The overall effect was one of softness, mainly due to the bass performance, allied to a smooth and sweet midrange and clean and detailed treble. Stereo was open and spacious, with good dispersion aided by the narrow front baffle, and little interference experienced from the grilles. Undoubtedly the recessed treble unit helped here too, as well as reducing discontinuities in its response.

As one nearly always sits above the tweeter axis, the soundstage spread behind the speakers, even when a soloist was given a spot-lit close-miked forward projection. The view of a performance was thus from the balcony rather than the stalls, a feature that many may prefer. Similarly there was little immediacy to the sound, always a feeling of withdrawal from close proximity with the performers. If one finds this an attractive characteristic, then the RTL2 offers notably good tonal accuracy and detailing at this price level.

TDL RTL3

As the largest of the RTL models, one might expect the RTL3 to approximate most closely to the transmission line principle.

There is indeed a brace running vertically behind the bass units which strengthens the cabinet and helps reduce resonant effects in the large area of the side panels. But, as the large cut-outs in the panel show that this is not used to divide the cabinet acoustically, the line/port is provided by a horizontal shelf at the base of the cabinet whose length and entry/exit area is calculated to tune the large volume of the cabinet to 30Hz.

SOUND QUALITY

Initial impressions were of a well balanced speaker with a smoothly integrated upper midrange and treble matched by a deeply extended, if not ideally controlled, bass output. Listening to choral passages revealed a hollow nature predominant in male vocals, and a mild overhang to percussion. The major effect was to muddle and obscure important midrange detail; a great shame since the important presence region was well handled. The speaker was thus best suited to recordings with a brighter balance, provided it is not artificially induced, in order to cut through the murk. Treble perfor-

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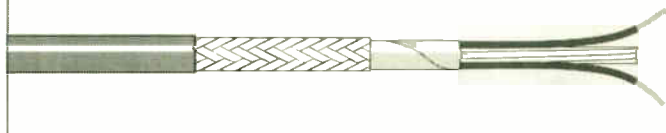
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RTL3

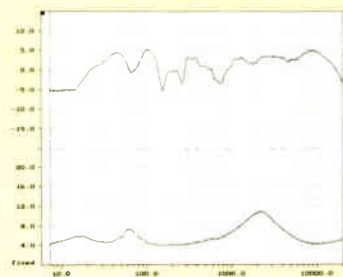


Fig 3a. TDL RTL3: response family, 1m. From top: on-axis; 15° vertically off-axis; 30° vertically off-axis; 30° laterally off-axis

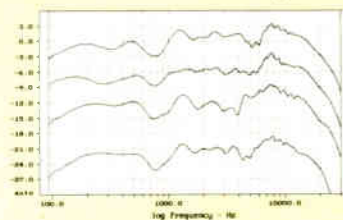


Fig 3b. TDL RTL3: room-averaged response at 2m, 1/3 octave weighting. Lower trace shows impedance, 4ohms/div

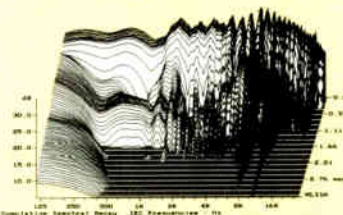


Fig 3c. TDL RTL3: MLSSA 'waterfall' display of cumulative spectral decay

mance was generally smooth, and the upper midrange blended well with this allowing brass instruments to shine without sharpness.

The RTL3 retained its sense of composure over a wide range of recordings. Its easy-going character suited a wide range of equipment, being relatively unfussy over choice of amplifier or CD player. Like recording preference the best match was from electronics of a vibrant and forward nature, such as the Rotel RA935BX and Pioneer PD-S802.

Spread in a natural manner between the speakers, the stereo image had more than a hint of good depth, though height was limited. The accuracy and stability of image depended on listening angle, and the speakers should be toed in towards a central listener. Chair height is important too, as the depth of image changes as one's ears move markedly above the top of the speaker. The source appears to move further away as one moves vertically off axis, an indication that the phase plugs in the bass units are doing their job well. Listeners off axis horizontally, however, are subjected to a phasey sound and an image which collapses into the nearest speaker. Keep the speakers away from side walls, too, or the reflections are disturbing.

Bass performance benefited from an amplifier that retained tight control over its dynamics. Without this the bass seemed as muffled as its accompanying low mid. Best results were at low listening levels, where the hollow coloration did not intrude much, and with the speakers about 0.5metres from the rear wall. The tonal balance was refreshingly neutral, and the full bass precluded any tendency to reach for the tone or loudness controls.

As the volume level advanced then the bass balance started to dominate the rest of the spectrum, and the colorations in the lower midrange overpowered musical detail. Music that relied on sheer volume to create its impact was not served well.

CONCLUSION

An unusual diversity of sound qualities was experienced from the three RTLs; unusual because the sibling similarity between the pattern of drive units and crossovers should have given a 'family' sound. In reality the cabinets played a larger part in the balance of each model; the resulting bass characteristics dominated the proceedings.

As a shelf speaker, when the low bass was too pronounced RTL1 did not serve too well. Even when stand mounted it could not be positioned so that the bass achieved a natural, unforced balance with the midrange.

It was felt that the cabinet and reflex line was having to work too hard to extract bass that, along with the midrange, was rather reticent. Upper bass and midrange both sounded lightweight, resulting in a particularly disappointing spectral imbalance on vocals.

The same units and crossover in the floor-standing RTL2, however, achieved a far better balance. A combination of larger cabinet and extended reflex line suited the bass unit well, and near-wall mounting was successful not only for the low bass, but also in reinforcing the upper bass and midrange. The midrange deficiency shown on the forward response graphs was thus ameliorated in the room averaged response, and the subjective balance restored. Treble was successfully blended too, and the crossover served to integrate the units over a wide listening area. The only drawback of the bass cone was one of softness, and a little more attack to percussion and incisiveness to the midrange would not have come amiss.

Undoubtedly, RTL3 suffered from two bass units being flanked by a wide dispersion treble unit. As well as causing treble anomalies, mainly heard as odd phasing effects when sitting off axis, the midrange exhibited similar problems to the RTL1, but here doubled to give an obvious shelf in the response above 1kHz. The extended bass from the large cabinet was welcome, but not the thrum from the large area of cabinet walls. As this became more pronounced as volume levels rose, so the speaker's character abruptly changed. Although the bass and cabinet output was balanced by an elevation of upper midrange and treble level, the result sounded unnatural after prolonged listening. Switching back to the RTL2 showed the latter to be clearly superior, and therefore the best of the bunch.

As a method of reducing distortion from reflex porting, the 'reflex line' appears to offer an advantage over conventional tuning methods, though the addition of the word 'transmission' is misplaced as far as Bailey's original description is concerned. Although John Crabbe [HFN/RR Aug '93] indicates that practical examples of transmission line speakers, as in TDL's more expensive offerings, have some reflex characteristics, the RTL design does not 'push the lower resonance...out of harm's way'. Nevertheless the results from the RTL2 show that the concept should be pursued in further designs. Meanwhile, as a bargain basement floor-stander offering extended bass, this model is worth auditioning. ✓

LAB REPORT

Uneven subjective results are echoed by non-linear responses, the graphs showing a three-stepped output. Performance below 1kHz is still subject to the anomalies of this particular shape of bass cone, and output is elevated between 1kHz and 4kHz in a second step. The treble unit is clearly unhappy sandwiched between two projecting bass unit chassis, and sharp discontinuities in the response occur between 4kHz and 6kHz, depending on measuring axis. Higher treble is stepped up again, showing a poor match to the midrange level, but is probably equalised to the bass power in the room shown by the room averaged response. An extended response to 30Hz, though not ideally smooth, is achievable in-room. Reflections from the overhanging bass units give a troubled treble performance in the MLSSA 'waterfall', while the extended upper bass decay is a feature of the large cabinet panels. Impedance is a smooth 4ohm load, while the effects of the internal damping modify the effectiveness of the reflex 'line' tuning at 35Hz.

Test results

	RTL3
Power suitability	15 to 120W
Recommended placement	near wall
Response consistency	poor
Bass frequency roll-off (-3dB point in room)	25Hz
Sensitivity (for 2.83V or 1W, 8ohms, 1m)	89dB
Impedance (minimum/typical/ease of drive)	4.4ohms/good
Dimensions (hwd/mm)	920x200x375
Typical retail price (inc VAT)	£399.95



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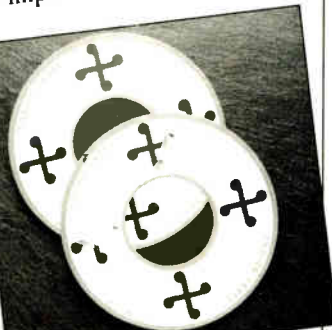
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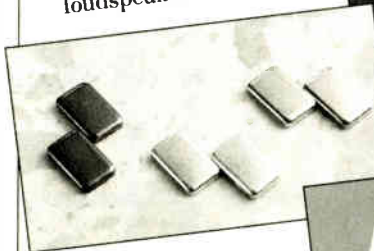


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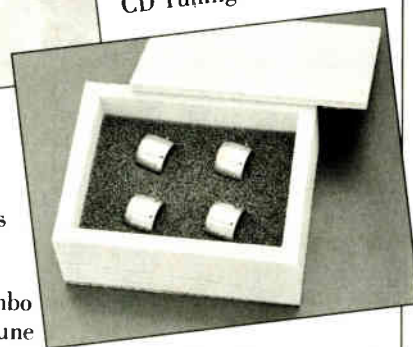
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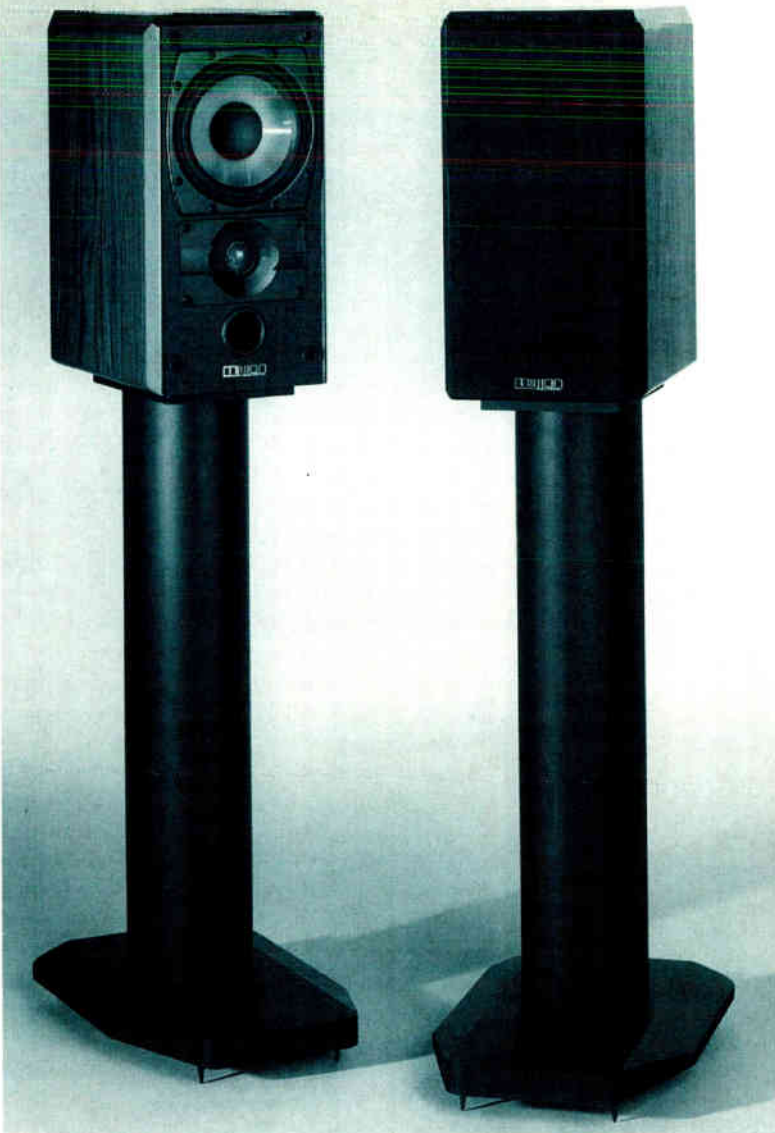


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The 751's unhyped naturalness helps it paint in the colour and texture of acoustic instruments with unusual ease. Similarly, its ability to stay unstressed under pressure helped it to retain the same easy analysis and focus during the blazing finale of the Mahler 3

ther excellent but costly small speaker, the UKD Callas.

A touch of visual distinction is provided by the sharply bevelled edges which gives the system crisp, distinctive, bulk-reducing lines and has some acoustic benefits. The terminal block is a quality item with gold-plated 4mm binding posts. Aesthetics are further enhanced by excellent black ash or rosewood finishes – from sustainable sources, according to Mission. I've yet to go eyeball to eyeball with a black ash tree, sustainable or otherwise, but what do I know?

Like the 753, the 751 is built using the so-called transverse folded enclosure construction technique in which the front, rear, top and bottom are V-grooved and folded from a single piece of 25mm MDF, the sides being added subsequently before visco-elastic wall damping is applied. In principle, the Mission way means that the baffle is extremely well anchored, but a health warning is in order as it is impossible to work backwards and relate what was heard to this particular element of the design.

The 751 is inverted, the bass unit above the tweeter, which gives optimum dispersion around the 3.2kHz crossover. Mission recommends using the 751s within 30cm of the rear wall, but I found it was possible to go closer with no noticeable loss of control or focus. Much depends, of course, on the geometry of the room and to an extent also on personal taste.

Mission specifies a minimum 24-hour running in period, and using the speakers without toe-in on rigid stands, a recommendation fulfilled by using Kronos pedestal stands, which are about as solid as they come. They also specify solid-core cable, a condition I was pleased to comply with (using DNM cable rather than Mission's) as I favour this construction for inherent sharpness and resolving ability. The 751's high 89dB/W/m sensitivity, apparently benign impedance characteristic and limited bandwidth, means that unless very long cable runs are involved, the disadvantages of solid-core won't be obvious.

In complete contrast to the 753, there has been no attempt to give the 751 a big speaker balance. It could not be more striking, even taking differences in enclosure volume into account.

The upper bass region does have

MISSION 751

*It's an astute package,
but can Mission's 751
loudspeaker match
the 753?*

by ALVIN GOLD

ission is not a prolific producer of new loudspeakers, so when a new model is signed on, it is usually an event. So it is with the 751, which started life as a son of 753, but which turns out to be its own speaker, with almost no musical point of contact with the model from which it was derived.

The 753 floor-standing column loudspeaker is chiefly notable for its incisive sound quality. A kind of miniaturised 753, the 751 has a simi-

lar 25mm laminated, ferrofluid cooled composite dome tweeter, and a single injection-moulded Polypropylene cone bass/mid driver where the 753 has four similarly sized but different bass units.

The new baby is an astute package. Measuring 320 × 185 × 268mm (h × w × d), the bulk of the design is concealed by a narrow baffle – the whole enclosure is less than a handspan wide. The 7.5 litre enclosed volume is front-vented, which, combined with a necessarily relatively high LF cutoff (the specified -6dB point is 55Hz), means that the system is a little less critical than usual of the fine-tuning afforded by proximity to the rear wall. In size and bass alignment, the 751 is not dissimilar to the Acoustic Energy AE-1, a much more costly design, but which on grounds of size and pretensions was used as a yardstick for review purposes alongside ano-

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EPSILON RIBBONS

*Few speakers retain
sonic integrity at
realistic levels, but the
Epsilon can*

by CHRIS BEECHING

The Epsilon never gave the impression that things were getting too much. But also, the speakers had a tremendous sense of punch on sudden climaxes and transients. In particular, plucked strings and tutti fortissimos were handled with ease

Ribbons aren't dead, nor, does it seem, are planar drive units. Combining the two would seem to be a good idea, and Analysis has done just that with its range of three planar-ribbon speakers. Called (in ascending order of size) the Omikron, Epsilon and Omega, the initial impression is of an Apogee copy. However, their performance and fundamental differences set them well apart.

The Epsilon stands some 4ft tall, 2ft wide and 2in thick, with the small, triangular stands rearward projecting 10in providing vertical support. The speakers lean backwards at about 10° and are 'handed'. Down one side the treble ribbon stretches from top-to-bottom, and

the rest of the frontal area is taken up with the mid-bass planar driver.

Connectors at the rear are of quite astoundingly high quality; gold-plated finished with soft rubber rings around for easy grip when tightening onto bare wires, the sockets will accept a wide range of spades, bare wires, 4mm banana plugs, and with separate terminals for bare and planar drivers, bi-wiring is easily accomplished. However, connecting links are also provided for on bi-wire (or is it 'standard?') operation.

Initially, the speakers have an imposing presence. Once set in motion though, the speakers tended to disappear, both visually and aurally. We found, after a little experimentation, that position, once the back wall was a metre or so away, made little difference to the overall performance.

In order to obtain a wide stereo image, we placed the speakers with the ribbon tweeter running down the outside edge of the speakers, rather than concentrating treble energy in the centre. With the treble ribbons in the centre, imagery went to pot, providing a wonderful depth, but little side-to-side detail.

Sensitivity seems to lie around the 87/88dB/W level, with both valve and solid-state amps driving them with relative ease. Frequency response was quoted as 26-20kHz, and from listening, it seems a very flat and even speaker. Room modes do get excited – it's as adept as an electrostatic dipole from that point of view, hence the need to stay a fair distance away from the rear walls.

First disc on the turntable was the 1976 recording on Argo of *Pulcinella* (ZRG 575). The performance is magical and the sparkle and enjoyment from the players was easily discernible. The double bass had depth, space and full rounded and deep tone. The piccolo and bassoon were clear even when the texture became complicated and busy. The Epsilon never gave the impression that things were getting too much. But the speakers also had a tremendous sense of punch on sudden climaxes and transients. In particular, on plucked strings and *tutti fortissimos* were handled with ease. With such an open and revealing recording, any speaker coloration would be in evidence right from the outset. Not this time. The speaker sounded fast, articulate, deep and detailed.

Moving on to more complex textures, Saint-Saens's 3rd Symphony hit the CD player — one of the most difficult works to record (and perform) due to the huge forces involved, combining organ and full orchestra. Again the speaker excelled. It was easy to differentiate when the organ was underpinning the orchestral texture with deep sustained pedal. The result was not the muddle usually associated with lesser speaker systems, but a genuine ease in hearing both the organ and the double basses playing their own different parts. When the brass entered over the full organ/orchestra, the effect was one of 'how did I get that lot in my living room?'. Despite the dynamics and full texture, the size and space of the acoustic wasn't lost either. If I have been praising the 'loud' capability of the speakers, then it is not at the expense of subtlety and low-level detail. Fast brass tonguing and the bassoons' reeds starting to speak are as easily heard as the rasp of the trumpets.

Moving on to perhaps the sternest test – vocals – I pressed Rifkin's version of 'Jauchzet Gott in allen Landen' into service (Oiseau Lyre 417 616-2). The trumpet and soprano



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opening offer one of the hardest pieces to reproduce accurately. The absence of box coloration is an undeniable advantage here, with both parts being easy to follow with a superbly natural presentation. In fact, from the next room, and at volume levels which made sitting in the same room uncomfortable, it really did sound as if there was an ensemble and singer next door. There are few speakers which manage to retain a sonic integrity at truly realistic levels, but the Analysis Epsilon does it superbly.

Changing tack to one of my favourite jazz recordings (*We Get Requests/The Oscar Peterson Trio* on Verve, 810 047-2) 'You Look Good To Me' nearly always suffers on a hi-fi system when Ray Brown starts to sing along with his bass... Often his singing gets muddled with the deep, powerful, effortless strokes he uses to pluck those thick gut strings. On other speaker systems this 'sing-along-a-Ray' doesn't come through at all, but here the Epsilon excelled. The bass had just the right amount

of weight, and quite clearly Ray was enjoying the performance. His ad lib impromptu was so clear you could make a transcript of his 'doo-bee-doo-bee-doo...'. The rest of the trio had a very natural perspective too. Surprisingly this didn't become distorted as you turned the volume up or down. The effect was more to move you nearer or further from the ensemble without losing any of the detail, or the sheer musicality of the performance.

Pop/rock music fared well too. There seemed to be little that the Epsilon couldn't cope with. The Farm play around with a deep driving bass line with a subtle vocal/synthesiser overlay on their track 'Suzy Boo' but again the whole was an integrated set of parts. The bass was easy to follow, the vocals clear, the drumkit punchy and with natural weight and drive, and the vocal strands (of which there were many) clear and precise. Mary Black came across with the precision and clarity you would expect from such a well recorded artist, and all the

depth and space of the performance was clearly evident. Finger movement on the guitar strings was easy to discern, and the separation between Mary Black and the other musicians gave tremendous insight into the recording environment.

So, with all these virtues, were there any downside effects? Partly. At full tilt, just on occasions, the bass would harden up just a little, although the overall tonal balance and seamless integration between bass and treble drivers wasn't disturbed. What was amazing was the speaker's ability to recreate the whole performance; not just the sound, or the imagery or the scale, but also the excitement, the enjoyment and the 'music'.

The sound they produce is among the best I have heard from any speaker, regardless of cost. Of course they have short-comings. What speaker doesn't? But for £3000 they offer a reference and realism which most music lovers would find hard to beat. If I could afford a pair I'd buy them. †

If I have been praising the 'loud' capability of the speakers, then it is not at the expense of subtlety and low-level detail. Fast brass tonguing and the bassoons' reeds starting to speak are as easily heard as the rasp of the trumpets

49 ► a fullness, and sometimes even a suggestion of opacity, which helps provide an impression of weight, an impression reinforced by a system frequency balance which has a mild but detectable downwards tilt through the midband. There is also some reticence and nasality at the very top end that I would not normally associate with Mission. The system is far from bright, though the midband can be a tad pushy, but deep bass simply isn't there. With Mozart piano trios, Mahler symphonies, rock from Stevie Ray Vaughan and others, the 751 painted a consistent picture of a speaker smaller than its dimensions rather than bigger, unlike the Acoustic Energy AE-1 or UKD Callas, both of which are wrapped around similar volumes of air.

Typical observations included one of an orchestral string bass section in a passage leading up to the finale of Maazel's Mahler 3 (on CBS) which makes the odd fleeting, but telling, appearance. It was almost felt in the pit of the stomach with the Callas, but had almost no presence at all when reproduced by the Missions. Even the Acoustic Energy AE-1, which, if anything has a somewhat smaller enclosed volume at its disposal, has considerably more raw urgency, weight and depth. This is underlined when stressed with dynamic, percussive bass lines as in

Phil Upchurch's *Whatever Happened to the Blues?* (Go Jazz). In this case, the Mission sounds comparatively bland and constrained, whilst the AE was deeper and more airy and expansive, with some wonderful textures provided by the interplay of bass and drums giving the song an unusually live feel. The treble can't conceal a suggestion of tizz, but it does have a lovely, natural, singing quality with high-hat and cymbal work. Overall the treble is reproduced with an integrity a zillion miles from the caricature top end of many speakers, which includes (I regret to say) many of those with high-tech metal domes.

I liked the 751, but selectively, on certain types of music only. It lacks the colour and richness of the 753; somehow the senior model has an overall rightness that the new model can't match. The 751 is great on small-scale acoustic music, and is tremendously clear, refined and unmuddled, but the 753 has more bass, more treble and more middle too. The 751 is genteel and sophisticated. The 753 is hairy and has balls.

CONCLUSION

This is one of those products that cannot be summed up in a single, facile phrase. In one respect the 751 missed the mark compared to the 753, which was a speaker for every-

one, irrespective of musical tastes. The senior model is refined and uncluttered, tuneful and dynamic and has a rip-roaring bass. As a result it favours no particular style of music; or rather, it favours them all. The 751 cannot be described in comparable terms. Although it has the capacity to play loud without sounding congested or compressed, its real forte lies in its rather analytical, and sometimes even disembodied clarity and refinement, and I am tempted to describe it as a classical music lovers' speaker. Despite the occasionally obvious nasality, the 751's unhyped naturalness helps it paint in the colour and texture of acoustic instruments with unusual ease. Similarly, its ability to stay unstressed under pressure helped it to retain the same easy analysis and focus during the blazing finale of the Maazel Mahler 3, where the UKD Callas was beginning to sound distinctly frazzled.

I can see this speaker being chosen in droves (or at least in pairs) by those who want a decent sound, but are unwilling to soil their living rooms with large loudspeakers. As a parting shot, I'd merely note that the 751 is a loudspeaker that works better with a good £200 amplifier than an indifferent £500 one - but that a couple of grands' worth of silicon and steel is what the 751 really enjoys most. †

There is also some reticence and nasality at the very top end that I would not normally associate with Mission. The system is far from bright, though the midband can be a tad pushy, but deep bass simply isn't there

LINAEUM LFX-REVISED

It's not even old enough to have evolved this far, but Linaeum's wee LFX with the wacko tweeter has changed. Hell, I only reviewed it in October '92, but here it is with enough revisions to justify a MkII prefix... though Linaeum hasn't made much noise about it. But owners of the MkI LFX needn't worry about a thing, because the big changes make less difference to the already staggering performance than the small refinements, and the most important of the small refinements *might* be retrofitable.

LFX-Two uses a woofer sourced from another maker; the clear Mylar figure-of-eight which gives the novel tweeter its distinctive look is now black; the crossover has been tuned to accept these modifications; and the hefty binding posts have been drilled to accommodate banana plugs. The change of woofer came about because of the need for deeper bass (my fellow Americans really do have an obsession about this, much to my embarrassment...) and higher power handling. The change in tweeter colour? The chaps at Linaeum umm'd and aa'd but didn't say much, and my ears couldn't identify any radical sonic metamorphosis when I played the new ones side-by-side with the old... *with the grilles removed*. Which brings us to the most important change of all: the new grilles.

Some know-nothing, stone-deaf klutz specified, for the early LFX, the thickest grille used since the 1950s. Maybe he had a garage full of Hudson Bay blankets or LL Bean sleeping bags, or maybe he was shuffling someone at the local carpet factory. Whatever, it was impossibly dense and obscured the main feature of the Linaeum: the magic tweeter. The new grille, on the other hand, is sensible. It's thinner and

therefore allows the tweeter to sing. You can, of course, run the old or the new LFX without grilles, but this worries me because the tweeter rests on the top of the cabinet and it's a dust trap. I prefer the peace of mind that the grilles provide. And the new grille does far less to compromise the tweeter than the old.

To give credit where it's due, the new woofer lets the LFX go a touch deeper and a shade louder, but the overall character hasn't changed. No question, the greatest gain – cleaner top, slightly tighter image specificity and more 'air' – came from the change of grille. Yes, I did try the old grille on the new LFX and the new grille on the old LFX to make certain the gains/losses were due consistently to the new grille material rather than the change of tweeter membrane.

Which leads me to a pleasant discovery for owners of MkI LFXs.

Be kind to your friendly LFX dealer. Say you'd like to buy a pair of the new grilles, and maybe the pre-drilled binding post nuts. I'd say they're worth about £50-£75 all in, as a kit. Which Linaeum should offer if it hasn't already. And for those who don't own LFXs but want a truly minuscule (smaller than an LS3/5A) loudspeaker that thinks it's high-end, there is no better buy I can name at £699 than the LFX in wood. On the other hand, the £1399 Corian version is simply gorgeous.

Ken Kessler

PINKLINK INTERCONNECTS

Pinklink and Musitube have recently added four cables to the myriad on the market. Three are conventional cables, that is, silver-plated, pure copper with PTFE insulation. The Musitube is something quite special. All the interlinks use identical phono plugs (not the most expensive on the market) chosen by



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the designer because they sound best with his cable. The entry level product is Pinklink Red at £39.95/m, a well balanced and coherent cable which is miles above the throw-ins given away with budget equipment. Next comes Pinklink Braided at £63.95, recommended for head-amp to pre-amp and other low-level applications. It is fairly transparent but emphasises the bass-end somewhat – useful for bass-shy systems.

At £89.95 Pinklink Black is a vast step forward; being totally together, full of pace and quite transparent, it's particularly good at the frequency extremes where it adds little and subtracts nothing.

The flagship of the range is the Musitube – one of the best 'non cables' I have ever not heard! This cable, for want of a better term, is made from a pair of pure copper tubes which are insulated and laid side by side and protected by a plastic braid. To say that these interconnects are stiff is an understatement. John Cadwallader, who produces them, suggests the customer supplies a template or diagram so they can be made to individual requirements. And the price for custom made exotica? Just £119.95.

I have been running the Musitubes between CD and power amp for quite a long time now, and can only pay them the highest compliment, which is, I've forgotten they are there, except when an old and familiar piece of music takes me by surprise and shows me something I've not heard before.

Richard McDonald

The new grille is sensible. It's thinner and therefore allows the tweeter to sing. You can, of course, run the old or the new LFX without grilles. . .

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NAKAMICHI IA-3

It's not every day that manufacturers head off in a different direction. But now, Nakamichi, revered cassette deck champion, has turned its sights on a simple but stylish amplifier. Rather than heading for the higher echelons of hi-fi reproduction, it has sensibly aimed at the more middle ground, pitching in where the ubiquitous A400 and its clones have made such a mark. Not that it aims to compete – the IA-3 (£349.95) is a very different beast.

Sporting only four inputs – CD, tuner, aux and tape (in and out) – this unassuming integrated makes its own statement of quality by ignoring the usual tone controls altogether. This leaves the front fascia clean and uncluttered, except for the on/off button (left) and three control knobs (right), 'output level', 'record out selector' and 'listen monitor'. That's it.

The rear panel carries the usual phonos, in nickel/steel for most of the inputs but gold for the CD, and there's one set of output terminals for connection to the speakers. That's where the first niggle came in. I could not get a set of 4mm banana plugs to fit into the output terminals. On closer inspection it seems they are designed for bare wire operation – something I've never particularly favoured – even though they appear at first sight to offer the 4mm option.

The mains lead is captive, quite stout, and of normal grade cable. Powering up is only really the start of the fun with a new amp. Often it's the least exciting bit, for as soon as you hit the 'on' button, you know almost immediately that the sound you're going to get isn't what the amp's really capable of. Usually. But this wasn't a case of 'usually'. Instead of the expected slightly brittle and aggressive sound – the hallmark of a virgin transistor amp when new – a smooth, detailed and engaging presentation quite beguiled my ears. In fact I was so surprised I sought my reference system just to check that I hadn't gone soft in the ear. But I hadn't. Far from being fatiguing or hard work, the IA-3 was instantly listenable. 'Probably not yet up to par' I thought to myself, reluctant to admit I'd been completely floored, 'but augurs well for later...'

I left the amp on for a weekend, with a sampler CD from Chandos playing away. When I settled down for a serious first listen, I selected the Chopin Piano Concertos played by Perahia with the Israel Philharmonic. A live recording by Sony Classical, where what is lacking in sound quality terms is more than



The feeling of involvement also extended to the impression that the listener was a part of the audience, the aural perspective having you believe you were roughly two-thirds of the way down the hall

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Road, Churchill
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Lancing, W
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750750.

made up for in performance and involvement... Would the IA-3 convey that feeling of 'being there'?

The answer is an unequivocal 'yes'. The beguiling attitude of the amp had improved and it now displayed a remarkable openness and spaciousness missing in a great many amps at a similar price point. There was little apparent distortion of the perceived soundstage perspective either. The recording environment – the Mann Auditorium in Tel Aviv – was portrayed with a good sense of length and height, and just enough width to accommodate the accompanying orchestra. The piano was sensibly situated towards the front of the orchestral platform, and roughly central, which is exactly where it should have been.

The feeling of involvement also extended to the impression that the listener was a part of the audience, the aural perspective having you believe you were roughly two-thirds of the way down the hall. The amp also exposed the recording's somewhat veiled sound quality.

Changing to material a bit more up-beat, Prince's *Diamonds and Pearls* had all the verve and drive you'd expect from a dance-based album. The sound quality was a bit thin, with a noticeable upper-bass suck-out – but that's the CD, not the amp. It had a good deal of drive and pace, and the timing from bottom up was well integrated and seamless. To be honest, this amp can boogie, though it does need a bit of coaxing, and the results are pretty good when it gets going.

Moving on to slightly more reveal-

ing programme, Mary Black was exposed to the laser. It was here that the amp's true colours began to show through. Her vocal line was clearly presented, with no ringing or coloration, no 'boxiness' or undue nasal qualities, and you could pinpoint her location. The imaging properties of the IA-3 are good. However, while the amp had good sonic integrity, with a fairly seamless bass-to-treble frequency performance, the leading edge of some aspects of performance was lacking, particularly with heavy bass – either electric or acoustic – the notes seemed to take a bit of time to get going, especially when left exposed in a small jazz combo. Although middle of the road as far as jazz goes, many of Oscar Peterson's CDs are well recorded and on *We Get Requests* there are a number of opportunities where the bass has a go on its own.

But the initial bite of each plucked note was not quite 'there' as it would be with a high-end amp. Similarly with Sphere on *Four In One* the sudden burst of sound from the sax was often blurred and indistinct, losing some of the immediacy of the performance.

None of this is a way of saying the amp was soft – far from it. With material with weight and scale, ie, Delius's *Mass of Life* with huge orchestra and double choir, you were instantly aware of the forces at play, the interplay between orchestral parts and choral textures, and of the effort involved in making the performance successful. None of the parts in this work is easy to play or sing, and in

Not Bourri

both my recorded versions the grunt and vigour – and the subtlety and pathos – were all well portrayed, the IA-3 allowing you to delve into the textures to follow individual lines, yet maintaining a good overall perspective on the work and sound as a whole.

Tonally the IA-3 is slightly on the cool side, but that tends to be mainly in the midrange. The treble is barely splashy, being at best crystal clear, and at worst just a tad enthusiastic with sibilance. Bass is lacking not at all, and changing speakers to pairs with different impedances and characteristics does little to affect its performance. Although power output is limited, the amp – for an integrated – will cope well with most loads and speaker types within its operating spectrum. Push it outside that and clipping can start to sound nasty; but then that's not the sort of level your neighbours would appreciate, and you'd have to have insulated ears to cope.

Screening was pretty good too. There was no RF or other breakthrough, and even placing a tube amp on top failed to add any noise to the background. The often-experienced hash from my word processor was pleasantly absent, making my ferrite cable clamps redundant again.

However, for me the ultimate test is that of low-level detail. For this I used an outboard phono stage coupled through the aux input. The test LP was Bartok's *Music for Strings, Percussion and Celesta*. The most revealing version is Boulez's on CBS, sadly long deleted, where the quietest sounds are well hidden in the more complex textures. Would the IA-3 let them shine through? At the beginning of the Adagio there's a subtle change from timpani to lower strings, and here the amp let me down. I know the piece well, and this recording in particular, but the subtle change wasn't there. The sound just merged from timpani into basses. But in the upper registers the amp fared better, revealing a clarity and insight which, for the money, is enviable. Interestingly, percussion with a large high frequency content also fared well, supporting my observation that the amp was just on the slightly 'cool' side, and accounting for its spacious portrayal.

CONCLUSION

I was quite impressed. Not an 'integrated' fan, I nevertheless found the IA-3 an enjoyable musical experience. The sonic flaws were marginal, and the ease of use and listening satisfaction rated highly. The IA-3's looks, too, are fine, and will suit many domestic situations without anguish.

Chris Beeching

MARANTZ PM54 SE

Power plays in the budget sector continue to revolve around high-value-for-money integrated amplifiers, with most intelligent manufacturers having given up on £99 loudspeakers. Sadly, the lower reaches of the catalogue can make or break a brand, especially one of the quasi-mass market variety.

But given that price *must* be addressed, it's interesting to see how a company can shave costs while offering acceptable performance. Marantz's latest contender in the 'Let's Get Pioneer' battle is the PM44SE, which replaces the much-loved PM30SE. And it's adorable. But what about those who need more grunt? Especially those who won't sacrifice their street cred? How do you take what is ostensibly a sop to the impoverished audiophile and turn it into a monster?

Enter the PM54 Special Edition, which is described as 'a successor to the PM40SE in real terms'. It looks dearer than its siblings, it isn't short of features and it costs about £100 more than the smaller amp. The '54, though, delivers a lot for £299, and not just its healthy 70W/channel instead of the typically weedy 30W or 40W which seems to be the norm for budget amps.

To protect its credibility, the '54 features hefty power supplies, top quality tweako ingredients, a real metal chassis, copper-plated shielding, enough binding posts to support either two pairs of speakers or easier bi-wiring, a proper moving-coil input, four line-level inputs, a direct input and a mono button.

So, in terms of bulk and buttonery, you definitely get your money's worth: a handsome, smooth, tidy, black box which will do everything necessary to handle the myriad sources likely to be found in a modern system, while offering enough power (and this really is where the '54 finds its edge) to widen the choice of loudspeakers available to

the owner. It will power speakers which are wa-a-ay beyond the baby amps, whatever anyone tells you about 70W being only 3dB greater than 35W.

Having been scolded enough times for not using like with like, I spent most of the listening period with the Marantz connected to affordable speakers like the Monitor Audio Ruby 3 and a cluster of pocket-money Italians. But I also fed the Marantz into a couple of Sonus Fabers and even the Apogee Stages. And it drove them without issuing plumes of smoke à la the Editor's Hornby. Which is what surprised me the most. Ordinarily, I find budget integrations about as interesting as an Andrew Lloyd Webber show, usable only as doorstops or for loaning out to friends in need of some kit. The '54? It actually rocks.

But so do a lot of amplifiers, even at £299. In order to make it stand out from the Pioneers and Denons and Rotels and Arcams, it has to have something, a signature, an area of expertise. Without wishing to portray this amp as suitable only for kick-ass material, I cannot ignore the impression it gives about being happiest with loud, dynamic material, specially performances with a lot of bass content. You will not fall in love with the '54 for its finesse. You will buy it on the strength of its, well, strength. Marantz, wisely, opted for power over politesse; the '54's baby brother will provide delicacy and detail if that's what you'd prefer in your system.

But does this mean that the ideal '54 customer is a headbanger rather than a longhair? Yes, I'm afraid so. Thanks to Sylvester Stallone, rampant macho is seriously unfashionable. Pity. It means that everyone walking out of a shop with a '54 will want it packed in a box that reads PM44SE. I mean, can you see Marantz advertising this as 'The Real Man's Amp'? I think not.

Ken Kessler

Without wishing to portray this amp as suitable only for kick-ass material, I cannot ignore the impression it gives about being happiest with loud, dynamic material, specially performances with a lot of bass content. You will not fall in love with the '54 for its finesse. You will buy it on the strength of its, well, strength

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630868.





AFFORDABLE CLASSE!

Make no mistake: balanced operation throughout, including source, is the best way to employ the Classe; I used it solely in this mode

With the Thirty pre-amp and the Seventy power amp, Classe has entered a field populated by the few, the easiest for me to recall being Aragon and Musical Fidelity (with its F-Series tube/tranny hybrids). The recipe is simple: offer to the audiophile solid, no-nonsense products at the right price while leaving out nothing important. That means: the inclusion of true balanced operation (Classe even includes a balanced input on the pre-amp), designer ingredients, exactly enough facilities to allow for the use of all the major sources including phono, clean styling and good build quality.

The Thirty sells for £1320 and the Seventy sells for £1399. For a fully balanced system which delivers a perfectly adequate 75W/ch into 8ohms and which will handle five sources plus tape and not embarrass the owner when snobs are about, £2719 is far from extortionate. And then there's the remote control.

Unlike Musical Fidelity at one end of the price scale or Krell at the other, Classe did not include source selection on the remote. The Classe hand-held provides only volume up/down and mute. Unfortunately, the argument for leaving off source select is specious at best – you have to get up to change software anyway, so what good is switching sources from the seat? Because some people might want to switch between tuner or TV sound and a CD or tape that's paused, while (and this is the real kicker) others, like review-

Classe performs a neat

juggling act with its

entry level Thirty/Seventy

pre/power combo

by **KEN KESSLER**

ers and retailers, might wish to perform A/B switching from the listening position. Still, to be fair one must admit that most of the activity involving a remote control pre-amp is volume adjusting or muting.

Across the front of the Thirty (both units are available in silver or black, by the way) are the rotary controls for selecting inputs, the tape/source toggle, the centrally positioned infra-red sensor, a rotary balance control, a toggle to choose play or mute with a green/red LED to indicate status and the (motorised) volume control. It's lean, clean and wholly functional, lacking only a mono button if one wants to quibble about what constitutes 'essential'. The back features (left to right) an IEC three-pin mains input, XLR balanced outputs, top quality phono sockets for all line sources and a pair of XLRs for balanced input. Note that the phono section can be converted to line operation, while a resistor kit is available for phono users who wish to alter m-c stage settings. Internal details include extensive mechanical isolation of the

signal path circuitry, one percent custom-made metal film resistors, polystyrene and polypropylene capacitors, silver or gold contacts and custom-made controls and switches.

Measuring the same 19in wide but an inch deeper than the Thirty at 12in and two inches taller at 5in is the matching Seventy, as featureless an amp as it gets. An on/off rocker, an LED and a logo; that's the front panel in a nutshell. The back is slightly more crowded as the company has fitted the heat sinks to the rear rather than the sides. The outer areas of the back panel house the balanced (XLR) and single-ended (phono) inputs, then, moving towards the centre, come the heat sinks flanking the centre section which contains an IEC mains input, a fuse holder and multi-way binding posts. Like the Thirty, a substantial number of custom-made parts are used, including large capacitors for filtering totalling 40,000µF, with proprietary filtering of the main output transistor stage and the local supply to the low level differential amplifier stages. Smack in the middle is a single toroidal transformer powering both channels, one of the only visible economies effected by Classe to keep the price so low. So, no, there aren't any false claims about dual-monoism.

Make no mistake: balanced operation throughout, including source, is the best way to employ the Classe; I used it solely in this mode. I realise that far too few source components with balanced outputs are available aside from a few high-end CD players and the late, lamented Sequerra tuner, but I only had a week in which to assess this pairing at its best rather than at its worst. Trying to assemble a like-priced system, I used the Classe duo with Sonus Faber Minima Amators, Monitor Audio Ruby 2s and Rogers LS3/5As (a price span of £499 to £1449 per pair) and the Krell Studio DAC with the MD20 transport. And while the latter costs too much to be used with the above in a normal situation, it formed the least expensive source I could muster with balanced outputs.

Which is almost like insulting the Classe set-up because it is coherent, competent and transparent enough to warrant the use of the finest sources its owners can afford. Now read this closely. I still firmly believe that, for assembling a balanced system, far more important than 'garbage-in garbage-out' is the belief that a system can be no better than its weakest component. (If I ever start blathering in a Glaswegian accent, just shoot me, OK?)

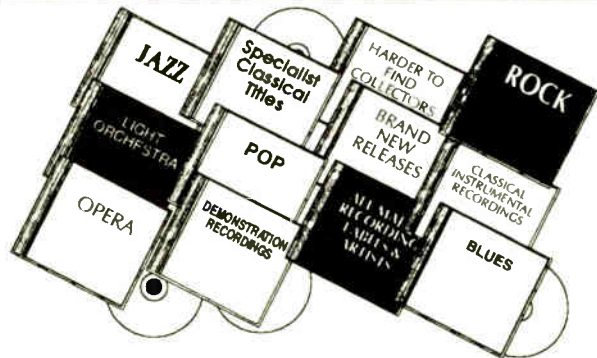
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SUB-WOOFERS AND OTHER ANIMALS

When first we began to recommend the use of Sub Woofers, some 14 years ago, the concept was totally strange to most music lovers and virtually ignored by so-called 'Hi-Fi Experts'. We had to explain that the term did not describe some canine guardian of the underworld but a third loudspeaker which might be said to "refresh the parts normal domestic speakers cannot reach". As in common with most of our customers, we do not really enjoy looking at bulky loudspeakers, the Audio Pro B 1-20 Sub-Woofer when used in conjunction with the STILL incomparable BBC-designed LS3/5A speakers simply enables you to "have your cake and eat it".

The recently introduced B 1-20 is strikingly smaller than its predecessors (only 12 in. square by 14 1/4 in. high!) and can be placed anywhere in the room, preferably out of sight, without in any way disturbing the illusion that all the music, down to the lowest organ pedal notes, emanates from the LS3/5A speakers' 'sound stage'. Needless to say the concept of the Sub-Woofer is now quite widespread, though few models on offer can compare with the B 1-20 (and most of those cost two or three times as much!) and other outstanding speakers — such as the QUAD ESL 63s — also benefit greatly from its ministrations.

Where most people, guided by the 'received wisdom' of those who care more for abstract Hi-Fi concepts than for music, tend to go wrong is in the belief that, in order to get the best out of such wonderful speakers, extravagant expenditure on amplifiers, CD players etc. is the order of the day. Of course, we do have the complete QUAD set-up on demonstration for those able to afford it but if, like most of us, you do not wish to spend more than is strictly necessary, you will soon discover here what wonderful, truly musical results can be obtained from modestly-priced JVC, Pioneer and Yamaha 'separates' or the beautifully compact Denon D-65 mini-system, provided these are linked to really outstanding and truthful loudspeakers.

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TESSERAC AUDIO
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So, with the system ready to roll, each item familiar bar the Classe units, I let 'er rip. Long-term readers will know that I have had dearer Classe units in my system for some time, a DR-4 and two DR-10s, which I alternate with Krell, Aragon and Gryphon electronics for solid-state duties. Do I have a handle on the Classe 'family sound'? If the dearer models are anything to go by, it would be solid-state coherence and speed with a bit of sweetening at the frequency extremes, detailed without being too finely etched. The Classe sound is less commanding than that of Krell, less 'solid' and less extended at the frequency extremes, but it's particularly pleasant and rather forgiving by nature. It's almost tube-like in its 'attitude'.

The Thirty/Seventy, not surprisingly, sounded like a scaled down DR-4/DR-10, and not just because of less power. I don't mean that it was merely a case of less grunt and a smaller playing field. The dearer units offer greater precision and tighter control of the bottom octaves and transient attack/decay. But the clever bit is the way that the compromises are spread evenly across

the board instead of being concentrated in one area, such as power output. Which is as it should be.

It's an interesting notion because it's more than likely that a small amp from the maker of larger amps will sound nearly identical and behave similarly for all but those last few decibels of available SPLs. But I wouldn't expect the Thirty/Seventy to be as quick or transparent or uncoloured as its dearer siblings. What's important is how it fares at the price point.

As with every decision in my life, it's a case of choosing the least painful trade-offs. In this case, forgoing remote control isn't one of them. There's more slam available elsewhere (Musical Fidelity F-22+F-15, Aragon 4004), transparency (the Trilogy tubes) and bass extension (F-15). So the Thirty/Seventy package needs a hook, an area of excellence which distinguishes it from its rivals.

Let's dispense with the Classes' sonic negatives. The sound is neither the most dynamic nor powerful in its class. The Seventy will drive even the Minima Amators to healthy levels, but you sense the effort. OK, that's no

problem. You just keep this away from Apogee Stages. But then we come to the signal virtue, and that has to be coherence. The Thirty/Seventy has a top-to-bottom consistency that I've not heard at this price point, and it's great because it makes the practice of tearing the sound spectrum into sections a near impossibility. The bass segues smoothly into the mid-band, which blends seamlessly into the treble with a thoroughness that defies the listener to identify regions according to textural changes rather than actual frequency. This amp is, conversely, ideal for exposing poorly designed crossovers and, by extension, it's perfect for proving that bi-wiring works, because you'll hear the splitting of a crossover, not the Jekyll and Hyde nature of an amplifier. Which makes the Classe Thirty/Seventy an ideal choice for fastidious music-lovers rather than one for power-mad listeners.

And the remote control? It's just a welcome bonus. Then again, I never got to test it because it arrived after the units were sent off for photography. So ring Debbie at Absolute Sounds to find out if it does do what it should do. ♪

The Thirty/Seventy has a top-to-bottom consistency that I've not heard at this price point, and it's great because it makes the practice of tearing the sound spectrum into sections a near impossibility. The bass segues smoothly into the midband, which blends seamlessly into the treble

Last October I mentioned the joys of discovering fine recordings by chance, of taking a successful plunge into unfamiliar waters on a whim. This happened with me recently in Manchester's Free Trade Hall where, amongst a display of CDs, I espied one featuring Berlioz works arranged for brass band. Now, I've never paid more than brief passing attention to brass band music, but this did remind me of an LP I once had which included a splendid transcription of *Les Francs Juges*, and here was that same overture staring me in the face, in the company of no fewer than seven other Berlioz items.

Although produced by a small local company, the DDD recording featured the Williams-Fairey Band (one of the North's most prestigious ensembles) conducted by brass doyen, Major Peter Parkes, and had been made by a professional team in BBC Radio's largest Manchester studio. It certainly looked promising, but at first I intended simply to note down the contents for discographical purposes. Then, as my list progressed from the *Hungarian March*, via the *Corsair*, *Cellini* and *Roman*

Carnival overtures, to the improbably light-footed *Will O' the Wisp*s and *Dance of the Sylphs*, then finally to the 'Witches Sabbath' from the *Fantastic Symphony*, I became converted to making a purchase. It would at least be intriguing, I thought, to hear what a brass band could make of all that familiar music, even if a hardened Berliozian such as myself might have some difficulty in regarding the composer's own brilliant instrumentation as in any way surpassable.

But 'authenticism' is only one of many possible paths in music, and in the event my purchase proved to be stunningly worthwhile. It has made me an admirer, not only of a range of rich sonorities never heard in a symphony orchestra, but also of the incredible dexterity of brass players in getting their lips, lungs and fingers to produce a quite extraordinary range of effects – flutter-tonguing to emulate shimmering strings, cornets skipping around like flutes, and so on. I still feel enthusiastic enough, after umpteen playings, to declare that this CD should convert any Berlioz lover (or for that matter any lover of orchestral music in general) to the brass band, and

perhaps brass-band lovers to Berlioz.

That said, I have long been interested in transcriptions in general, both for providing fresh insights, and as ambassadors for music which might not otherwise appeal. Thus Stokowski's orchestrations of Bach's organ works are superb servants of the music and great horizon-wideners, with the Carlos 'switched-on' *Brandenburgs* a worthy runner-up. Miki's accordion versions of Scarlatti keyboard sonatas are always a delight, Farbermann's percussion arrangement of the scherzo from Beethoven's Symphony 9 captivates everyone who hears it, Mahler's orchestral setting of Schubert's 'Death & the Maiden' quartet never fails to stir me, Tomita's tongue-in-cheek electronic scherzo from Prokofiev's Symphony 5 actually makes people laugh, and I've seen Stokowski's transcription of the *Adagio sostenuto* from the 'Moonlight Sonata' make people cry. Now Berlioz-via-brass joins my list, and I'm all agog for the next chance discovery.

John Crabbe

Works of Berlioz (SIB CD1), £11.99 inc p&hp from: Siars in Brass Recordings, 132 Gillbent Road, Cheadle Hulme, SK8 6NJ.

sidelines

I've never paid more than brief passing attention to brass band music, but this did remind me of an LP I once had which included a splendid transcription of *Les Francs Juges*, and here was that same overture staring me in the face

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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 'Save on CD'). Reissues are shown as ® with the first UK publication date
Ⓜ = monophonic recording.



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Photo: Fritz Cyren; Chandos

'The more you play Mozart, the more you find; the closer you think you are getting to shaping his music with just the right degree of finesse, the further away one's ultimate goal appears to get. Unlike the big Romantic scores, there is quite literally nowhere you can hide.'

Howard Shelley recording with the London Mozart Players

HOWARD SHELLEY

by JULIAN HAYLOCK

Howard Shelley's enthusiasm for his art clearly knows no bounds; his eyes light up every time I touch upon a favourite subject, whether it be Rachmaninov, Mozart or his fast-developing passion for conducting. Yet Shelley's life is refreshingly free from the obsessionism which has brought many a promising career to a grinding halt. He speaks freely and openly about his devotion to his family (he is married to the concert pianist Hilary MacNamara) and clearly enjoys fatherhood enormously. After the gruelling challenge of a long tour, he revels in the opportunity to return home, away from day to day pressures.

Howard Shelley has for a long time been associated in most people's minds with virtuoso music from the high-tide of Romanticism, particularly the works of Rachminov. It therefore came perhaps as something of a surprise when Chandos

announced that his next major project would be to record the complete Mozart Piano Concertos with the London Mozart Players, directing from the keyboard. (Three acclaimed discs are now in the catalogue, and a fourth is already in the can.) I wondered how much truth there was in the often-stated opinion that, compared even to the most excruciatingly demanding, note-splattered of scores, Mozart's music, despite its superficial innocence, is perhaps the hardest of all to play well.

'That is absolutely right. The more you play Mozart, the more you



Photo: Robbie Jacob; Chandos

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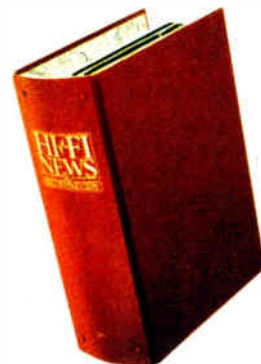
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find; the closer you think you are getting to shaping his music with just the right degree of finesse, the further away one's ultimate goal appears to get. His music is so revealing, so finely balanced that every little mis-calculation of timing within a phrase, or tiny inelegance of fingering really shows. Unlike the big Romantic scores, there is quite literally *nowhere* you can hide.

'That is not to say, however, that the two styles are in any way incompatible, Rachminov, for example, possessed a beautiful, pearly clarity and lightness of touch in semiquaver runs, which is absolutely ideal for Mozart, as is shown by his recordings. Clearly there are technical hurdles which one encounters in later music barely dreamt of by Mozart, yet the crystalline purity which his music demands also plays an important part in the work of composers whose style would appear at first to be worlds removed.

'The principal difficulty with Mozart, however, is maintaining a sense of direction or forward momentum within the basic tempo. Clearly it is not enough merely to play everything metronomically, yet over-use of rubato can so easily lead to musical stagnation. What I find most desirable is a series of tiny fluctuations and shadings which almost defy description. When I am working with the London Mozart Players, for example, obtaining a certain lightness of touch or encouraging a sensation of *joie de vivre* is just the beginning, for then one has to ensure that each phrase moves towards the next so that the shape of a whole movement, even a whole work, becomes an inevitability. This can only be achieved by the use of infinitely subtle shades of the same tempo – the listener should not be aware that anything is necessarily faster or slower as such, but should experience the relevant passage as being, for example, more invigorating or alternatively more relaxed – but still leading the ear ever onwards.

'Without wishing to appear in any way sexist, another problem with Mozart is achieving that fine balance between what might be traditionally perceived to be the masculine and the feminine elements in his music. I remember one of the first Mozart concertos I ever played, when the conductor leaned over to me at the start of the rehearsal and asked: "Now. Is this concerto" – it was K491 – "a masculine or a feminine one?". I sat there deep in thought, only too well aware that my answer would decide whether the concert would be a success or not. I answered masculine, and fortunately he agreed. But in a way this whole

question of strength versus delicacy in Mozart is absolutely crucial to any interpretation. One will inevitably encounter both along the way, but one must decide which is to be seen from the perspective of the other beforehand, otherwise the result will almost certainly fail to cohere properly.'

I wondered whether Shelley's experience of directing Mozart from the keyboard might encourage him to attempt any later music in this way: 'Yes. In fact Chandos are releasing my recording of the two Mendelssohn Concertos with the LMP; these worked exceptionally well, giving various members of the orchestra a chance to respond with a chamber music sensitivity to Mendelssohn's glittering piano writing. [Nov '93 release. **Mus Ed**] I've also performed the Shostakovich Second in concert, and the Ravel G-major Concerto is perfectly viable – I've even a hankering to have a go at the Chopin concertos. But clearly there is a limit to this sort of thing; I cannot imagine anyone undertaking the works of Brahms, Tchaikovsky and Rachmaninov in this way.

'However, although I've developed my own ideas as a conductor over the years, I would never wish to lose that special point of contact with another musician directing the orchestra. The exchange of ideas and challenges that working in this way continually encourages is something of crucial importance to any solo artist's development and fulfilment.

In fact my next Chandos recording is with Richard Hickox conducting, playing the *Fantasia on a Theme by Handel* as part of the first volume in their series of the complete Tippett orchestral works. [See review.]

'From directing, it seemed a logical progression to go on to conduct whole concerts. I have always been fascinated in conducting, and as you can imagine I have been in the privileged position of watching many great artists at very close quarters. This has influenced me less in terms of the physical gestures one makes when conducting, than in rehearsal techniques and how to get the best out of different orchestras when working under varying circumstances, and, of course, in many contrasted venues around the globe.

'But I see myself very much as a musician first and foremost. It is the spiritual side of music-making which has always attracted me far more than the technical side. You really have to be something of a masochist to over-involve yourself with technique. In the real world, where one is expected to perform under less than perfect circumstances, one continually calls upon one's professionalism to cover the cracks, and to make every concert just that extra bit special. The more you pursue a certain kind of perfection, the more unhappy you are with anything less. It's the law of diminishing returns in the end, and in my opinion life is simply too short to become preoccupied with such minutiae.' ♪

'In the real world, where one is expected perform under less than perfect circumstances, one continually calls upon one's professionalism to cover the cracks, and to make every concert just that extra bit special.'

'Whether I am playing, directing from the keyboard or conducting, I feel driven by the sheer thrill of making music.'



photo: Fritz Czernow/Chandos

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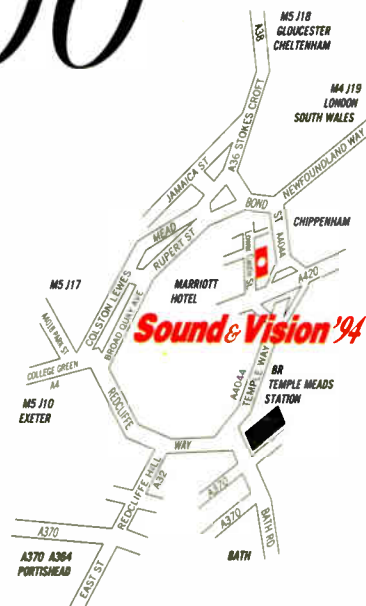
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RECORD OF THE MONTH

BRITTEN:

Sinfonia da Requiem □ Peter Grimes – **Sea Interludes & Passacaglia** □ **Young Person's Guide to the Orchestra**/PURCELL (arr. Britten): **Chacony for Strings** LPO/Slatkin

RCA 09026 61226 2 (68m 05s) •

These are finely prepared, finely detailed performances – in particular, the *Passacaglia* emerges as a piece of real stature, able to stand out of context (even if it does portray Grimes and the boy). In fact, the recording derives from different sessions from the 'Sea Interludes', for which the brighter acoustic of Abbey Road is manifest. Deep bells in 'Sunday Morning' nonetheless toll, *Tosca*-like, with impressive heft (note the sensitivity with which this second interlude fades away to stillness).

These interludes are by no means easy to conduct: I recall one performance, by this very orchestra, falling apart at the hands of a last-minute substitute conductor. Slatkin's realisation is full of imaginative touches; for example, in 'Dawn' listen no further than the first cymbal clash, which perfectly mirrors the visual effect of spray hitting the rocks, dazzling in the sunlight – and how precisely the preceding wind phrases convey the waves circling around the rock bases.

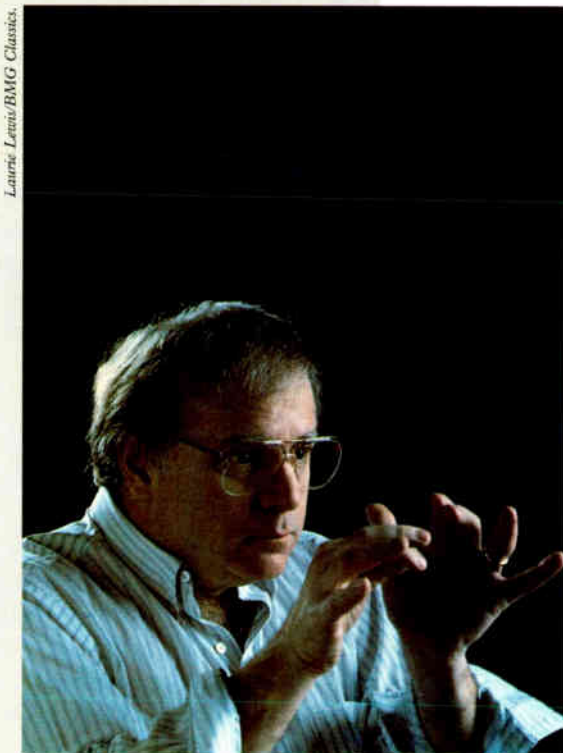
With YPG, choice between Slatkin's version, Andrew Davis's [Teldec], or the composer's [variously coupled on Decca] could only be determined by preference for one or other of the three London orchestras. Each is splendidly engineered: the LPO brass particularly ripe-sounding in this Walthamstow Keener/Hatch recording (regrettably not sub-indexed) and the general effect warm, unexaggerated in balances. How meaningfully the bassoons, then high-soaring strings phrase, from 4m 06s – there's nothing routine allowed onto the master here.

In the *Sinfonia da Requiem*, the Abbey Road recording nicely captures the wide range of colour in the scurrying 'Dies irae' orchestration, from delicate flute to tuba growls and woodenish thwacks on bass drum. Britten himself was nervier, more urgent here with the NPO (superb Decca analogue sound from Kingsway!); but this is the Slatkin we remember from



Unsung songs from John Adams: just itchy minimalism or a new level of aural imagination?

Leonard Slatkin – a collection of Britten works recorded with the LPO



ADAMS:

Hoodoo Zephyr

Synthesizers/Adams

Elektra Nonesuch 7559-79311-2

(53m 33s) •

Wow! And that from a listener who habitually avoids synthesized music. 'All songs composed and performed by John Adams', claims the fold-up annotation, but there's no singing, and the 'instrumentation' (my quotes) – which is in effect a one-man band – was produced between January 1992 and May 1993, utilizing various electronic instruments and systems. Stylistically, *Hoodoo Zephyr* marks a leap forwards from Adams's operas and older instrumental pieces: the range of tone-colours employed is more varied, and Adams's imagination has broadened to accommodate new levels of aural exploration. There are seven songs in all, each reflecting the mood of a specific printed text: 'Come on my skateboard,' says the first, 'my possible vehicle, my holy roller...', and off we go on a brightly-lit ostinato. Worlds surveyed are vividly surreal, the second song plunging us among submarine wonders only to veer sideways [at 4m 02s] among a line-up of gamelans, possibly in earshot of Nibelheim. The third song combines tabla-style tapping with distant chanting, the sixth (already a favourite) is ripe for a 'Baywatch' sound-track with slow-motion beefcake, while the seventh visits Steve Reich [at 2m 39s] and Stravinsky [at 6m 09s]. The closing couple of minutes have a childlike sense of fun and the recording is quite spectacular: there can't be many points along the spectrum that haven't been fully exploited. Itchy minimalism, pop, MOR – who knows how *Hoodoo Zephyr* will be greeted? And who cares! What matters is that it works, and it's my guess that John Adams's 'latest' will attract something of a cult following.

[A*:1*]

Robert Cowan

BARTOK:

Piano Concertos 1-3

Peter Donohoe (pno)/CBSO/Rattle

EMI CDC 754 8712

(76m 35s) •

Original plans were for a fascinating threesome – Bartok Two alongside the Gershwin (which I remember suggesting to Andrew Keener as a possible companion after hearing what a spiky, percussive job Donohoe made of it in performance) and the Stravinsky *Concerto for Piano and Wind*. Obviously this is better still, and it explains why the middle performance, recorded two years before the others in 1990, has been on hold. Since then, I feel, Donohoe

has discovered even more of the song, as well as the dance elements of earlier Bartok. It seems like a natural step from his unexpectedly refined interpretations of the Liszt and Prokofiev sonatas to this Bartok First Piano Concerto, never unduly percussive – though Donohoe can be hair-raising when he wants to be, as in the piano's chord clusters which accompany the woodwind incantation at the heart of the slow movement. Even more revelatory, though, is the freedom and the variety he extracts from shreds of lyricism in (i), emphasising the melody and the rhythm in teasing turn. The engineering is helpful in putting Birmingham woodwind on the level with the soloist and, given Donohoe's sensitive ear for what his orchestral colleagues are doing, it really pays off; in concert, the strings inevitably form a kind of barrier.

Both the Second and Third concertos, in comparison, have their moments of reticence, though Rattle pulls all the stops out for the last flurry of brass fanfares in No. 2 after the great sadness of piano and flute echo (though why the long-held last note?). There may be a purpose to the reserved lyricism of No. 3, which the sound seems to bear out. Is this elegy or homesickness? It isn't quite clear enough to me. Anyway, the Adagio is truly *religioso* in the wider sense that Bartok intended, and its counterpart in the Second Piano Concerto finds Rattle and the CBSO strings managing *pianissimos* on the verge of silence as only they know how. The moods and questions of these performances linger on long after listening.

[A:1*/1]

David Nice

BEETHOVEN:
Violin Concerto/MENDELSSOHN:
Violin Concerto in e
Monica Huggett (vln)/OAE/
Mackerras

EMI CD EMX 2217

(66m 18s) ■

Following hard on the heels of Stephanie Chase's pioneering 'period' version of the Beethoven Violin Concerto for Cala [November], this recording adopts the same philosophy and includes the Mendelssohn concerto for good measure. The Cala CD featured the Hanover Band under Roy Goodman, and the soloist here, Monica Huggett, provides a link with that body since she was once its leader and even directed a couple of its excellent Beethoven symphony recordings. However, while her solo role in both of these concertos is admirably served, not much of the orchestral sound or style with which she has been associated is elicited by the OAE under Sir

Charles Mackerras. They produce a slightly coarse impact at tutti climaxes, especially in the Beethoven, without offering much of the inner clarity and variety of instrumental timbre one has come to expect from such ensembles, while there's a 'modern' fullness of tone in the bass which seems inappropriate. But the move to a more congenial ambience for the Mendelssohn concerto shifts the sound quality, suggesting that some of the limitations may have been due to the venue, while the soloist is nicely set back in both works.

The Mendelssohn receives a conventional, one might almost say perfunctory, performance, uplifted by some fine solo work from Huggett, but the Beethoven is a real disappointment – mainly in the matter of pacing. Even if tempi were indeed generally more brisk in earlier times, I cannot bring myself to believe that the outer movements of the composer's most relaxed, least confrontational concerto should be as hasty as here. The middle *Larghetto* didn't worry me, but to bring (i) and (iii) to below 22m and 9m is surely too destructive of the work's essentially reposeful mood. In addition, while acknowledging the interest and virtuosity of Ms Huggett's cadenzas, I must admit to a strong preference for the loving serenity of Ms Chase's first cadenza in the Cala recording. The latter therefore remains my firm recommendation for a period version of

All three Bartok Piano Concertos on one disc from Peter Donohoe: performances which linger in the mind

Sir Charles Mackerras sets tempi in a new period-instrument recording of the Beethoven Violin Concerto which won't please the traditionalists

Monica Huggett – a period instrument realisation of the Beethoven Violin Concerto is coupled with Mendelssohn's E-minor on 'Eminence'

the Beethoven. But this 'Eminence' coupling might nevertheless appeal to anyone who prefers vigour to repose in that work, is not much worried about the niceties of instrumentation, etc, and would like to have two great violin concertos on one mid-price CD.

[B:1/3]

John Crabbe

BEETHOVEN:

Lieder – 5 Goethe songs, Op.52:4, Op. 75:2, Opp.83:1-3 □ 6 Gellert songs, Op.48 □ An die ferne Geliebte (cycle of 6 Jetteles songs), Op.98 □ songs from poems by Reissig, WoO. 137/139/146 □ Matthison, Op.46/WoO.136 □ Stoll, WoO.140 □ Sauter, WoO.129 □ Weisse, Op.128 □ Herrosee, WoO.123

Olaf Bär (bar)/Geoffrey Parsons (pno)

EMI CDC 754 8729

(63m 21s) •

This is only the second newly-recorded all-Beethoven baritone lieder collection to appear on CD, following Louis Berkman's 1990 Meridian disc (DUOCD 89010). Otherwise the field is dominated by Fischer-Dieskau's 1965 live recital (in enhanced mono on Orfeo C 140501), with his full Beethoven corpus still waiting in the wings for digital transfer. That Orfeo CD is virtually unassailable as a one-disc baritone compilation, but any lieder-lover who nevertheless has reservations about Fischer-Dieskau's slightly precious verbal manner will be keen to know how Olaf Bär fares in a similar programme, duplicating F-D with 18 of its 26 songs.

He certainly tackles Beethoven without affectation. Meticulous, crisp and forthright, he is admirably supported by Geoffrey Parsons, with the latter always smoothly geared to the voice, and aptly Beethovenesque in his pianism. But there's a slight coolness in Bär's approach when it comes to expressing the moods of loneliness and yearning characterizing much of the poetry. Although fine in the more outgoing items, and certainly uninhibited in his use of *sforzandi* at climaxes, he doesn't in my view inject enough feeling into those songs (the majority) which are concerned with sadness, lost love, or religious meditation. I found that even Meridian's generally less polished Berkman achieves greater emotional weight in several of the latter, while Bär's fortissimos are not helped by a rather up-front recording. If played at a matching loudness this tends to be overbearing at climaxes, and while the sound is clean I would have preferred the performers to be set a little further back in the ambience.

[A/B:1/2]

John Crabbe



photo: Alan Wood/EMI

BERG:

Altenberglieder Op.4 □ **7 Early Songs** □ **3 Pieces from the Lyric Suite** □ **Orchestral Pieces Op.6**

Brigitte Balleys (sop)/Deutsches SO Berlin (RSO)/Ashkenazy

Decca 436 567-2 (66m 15s) •

The central challenge in performing Berg's music is the one that confronted the hyper-aesthetic composer in creating it: how to achieve sensuousness and extreme intensity without overripeness; how to articulate the lushest late-tonal harmony by means of fine-drawn polyphony; how to locate the mind amid the voluptuousness. The result is that Berg is the most popular of the Second Viennese trinity often for the wrong reasons: readings that stress the 'decadence' and heady sensualism of his sound, like a Schreker with brains or a blousier, more neurasthenic Mahler.

This beautiful recording comes as near as any I know to giving Berg his imaginative due. Ashkenazy's approach, aided by an exquisitely balanced yet never clinical sound, is most sensitive, marked by a high refinement and sense of atmosphere. The music breathes freely, and even at its most intense retains elegance and poise, always apprehensible as line and colour, not just hot chordal sensation. Brigitte Balleys, whom I've not encountered before, has a near-ideal voice for this repertoire, bringing youthful ardour and freshness to the *Early Songs* and a wealth of obliquely-conveyed passion in the more 'Expressionist' *Altenberg* set. She is never over-dominant, while Ashkenazy draws playing of magnificent restraint from his Berlin orchestra, as if they were a vast ensemble of soloists.

The two song-cycles are so good it would be worth getting the disc just for them. Three pieces from the *Lyric Suite*, though, are finely projected, with string-playing of notable tension in the last number. In the big Op.6 *Orchestral Pieces*, where Dorati, Karajan, Boulez, Rattle and others have achieved so much, there is less scope for Ashkenazy to achieve a personal approach – but this is still a powerful, even stark reading that stresses the baleful symphonic momentum underlying these multi-textured inventions. The vast orchestral apparatus is here for the most part dark and grim, but never, as so often, over-heavy: nor does Ashkenazy miss the rare flashes of sardonic humour. The climax of the final march is truly scarifying, and the final hammer blow has never reminded me so strongly of the end of Mahler 6.

[A:1*] Calum MacDonald

BUSONI:

Turandot – Suite/CASELLA: Paganiniana/MARTUCCI: Notturmo □ **Novelletta** □ **Giga**
La Scala PO/Muti

Sony Classical CD 53280 (59m 28s) •

Here's healthy enterprise from Riccardo Muti and the La Scala Philharmonic, and a welcome opportunity to sample the work of these three lesser-known Italian figures. The charming Martucci items are duplicated elsewhere in comparatively workaday readings under Francesco D'Avalos [ASV], so these more subtle realisations are welcome – the glowing, at times almost Elgarian, *Notturmo* for one is a real beauty. It's also good to welcome Busoni's *Turandot* suite back to circulation (the subsequent opera from 1917 coupled with *Arlecchino* is now on Virgin Classics under Kent Nagano). In his admirable Cincinnati SO account for MMG/Vox Cum Laude, the underrated Michael Gielen offered a more generous selection than Muti, who for some reason gives us only six numbers out of the eight which comprise Busoni's original 1904 suite. He matches Gielen's commitment if not always his authority. Sony's enterprising programme kicks off with Casella's *Paganiniana* – an agreeably bustling example of much ado about not very much at all. Balance is excellent within the chosen dry acoustic, and all told this is a most refreshing, off-the-beaten-track concert.

[A/(B):1] Andrew Achenbach

BRUCKNER:

Symphony 4
BPO/Barenboim

Teldec 9031-73272-2 (68m 23s) •

The booklet portrait brings home the fact that Daniel Barenboim is now middle-aged: indeed, this Philharmonic Fourth was undertaken just one month before his fiftieth birthday, in October 1992. This month his (twenty years!) earlier Chicago recording reappears as part of a DG boxed cyce; the timings show a gradual broadening over the work, ½m in (i) to 2m in (iv). The Berlin version is unexceptionable in (i), without that wild streak marking Karajan's 1975 DG Fourth [see 'Reflections']. Teldec's recording suggests, too, that getting decent sound in the hall has not become easier: the big climaxes cloud over, inner detail is often unclear, and does the acoustic suggest a full or empty hall? (This is not said to be 'live', yet two or three coughs and extraneous noises are heard.) The Andante is somnolent, not least in the climax, and the playing is far

from pinpoint. The *Eroica*-like scherzo is exuberant, the excitement of the chase well suggested. But I suspect the last movement will put Brucknerians off this purchase – especially the opening, although ultimately the innate nobility of the work is recaptured. Barenboim's flexibility is to be expected, and if in (i) there were lapses in exaggerated underlinings, then there were haunting pianissimi to compensate. Now it is as if Barenboim – in a curiously disinterested way – is all out to sensationalize or sentimentalize the music, eg with a heavy cymbal clash at bar 76, before the horn motif [2m 44s], and not to be heard in his more whole-hearted Chicago reading (nor with Muti/BPO, but also used by Karajan and, departing from Nowak, Jochum/BPO). Barenboim may have changed, but doesn't seem to have grown closer to the 'Romantic'.

[A/B:1/3] Christopher Breunig

CLEMENTI:

Symphony 1 □ **2 Symphonies Op. 18**
LMP/Bamert

Chandos CHAN 9234 (58m 55s) •

After so many decades of neglect it's good to see interest being taken in Clementi's splendid symphonies. This new recording of the First comes not long after recent issues from Erato and ASV of all four mature symphonies under Scimone and D'Avalos respectively. Clementi lavished a lifetime's care and attention on his four 'great' symphonies, constantly revising and improving them. For this reason they were never published, and definitive texts do not exist. Unlike the two previous recordings, conductor Matthias Bamert chooses Alfred Casella's edition of the first symphony, rather than Pietro Spada's version (which is claimed to be more faithful to the original autograph manuscript). The two early symphonies Op.18 are musically less profound, but still beautifully crafted and full of life and vitality. Bamert certainly secures clean, lithe orchestral playing from the London Mozart Players: rhythmically more vital than Scimone, more polished than D'Avalos – performances of real brilliance and sparkle. The new recording is superior too: more alive than Erato's, less beefy than ASV's – though that has a more vivid brass balance, giving climaxes more impact. Chandos's typically reverberant presentation sets the orchestra well back in a deep yet clear acoustic: not to everybody's taste, but very successful and convincing on its own terms.

[A:1] James M Hughes

Muti and the La Scala Philharmonic offer an enterprising programme of Italian music; Ashkenazy ventures into Berg – with exceptional results

Mathias Bamert and the London Mozart Players in a winning account of three Clementi symphonies



photo: David Carter/Erato

Daniel Barenboim – the fourth disc in his Berlin cycle of Bruckner symphonies is 'The Romantic'



photo: BMG Classics

CURRAN:
Songs and Views of the Magnetic Garden

Performed, synthesized, recorded and mixed by Alvin Curran

BMG 'Catalyst' 09026-61823-2
(51m 33s) •

Terribly '60s and '70s, this: a New Age-style fantasy full of birds, breezes, chimes, screeching animals, ethnic-style singing (Curran's own in the second section and Margherita Benetti's in the fourth), gurgling water, slopping waves, even buzzing bees and the distant barking of a dog. But it is a sustained 'experience', with supremely sensitive transitions between sections, and a wayward musical logic to what is, after all, largely *sans* music as we commonly understand the term. *Songs and Views of the Magnetic Garden* is a painstaking digital remake of a 1973 original, yet so effective is the transfer that you'd never guess its vintage. Curran himself takes sound as his prime inspiration, 'a sound that may manifest in any number of ways,' he writes, 'until I become obsessively involved with it.' And his 'garden' is essentially a six-part soundscape, a synthesized tonal arena that transports us through various locations with considerable aural imagination and a vivid feeling for atmosphere. But make sure you dig out your caftan, love-beads and incense sticks before you listen.

[A:1] **Robert Cowan**

DVORAK:
Cello Concerto/TCHAIKOVSKY:
Rococo Variations (Ed. Fitzenhagen)
Truls Mork (vlc)/Oslo PO/Jansons

Virgin Classics VC 759 3252 (58m 07s) •

The 32 year old Bergen cellist plays both works with complete technical assurance and he is faithfully accompanied by Jansons. Mork is inclined

to dwell over the slower music when the opportunity is presented, but, especially in the Dvorak, his musings fall on sterile ground: for whatever reason (and it might principally be the unalluring Oslo concert hall sound) these performances remain curiously uncommunicative – uninvolved, even though the gestures are heard to be made. The 1723 Montagna instrument is better presented in the Tchaikovsky, where the recording is more ingratiatingly transferred.

[B/(C):2] **Christopher Breunig**

GLUCK:
Iphigénie en Tauride
Vaness/Winbergh/Allen/Surian/Ch & Orch of La Scala/Muti

Sony Classical CD 52492
(2CDs, 116m 38s) •

Here is a fiery, big-hearted and committed account of Gluck's masterpiece. The Sony recording team made it during six days in March 1992 – by my reckoning the final two dress rehearsals and the first four performances of Giancarlo Cobelli's production at La Scala. The applause at the end of the acts, the stirrings of the audience, minor musical flaws, and balancing problems brought about by stage movements, are drawbacks. But the sense of corporate involvement, the warmth of response to Riccardo Muti's generous musical direction, more than overcome those disadvantages (others, of passing concern, are the occasionally woolly tone and unidiomatic French of some of the minor characters). Carol Vaness rises to the challenge of the taxing name-part: not always lovely to listen to (strident vibrato under pressure), yet instinct with the tragic potential and emotional ardour that I do not recall from Diana Montague's purer singing on the Gardiner/Erato set. Thomas Allen is a superb Orestes, as indeed he was for Gardiner (he is even more impressive in these live takes), and Gösta Winbergh as his companion, Pylades, is full-blooded, eloquent and only once or twice under strain. Giorgio Surian is a disappointing Thoas, and some of the important choral scenes sound too remote. The orchestra is in excellent form, with telling wind detail; the cushion of strings, however, suggests an age long after Gluck; and Muti's occasional desire to linger when the situation calls for a more urgent response is briefly disappointing. This set does not replace the 1985 Gardiner/Lyon recording in my affection and admiration, but for its theatrical sense the Muti is strongly recommendable.

[B:1/2] **Peter Branscombe**

GRIEG:
Violin Sonatas 1-3
Dumay (vln)/Pires (pno)

DG 437 525-2 (70m 01s) •

One doesn't encounter these lovely sonatas much nowadays, so this latest instalment in DG's Grieg Anniversary Edition is more than welcome. Though his occasionally febrile, throbbing manner will not be to all tastes, Dumay is a big-hearted, commendably accurate player, and both he and the nimble-fingered Pires form a lively, if sometimes over-impulsive partnership. They are especially impressive in the first two sonatas, and if things seem marginally less fresh in the much later Third (once a hugely popular recital item) that's perhaps because by this time there's a hint of production-line contrivance about some of Grieg's actual material and his subsequent treatment of it. The sound is clear and truthful, though the microphones catch Dumay's occasional distracting intakes of breath before the start of a phrase with alarming fidelity.

[A:1(2)] **Andrew Achenbach**

LOURIÉ:
A Little Chamber Music □ Little Gidding □ Concerto da Camera
Gidon Kremer, Thomas Klug (vln)/Kenneth Riegel (ten)/Deutsche Kammerphilharmonie

DG 437 788-2 (54m 33s) •

Arthur Lourié's music defies categorisation, but it must be heard. *A Little Chamber Music's* mild astringencies recall Prokofiev, and most especially Stravinsky, whose *Apollon musagète* (which Lourié anticipates both in texture and harmony) dates from four years later (1928). Stravinsky made an anthem out of TS Eliot's 'The dove descending breaks the air' in 1962, but Lourié's setting of the parent poem matched Eliot's sullen nostalgia with a plethora of imaginative motives and colours, a sort of organized musical bric-à-brac. Even Berg would have been hard-pressed to concoct a more graphic or compelling instrumental accompaniment – Lourié's tapered withdrawal from the closing couplet, 'We only live, only suspire/Consumed by either fire or fire', is unforgettable. And so, in quite a different way, is the 1945 *Concerto da Camera*: a sort of 'Fiddler on Stravinsky's Roof', all coruscating violin solos and improvisatory duets, the fifth of which (a Serenata for violin and double-bass) harks back to the world of *L'Histoire du Soldat*. How might one describe this music? Pungent, atmospheric, haunting; drier than Berg, sweeter than Webern, simpler



Alvin Curran's synthesiser programme is on the new BMG 'Catalyst' label. (Below) On DG, a trio of works by Arthur Lourié features Gidon Kremer

Anticipations of Stravinsky's Apollon musagètes in Lourié's A Little Chamber Music

than Schoenberg, warmer than Stravinsky – but with something of the stylistic characteristics of all four. Late Shostakovich also comes to mind. A roundabout way of nailing Lourié's precise style, perhaps, but I hope somewhere near the mark. Kremer has recorded the *Concerto* before (for Philips), but this version is both better played and superbly recorded. In fact, the whole programme makes for compulsive listening. Do try it.

[A*:1*] **Robert Cowan**

MENDELSSOHN:

**Violin Concerto in e/DVORAK:
Romance, Op.11/MASSENET:
Meditation from Thaïs/VAUGHAN
WILLIAMS: The Lark Ascending**
*Anne Akiko Meyers (vln)/
Philharmonia/Litton*

RCA 09026 61700 2 (58m 37s) •

An incongruous but pleasurable programme. (Ms Meyers's previous commitment to RPO Records spares us the Bruch G-minor!) The Mendelssohn – how shall I put this? – doesn't make a first choice, but might well get an airing when you put on this disc for the *Meditation*, the most winning of these four performances. The second movement of the concerto is taken a little too slowly for an Andante and, more particularly, for the simplicity of what Mendelssohn has to say. There are one or two other gestures not quite to scale, but what gives this version its appeal is Andrew Litton's punctual, non-routine, wholly complementary work with the Philharmonia. (The same can be said for all the music here. Later this year, Andrew Litton leaves these shores for the Dallas SO.) At the beginning of *Lark Ascending* one is more aware of the soloist's fine calculation, her beautifully accurate bowing, than of the summer haze,

Danse macabre in song form, a pot-pourri from Samson and Delilah, and a sizeable Mass setting reflect Geoffrey Simon's explorations beyond the beaten track of Saint-Saens's Carnival of the Animals or G-minor Piano Concerto

Two Cala discs offer rare and illuminating works by Saint-Saens. Michael Kibblewhite directs the Requiem Mass

the fluttering speck of the lark above; then, as the work proceeds, she seems to gain a freer, less self-aware manner – thus a good account if not surpassing the Iona Brown, Hugh Bean or Tasmin Little recordings. And it's hardly surprising that Josef Suk, with the Czech PO under Ancerl, played his great-grandfather's *Romance* with a mixture of authoritativeness and improvisatory innocence which this young (23 years old) Californian does not yet match.

[A:1/2], but a 'star' for the Massenet. **Christopher Breunig**

SAINT-SAENS:

Parysatis – Airs de ballet □ **Sarabande et Rigaudon** □ **Tarantelle for Flute, Clarinet & Orchestra** □ **Suite algérienne – Marche militaire française** □ **Africa** □ **Ascanio – Valse-finale** □ **Messe de Requiem'**
Soloists/LPO/Simon/Olafimihan (sop)/Wyn-Rogers (con)/Roden (ten)/Kirkbride (bass)/Herts, Harlow & East London Chs/Kibblewhite
Symphony 3 □ **Danse macabre (song version)** □ **La muse et le poète** □ **La princesse jaune – overture** □ **La jota aragonesa/LUIGINI: Samson et Dalila – Grande Fantasia**
O'Donnell (org)/Roden (ten)/Chase (vln)/Truman (vlc)/LPO/Simon

Cala CACD 1015 & 1016

(77m 39s/78m 24s) •

Goodies galore, many of them totally unfamiliar – Geoffrey Simon and Edward Johnson (the repertoire consultant and expert annotator for this enterprise) possess a real gift, it would seem, for staging precisely this sort of late-Romantic rescue-act. Saint-Saens travelled widely, and many of these impeccably crafted items have more than a touch of the exotic about them, not least the ballet excerpts from his incidental music to *Parysatis* (1902), the glittering fantasy for piano and orchestra entitled *Africa* (composed during the winter of 1890 while Saint-Saens was on holiday in the Canary Islands) and, of course, the *Suite algérienne* (1880), whose popular final number, the 'Marche militaire française', is affectionately realized here. Moreover, the *Sarabande et Rigaudon* (1892), *Tarantelle* (a very early, distinctly Mendelssohnian creation from 1857) and 'Valse-finale' from the ballet music for composer's seventh opera *Ascanio* (1890) are all most diverting too. But by far the biggest offering on this first volume is the *Requiem Mass* from 1878, a pretty, at times quite impressive composition (the 'Tuba mirum' features some striking scoring for organ and four unison trombones), and admirably presented here.

Tenor Anthony Roden also features on the second disc, in a recorded first for the orchestral version of the song *Danse macabre* (the famous tone-poem followed two years later in 1875). I must confess that *La muse et le poète*, a product of the composer's late career, incorporating busy parts for solo violin and cello, has yet to consistently grip my attention throughout its quarter-of-an-hour span; but who could resist the oriental, flighty charms of *La princesse jaune* (a real charmer of a curtain-raiser, this), or the colourful *La jota aragonesa*? Again, performances are lively and sympathetic. Actually, Simon's account of the ubiquitous 'Organ Symphony' isn't half bad either: textures sparkle agreeably, dynamics are nicely graduated throughout, and Cala's immensely ripe sonics ensure plenty of spectacle in the closing stages. Finally, Alexandre Luigini (1850–1906), the man who gave us the indestructible *Ballet Egyptien*, contributes his own amiable pot-pourri of tunes from Saint-Saens's *Samson et Dalila*. Francophiles will find much to delight them on these two extremely well-filled CDs.

Both [A/A*:1]

Andrew Achenbach

SIBELIUS:

Symphony 2 □ **Romance for Strings**
□ **Valse Triste** □ **Finlandia**
Boston SO/Ashkenazy

Decca 436 566–2 (64m 36s) •

Symphony 2 □ **Swan of Tuonela** □ **Valse triste** □ **Andante festivo**
Oslo PO/Jansons

EMI CDC 754 8042 (60m 51s) •

There are notable points of similarity between these dissimilar musicians. Neither indulges in incongruous theatricality nor in hectoring rhetorical gestures. Both prefer a controlled and dignified presentation of the music, with an emphasis on structure rather than sensationalism. The lush spaces of Symphony Hall give the Bostonians a plangent glow, but Ashkenazy doesn't allow the textures to clog. The Oslo aggregation emerges with a brighter astringency but Jansons keeps the sonorities from degenerating into a desiccated hardness of tone. Yet within such a relatively unromantic setting, it's Jansons who, in the symphony, conducts a more romantically nuanced (i). Ashkenazy is plainer, and is not quite so successful in welding the varying elements of (ii). Jansons is preferable, though he allows his woodwind to fluff their motif at 3m 50s. Both conductors are at their best in the last two movements – but

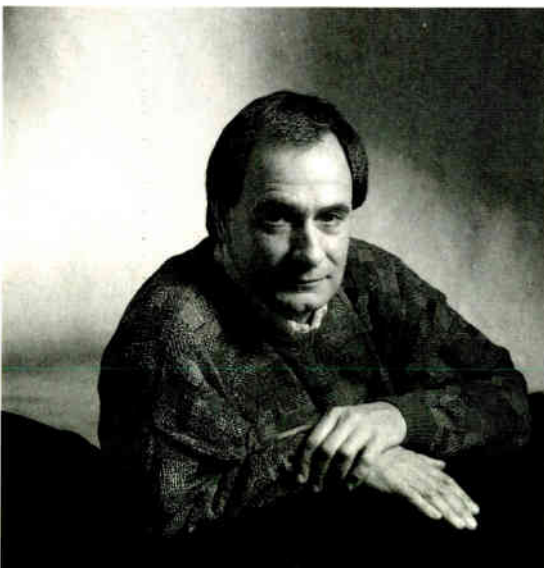


Photo: Hanyu Chiala

A draw declared between these recent versions of Sibelius's Second – and James Levine's is set to enter the competition (DG). Decca should kit out the LSO/Monteux for CD too!

Oslo trumpets and trombones are slack in attack at the end of (iii) – and build the music most convincingly. Overall, both performances vary from good to very good, but Ashkenazy has the finer orchestra. The recordings are generally top-drawer but both companies cut the level by a whisker as their respective maestros approach the apotheosis of the finale.

The fill-ups follow similar patterns of performance. Janson's rather free *Valse Triste* may not have universal appeal, but he offers a fine *Andante Festivo* and *Swan*. Ashkenazy rounds off with a deeply-felt *Romance* and a powerful yet unhistrionic *Finlandia*.

So, a dead heat; and there can be no clear-cut recommendation. Choose according to your tastes – but for a truly great account of the symphony, turn to Barbirolli and the RPO [1962:Chesky]. And if you are lucky, Decca may decide to reissue the equally magisterial Monteux/LSO recording (1960) sitting needlessly in their archives.

[A:1/2] *Nalen Anthoni*

SCHUMANN:

Manfred

Soloists/Sudfunk-Chor/Stuttgart RSO/Schuricht

Archiphon ARCH-2.3 CD (79m 29s)
 recorded 1952 •

We still await a modern recording of Schumann's admittedly uneven incidental music to Lord Byron's *Manfred*. Until then collectors are left with a straight choice between the protracted mid 1950s Beecham version (of his own revision) and this radio production under Schuricht, which thankfully leaves Schumann's original largely untampered with. Despite fleeting technical infelicities in both the performance and recording, it is Schuricht who really gets to the heart of the matter, directing a memorably coherent and dramatically compulsive account of a potentially diffuse work.

[H:2] *Julian Haylock*

R STRAUSS:

Orchestral songs - Vol 2

Felicity Lott (sop)/SNO/Järvi

Chandos CHAN 9159
 (56m 18s) Part © 1986, '88 •

If you had been collecting the Chandos Strauss series then the company's Vol. 1 compilation of the Lott-Jarvi-Strauss formula was not much use to you, with only one previously unissued song. This is quite a different matter. There are five new tracks recorded last year, and four of them feature songs that are big on vocal demands and/or orchestral scope – doubly welcome since

they fill surprising gaps in the catalogue as well as complementing the imposing *Song of Apollo's Priestess* and the *Three Hymns* (to Holderlin texts which I labelled 'washy' when these versions first appeared, and was consequently taken to task by an ardent reader: no change of heart now, I'm afraid). *Verführung* is an incandescent nocturne leading soprano and orchestra from Salome to Ariadne territory. I knew it only from a long-deleted Strauss disc from Sylvia Sass, where it sounded a good deal more leisurely than Järvi makes it; Lott moulds the lines flexibly to his urgent purpose and, if no *spinto* soprano like Sass, out-beguiles her in the dying close.

The marshalling of resources in the wails and laments of the strange *Frühlingsfeier* is admirable, and I was much moved by the matching of steady vocal tone to easy orchestral gait in a masterpiece, *Des Dichters Abendgang*. *Winterweihe* and *Das Rosenband* come from the least happy session of songs in 1988; especially in this company, the voice sounds slightly tired and strained. But the big Greek hymn and the Holderlin settings command respect for a relatively light soprano conveying power and strength with unerring good taste. It's all a bit much at one sitting – surely that's true of any Strauss song recital – but it certainly sheds a new light on the number of dramatic scenes in this area of his output. The soprano fends very well for herself in the rather swimmy open-hall acoustic.

[A/B:1/2] *David Nice*

STRAVINSKY:

The Firebird – complete □ 4 Etudes

□ Fireworks

Chicago SO/Boules

DG 437 859-2 (59m 57s) •

Boulez takes a cool, calculated view of *The Firebird*, giving a detached reading with the emphasis on clarity and transparency. Those who like plenty of theatricality in this score (vulgarity even) may find Boulez too cerebral, too unwilling to give the music its head. The quiet first half of the ballet is superbly done with much subtle orchestral detail and plenty of animation where necessary. But Kashchei's 'Infernal Dance' could be more urgent and aggressive, more vividly coloured; one misses a certain primitive excitement at this and other key points. In this respect Boulez's 1975 New York *Firebird* [CBS, nla] was more engaging and direct, if less well played than this new one. The sound of the older recording, while not as truthful and refined as DG's, was

more exciting too, highlighting percussion or brass detail in an exaggerated yet impressive way. DG's '4D' recording is very clean and well-balanced. The basic sound is quite close without seeming too forward, but there is a lack of depth and spaciousness – for example, the brass don't really sound as if placed behind winds and strings – and more ambience would have been welcome. Like Boulez's Cleveland *Rite* and *Petrouchka* [DG], the sound seems to lack extreme top and bottom-end, giving a very mid-centred tonal balance.

The short fillers are well-played, showing the conductor's superb control of the orchestra. It would be hard to imagine better accounts of the *Four Etudes*, though *Fireworks* too could have been a tad more elemental.

[A/B:1/2] *James M Hughes*

STRAVINSKY:

Orchestral and stage works

Soloists etc/Suisse Romande Orch/Järvi

CHAN 9240 (5CDs, 301m 51s) ♦

Also available as – *Oedipus Rex* (*Schaut/Svensson/Amoretti/Grundheber/Von Kannen/Rosen/Piat/Romand/Lausanne Pro Arte & Brassus Society Ch* [CHAN 9235]; *Symphony in E-flat* □ *Violin Concerto*¹ (*Lydia Mordkovich*) [CHAN 9236]; *Petrushka* (1911) □ *Apollon musagète* □ *Circus Polka* [CHAN 9237]; *Le Chant du Rossignol* □ *Symphony in Three Movements* □ *Capriccio for Piano and Orchestra*¹ (*Geoffrey Tozer*) [CHAN 9238]; *Symphony of Psalms* □ *Concerto for Piano and Wind Instruments*¹ (*Romand, Lausanne Pro Arte & Brassus Society Ch/Boris Berman*) [CHAN 9239] •

Oedipus Rex

Langridge/Quivar/Morris/Rooter/Kaasch/Bastin/Chicago SO & Ch/Levine

DG 435 872-2 (51m 27s) •

After the analytical Ernest Ansermet and, more recently, the colour-conscious Charles Dutoit (both on Decca), Neeme Järvi offers a third slant on what might be roughly termed the 'Stravinsky-Suisse Romande Experience': spontaneity. But there's a snag. Based on rehearsals for concerts, most of these performances, although admirably vital; are full of minor imprecisions, mostly relating to articulation – far too many to catalogue in detail. And that the Suisse Romande isn't exactly the Berlin Philharmonic to start with makes matters even more hazardous. So you'll need to weigh the appeal

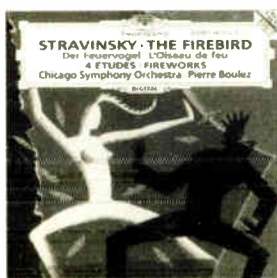
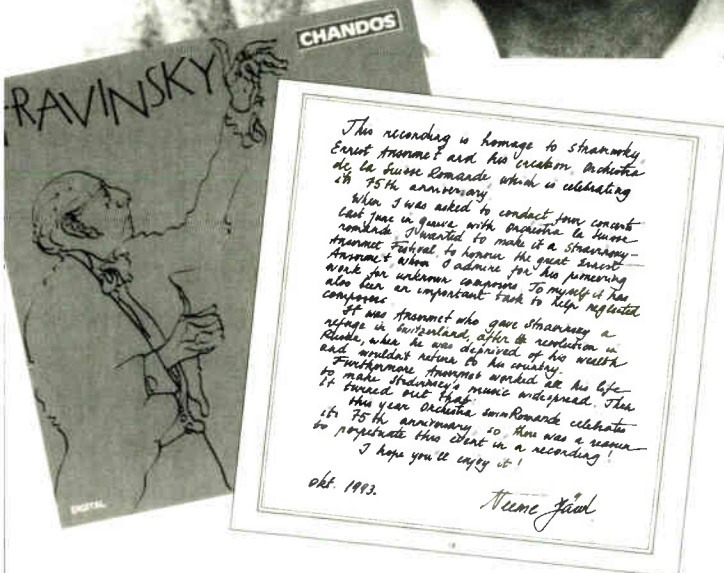
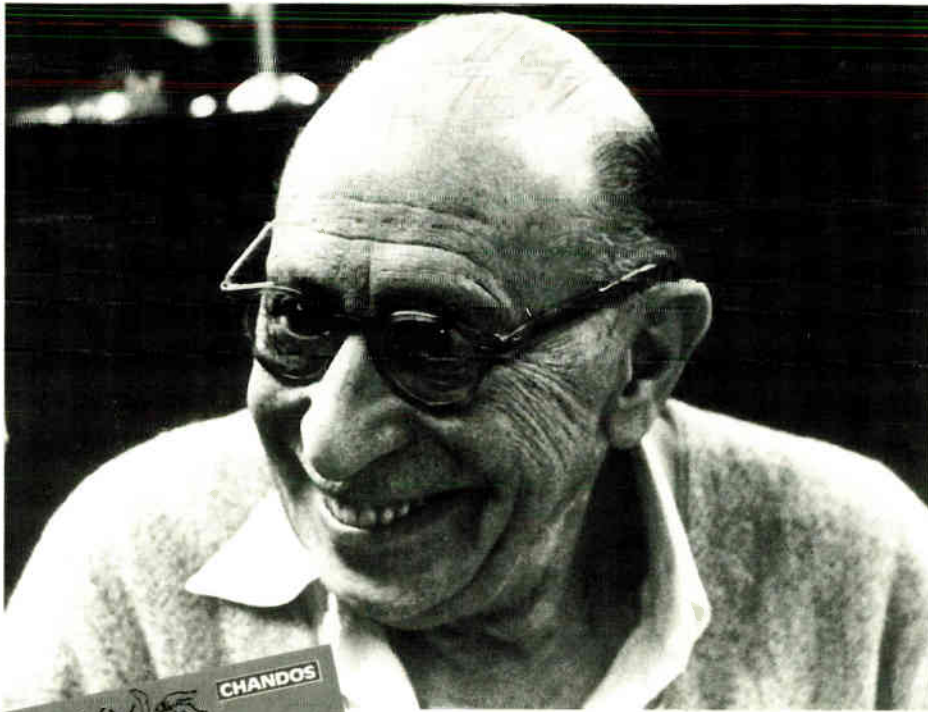


Photo: Sony Classical



Concerto finds Lydia Mordkovitch combining rasping aggression with a rather over-sweet brand of expressiveness, a tendency that makes the second Aria in particular sound inauthentically cloying.

Petrushka is bright and breezy but thin in texture. Spot-check comparisons with Esa-Pekka Salonen's more full-bodied Sony/Philharmonia recording (1947 version) throw Järvi's into a rather unflattering light, although the Suisse Romande 'Death Scene' has plenty of pathos. Salonen couples *Petrushka* with *Orpheus*, Järvi with the rowdy *Circus Polka* and *Apollo musagète* (the original version of *Apollo*), a fairly good performance that falls short of the ideal in terms of rhythmic suppleness, tonal refinement and balletic elegance. Here again, Salonen (on an older Sony disc) takes the lead.

Järvi detonates *Le Chant du Rossignol* to great effect: sparks fly in all directions, but characterization occasionally borders on caricature. However, the closing march (track 4, 8m 54s), although pretty fast, is suitably deadpan and, taken overall, Järvi treats the work more as a symphonic poem than a series of extractions from the parent opera.

The *Symphony in Three Movements* is a two-fisted affair whose central Andante has a certain sleaziness (try the flute solo at 2m 34s), but in the *Capriccio* effective ignition is hindered by a feeling of routine. The *Concerto for Piano and Wind Instruments* is far better, with lively shared syncopations in (i) and some strong solo playing. Which leaves only two 'symphonies', a forceful *Symphony of Psalms* that harbours a number of genuinely beautiful moments (especially in the closing 'Alleluja') and a *Symphony in C* where articulation is sometimes vague and where a tendency to rush compromises the music's dramatic impact.

There's an endearing suggestion of 'it'll be all right on the night' about this set, a seat-of-the-pants sense of excitement that keeps you on your toes. But it tells only part of the tale; there's more to Stravinsky than eagerness and impulse.

[A:2/3]

Robert Cowan

VERDI

Falstaff

Van Dam/Serra/Coni/Lipovsek/NorbergSchulz/Canonic/Graham/Begley/BPO/Solti

Decca 440 650-2 (2CDs, 121m 40s) •

Both Sir Colin Davis, in his orchestrally scintillating *Falstaff* for RCA, and now Solti seem to have had problems casting the very singular roles in a very singular comedy. There was no way Solti could have

Neeme Järvi's Stravinsky set (Chandos) is dedicated to Ernest Ansermet, the composer's staunch supporter – until he turned to serial techniques, which Ansermet abhorred

Järvi and the Suisse Romande recorded for Chandos whilst preparing for concerts in celebration of the Stravinsky-Ansermet link at Geneva Hall

of immediacy against a conspicuous lack of polish. In the case of *Oedipus Rex*, Järvi faces glitzy competition in James Levine's July 1991 Medinah Temple recording on DG. Of course the Chicago band is technically more refined in virtually every department, but DG's recorded balance is far from satisfactory – especially in the opening chorus 'Oedipus, adest pestis' with its ominous ostinato for harp, piano and timpani. Alas, DG have the timpani take precedence to the extent that the crucial piano and harp are virtually inaudible. Vocally, though, DG has the upper hand, with a smoother Oedipus in Philip Langridge, a more imposing Créon in James Morris, and a Jocaste (Florence Quivar) whose protestations that 'the oracles ... always lie' are heartrending in the extreme. Järvi's Peter Svensson is a more effortful Oedipus than Langridge, though he's every bit as dramatic and sounds even more

tortured; but Gabriele Schnaut (his Jocaste) is vocally ungainly: her piercing pleas ('Laius in trivio...') are pretty painful to the ear. Although Levine keeps springs tightly coiled and traces some delicate instrumental detail, eg at the start of Jocaste's aria in Act Two, Järvi is more dramatic: his pounding restatement of the work's opening chorus is powerfully conclusive, almost rivalling Bernstein's classic Boston reading from the 1970s [CBS nla]. In this context, the Suisse Romande's comparative rawness is virtually a boon.

Järvi [B:1/2], Levine [B:2].

What with its exotic colours and sundry sidelong references to Borodin and Rimsky-Korsakov, Stravinsky's early E-flat Symphony seems particularly suited to Järvi's headstrong interpretative temperament; and yet the score's plentiful quirks and surprises are never downplayed. The more astringent Violin

A new live Falstaff from Sir Georg Solti in Berlin yields in enchantment to his earlier Rome recording, though Marjana Lipovsek's Mistress Quickly 'shines at leisure'

improved upon key singers in his 1963 Decca recording, and his young lovers are no match for Freni and Kraus; Canonici tries gallant subtleties in his Act Three aria, but this is no *tenore di grazia*. The Alice, Luciana Serra, is metal-bright and sometimes excitedly sharp, hardly the gracious, clever lady to the life (what we briefly hear of Susan Graham suggests a finer *grande dame* manner); Coni's Ford has some cut in the upper register, but gives no hint of the jealous man's titanic anger; and van Dam's Falstaff is lean and melancholic, without the benefit of the orchestral padding so deliciously given to Fischer-Dieskau by Bernstein (CBS, nla). He makes a rather attractive wooer ('soave Sir John' indeed), and his Lieder-singer's intelligence colours the post-dunking melancholy back at the tavern interestingly, but there's no sense of bravado in the wine-induced recovery. Indeed, vocal wear and tear give him no chance to conjure Falstaff's largesse, and Solti provides little help, well as the Berlin Philharmonic often plays for him. Only Lipovsek shines at leisure, and the smaller roles are incisively taken (Kim Begley is an unusually ringing Caius).

It is an altogether heavier interpretation than the fierce and furious 1963 romp, and less enchanting, too, in Windsor forest moonshine. Berlin violins occasionally throw out a sonorous line or two, and the brass can turn to raucousness when the score demands. Yet for all the precision of the vocal ensemble, the situation-comedy sequences in Ford's home and garden need more brilliant orchestral articulation – and Solti's slowing-down to accommodate the lovers

Ute Lemper – 'simulated emotion' in another Weill programme on Decca

only goes to show that Verdi knew all about pace when he asked for a lively tempo to be sustained throughout these 'interludes'. The clean, warm sound is the one Decca constant in this live Philharmonie recording – it puts DG's dismal artifice in Abbado's recent Berlin Mahler Five, also live, to shame – though why the applause at the beginning as well as the end? [A:2/3] **David Nice**

WEILL:
Songs from Happy End □ Marie Galante □ Lady in the Dark □ Youkali

Ute Lempe (sop)/RIAS Sinfonietta Berlin/Mauceri

Decca 436 417-2 (60m 11s) •

Stranger Here Myself

Angelina Réaux (sop)/Robert Kapilow (pno)/William Schimmel (accord)/Bill Royle (perc)

Koch International 3 70872

(2CDs, 87m 39s) ■

Lemper's lean, mean impersonations and the operatic (or, more to the point, operetta-ish), heart-on-sleeve sequence of Angelina Réaux stand about as far apart as you can get in Weill. Since both so essentially feature songs of the composer's German, French and American 'phases', each reveals her own special strengths. With Lemper, the best comes first: her crisp delivery of Brecht's texts, absolutely on the beat when needed, was an asset on her first Weill-song album and the complete *Threepenny Opera*, and it doesn't wear thin here, either. 'Bilbao-Song' begins light and spruce – one anticipates her *faux*-soprano mode on the refrain 'es war das Schonste', but hears something altogether sweeter instead – while in *Surabaya Johnny* she effectively runs the vocal gamut from 16-year old innocence to prematurely aged experience with a good actressy line in cracked tones. So far, so good; but the impressive parade of simulated emotion won't carry a whole disc's listening. For the *Marie Galante* songs – good to hear them all in more or less the original orchestrations, albeit transposed – a grander dame with real heartbreak in the voice is needed, and the shot at American charm for *Lady in the Dark* falls very flat.

These are both the proper territory of Réaux, who for the most part sticks to Feingold and Blitzstein translations of Brecht (inevitably compromising). She uses the contrasts of lyric brightness in the upper register and dark chest tones very skilfully for Marie Galante's torch-songs, and the apocalyptic sobriety

with which she launches *Le train du ciel* trumps even Stratas (Nonesuch) – who elsewhere always just has the upper hand in breath control, sheer assurance (even if it leads to mannerism) and the extra twist of the tragic screw. Réaux's easy charms in the American songs pay off for *My Ship* (which I remember finding deeply moving in the one-woman show on which this recording is based, innocence regained as sandwiched between a heavy-laden *Alabama Song* and the cynical 'Big Shot') and the two seductive encores (shame about the fade on the last high note). The band worried me: just piano would have been quite enough since the accordion, though apt in the *Solomon-Song*, ruins such dewy-eyed numbers as the one-handed treatment of the Lilac-Bush Duet from *Street Scene*. Mauceri's forces for Lemper improve as she wanes: far too discreet in *Happy End*, very much at home for *Lady in the Dark*.

Lemper [A/B:1/3], Réaux [A/B:1]. **David Nice**

VIVALDI:

Oboe Concertos, RV447, 457 461 & 463 □ Two-Oboe Concerto, RV535 □ Concerto for two oboes, two clarinets and strings, RV559

Frank de Bruinme, Stephen Hammer (ob)/Eric Hoepricht, Anthony Pay (cl)/AAM/Hogwood

Oiseau-Lyre 433 674-2 (60m 06s) •

7 Concertos – RV129, 156, 308, 439, 463, 537 & 580

Hanover Band/Halstead

EMI CD-EMX 2210 (56m 08s) ■

Vivaldi's oboe concertos are less well-known than they should be. Hogwood includes both rare and familiar in this collection, with two fine and stylish oboists sharing honours. Stephen Hammer takes RV457 and RV461 while Frank de Bruine plays RV463 and RV447; they are joined by Eric Hoepricht and Anthony Pay in RV559. Bruine's tone is more open, with sharper overtones than Hammer's, but they blend well when together, notably in the bouncy outer movements of RV535. A bassoon strengthens the bassline to excellent effect, and the playing and balance are a delight. Less happily, the central episode of RV447's Minuet is uncomfortably set apart by heavy full-closes and a drastic tempo reduction, and in track 10 there is an odd metallic squeak at 2m 27s. Also, heavy rumbling noise interferes with enjoyment of several tracks.

RV463 is common to both discs, a fact not immediately apparent from the opening theme, because

photo: Guido Harari/Decca



Hogwood emphasizes its upward movement, Halstead its downward, while the RV index quotes only the latter. Anthony Robson on Halstead's disc is less exuberant than Bruine on Hogwood's: perhaps an effect of EMI's less forward recording. It is warmer than Decca's, with an attractive resonance that never obscures detail. Halstead's varied programme for 'Eminence' (soloists respectively are oboe, two trumpets; violin; flute; four violins and – in two concertos – none) will appeal to the general collector (it's cheaper, too) especially in these expert performances, while Hogwood's is aimed more at specialists. Both are strongly recommended. Incidentally, why has Oiseau-Lyre dropped the distinctive 'Florilegium' identification?

Hogwood [B:1], Halstead [A:1*].

Robert Dearing

A CAPPELLA:

Music by Britten, Brahms, Schumann, Pearsall, Delius, Ravel, Debussy, Poulenc
Cambridge Singers/Rutter

Collegium Records COLCD 119

(62m 32s) •

Really high-class choral singing, this: in purity of intonation and unanimity of attack you'd have to go a long way to hear better results than John Rutter obtains from his responsive Cambridge Singers. Their all-unaccompanied programme offers undiluted delight. I'd especially single out the piercing chromatic strains of Delius's gorgeous *The splendour falls on castle walls* (completed in 1923 – twenty years before Britten's legendary setting in the *Serenade*) and Ravel's wholly exquisite *Trois Chansons* (1914–15). Comparative rarities include Poulenc's lusty *Chansons Françaises* (1945) and Schumann's late *Vier doppelchörige Gesänge* from 1849. My listening notes abound in superlatives: I can't instantly recall a fresher, more intelligent rendering of Britten's *Hymn to St Cecilia*. With exemplary presentation (full texts, translations and copious annotations) and a superbly focused, ideally balanced sound-picture, this latest Collegium project deserves every success.

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

OF ETERNAL LIGHT:

Unaccompanied choral works by Monk, Messiaen, Gordon, Ligeti, Sherman & Moran
Musica Sacra/Westenburg

BMG 'Catalyst' 09026-61822-2

(70m 46s) •

The four most effective works here are also the shortest, Meredith Monk's *Return to Earth* is an upbeat,

minimalist study in rhythm, that toys with mouthed sounds and ends in a mood of suspended calm; Messiaen's *O Sacrum Convivium* (O sacred feast) is a haunting early work (1937) and easily the most beautiful piece on the disc; Kim D Sherman's 'Graveside' ('All war moves on mothers flesh...') is a raw, mildly shocking extract from a work-in-progress entitled *Service for the Dead in Bosnia-Herzegovina* and has its heart-wrenching operation cruelly punctuated by the funereal thud of stamping feet; and Ligeti's otherworldly *Lux Aeterna* (the 'Eternal Light' of the disc's main title) survives its one-time flirtation with Kubrick's '2001' and continues to enthral. Ricky Ian Gordon's *Water Music: A Requiem*, a blandly appealing, laid-back reflection of '... the view from my parent's window ... the waves, lonely, white-capped, hugging the shore (etc),' is rather too long for its material, while Robert Moran's *Seven Sounds Unseen* – a fairly intense setting of words by John Cage – finds *Musica Sacra*'s sopranos conspicuously wanting in terms of tonal precision [track 8, 2m 35s and beyond]. Otherwise, the singing is generally good (especially in the Monk and Messiaen), and the recording relatively close, and the documentation informative. The Monk, Gordon, Sherman and Moran works are all world-premiere recordings.

[A:1/2]

Robert Cowan

LEONARD BERNSTEIN

The Early Years (Vol.2) – RAVEL: Piano Concerto in G/BERNSTEIN: Facsimile/COPLAND: Statements for Orchestra – Jingo/GERSHWIN: An American in Paris
'Philharmonia/RCA Victor Orch/ Bernstein (pno/dir)

RCA 09026 61650 2

(59m 15s)

Ⓜ recordings from 1946–49 •

One intriguing entry in Stephen Pettitt's *Philharmonia* discography was a 1946 recording of the Ravel Concerto directed from the keyboard by Leonard Bernstein (as in his celebrated New York recording and, on DG, a somewhat hazardous 1971 live performance with the VPO). Curiosity is now satisfied by this clean transfer, brightly focused so far as the *Philharmonia* is concerned, furry around the edges of piano especially in (ii). Reining in his natural energies there, Bernstein introduces some self-conscious pianissimi into a draggingly uneventful delivery of the Adagio's opening monologue, while the outer movements reveal flawed yet highly enthusiastic orchestral playing. The NY Ballet Theatre commission *Facsimile*

is an appealing score – Bernstein was 28 – and RCA's recording was made exactly three months after the 1946 premiere; however, juxtaposed with Copland's brilliantly orchestrated 'Jingo', it becomes overshadowed. The Gershwin, too, is lively, characterful, although the cramped mono sound limits its appeal given the later NYP/Sony alternative. Primarily of documentary interest, apart from the Copland – a mere 2m 23s.

[H:1], Ravel [2/4].

Christopher Breunig

ERICH KLEIBER

Waltzes & Overtures by Heuberger, Reznicek, Weber (arr. Berlioz) & Strauss

BPO/Berlin State Opera Orch/VPO/Kleiber

Archiphon ARC-102

(77m 09s)

Ⓜ recordings from 1923–32 •

The sound is only just at the limit of acceptability (sourced mainly from noisily worn Telefunken 78s), but one item at least should be heard: a 1923 Vox acoustic recording of 'Blue Danube' with the Berlin Staatsoper. For not only does Kleiber enormously delay the beat of the main waltz theme, but the strings indulge alarming portamento slides. (Maybe the Danube was frozen over!) You wouldn't dream that Strauss was played like this in the inter-war years without such evidence. As for the rest, the Heuberger overture *Der Opernball* stands out, as do the only two VPO items, *Du und Du* and *Künstlerleben* (1929) – pure magic which the Berliners can't emulate, though Kleiber's 1932 'Emperor Waltz' is good.

[H:1/1*/(H)]

Christopher Breunig

The Bernstein/Philharmonia Ravel Concerto in G from 1946, and the first recording of Facsimile, on RCA

Historic recordings from Erich Kleiber – peerless Strauss from the Vienna Philharmonic



photo: Archiphon



ARNOLD:
Symphony 6 □ **Fantasy on a Theme of John Field** □ **Sweeney Todd – Concert Suite** □ **Tam O'Shanter**
John Lill (pno)/RPO/Handley

Conifer CDCF 224 (77m 39s) ●

Like its cloud-hung successor, Sir Malcolm Arnold's Sixth Symphony (1967) does not yield up its secrets easily. The first movement is terse, angular, given to irascible outbursts, yet tensions are well sustained; the second is an elegiac processional, leanly scored – as is the whole work, for that matter – with a typically Arnoldesque 'pop' episode at its core, itself ruthlessly crushed in the ensuing climax; the finale ends on a note of jubilant if hard-won affirmation. Though characteristically baffling on first acquaintance (this is by no means an 'easy' listen), the symphony contains much to intrigue and excite, especially when accorded such stunningly committed advocacy as here.

Even more rewarding, to my mind, is the *Fantasy on a Theme of John Field* (1975): a 20m essay of considerable emotional scope and giddy thematic invention, this is (as Arnold himself has conceded) a one-movement piano concerto in all but name. The theme is taken from Field's *Nocturne* in C, and Arnold subjects it to a kaleidoscopic variety of treatment during the work's thirteen interlinked sections. This magnificent performance finds John Lill, the dedicatee, in imperious form.

After all this, we are sensibly served some rather less heavy fare in the shape of a selection from Arnold's witty late-'50s ballet, *Sweeney Todd*. Compiled in 1984 by David Ellis under Arnold's supervision, this tuneful concert suite, with its many tongue-in-cheek allusions to other composers (one number towards the close is pure Ketelbey!) and styles (most notably the Hammer horror sound-track and

music-hall), is enormously diverting stuff, and the RPO certainly sound as if they're enjoying themselves. Finally, there's the deservedly popular overture *Tam O'Shanter*, which was actually set down at the end of the sessions for Symphonies 7 and 8 in June 1990; a more roistering and characterful rendering I've yet to hear. Superb production values throughout (Keener/Tryggvason – say no more...).

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

DELIUS:
Sea Drift □ **Songs of Farewell** □ **Songs of Sunset**

Bryn Terfel (bar)/Sally Burgess (mez-sop)/Waynsflete Singers/Southern Voices/Bournemouth SO & Ch/Hickox

Chandos CHAN 9214 (77m 08s) ●

I must confess that any normal critical faculties I may possess are always temporarily scuppered by any hearing of *Sea Drift*: for my money one of the most sublime masterpieces in all music. Now sadly deleted on CD, Hickox's earlier Argo account has long topped my desert-island selection, so it was with high expectations that I approached this newcomer. I wasn't disappointed. Phrases are shapelier, orchestral detail more imaginatively etched, tempi are more flexible. Again, Hickox's empathy with this score seems absolutely complete, his pacing masterful (the sense of mounting excitement from Fig.13 through to the giant *fff* climax at Fig.17 is thrillingly tangible). Needless to report, baritone Bryn Terfel is in simply glorious voice, displaying the utmost tenderness at moments such as 'this gentle call is for you my love' (4 bars after Fig. 22) and a wonderful range of tone colour and projection throughout. At 'O rising stars' (Fig.19), the BSO chorus don't quite match the ineffable purity of their

LSO counterparts on the earlier Argo version, though their contribution is otherwise impeccable – and certainly more firmly focused than Mackerras's WNO forces.

A distinguished reading, then, and its exalted standards are fully replicated in a irresistibly fresh outing for the *Songs of Farewell*, five Whitman settings completed late in Delius's career (1929–30) and a work I had somehow completely overlooked. Both here and in the ambitious *Songs of Sunset* (1906–7) Hickox assumes the latterday mantle of Beecham himself, presiding over performances which are at once beautifully refined and intensely sympathetic. Immaculate Chandos engineering further enhances a collection that should be in every self-respecting Delian's library.

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

DELIUS:
Brigg Fair □ **In a Summer Garden** □ **On Hearing the First Cuckoo in Spring** □ **Summer Night on the River** □ **Walk to the Paradise Garden** □ **5 Pieces for Piano: 1, 2, 4 & 5** □ **3 Preludes** □ **Dance for Harpsichord** □ **Brigg Fair (arr. Grainger)**

LSO/New SO/Toye/Howard-Jones (pno)/Stone (ten)/Oriana Madrigal Society/Scott

Dutton Labs CDAX 8006 (64m18s)
 Ⓜ recordings from 1927–9 ●

'Your interpretation of these works is most poetical and understood entirely.' Thus Frederick Delius in a letter to composer/conductor Geoffrey Toye concerning these January 1928 recordings with the LSO of Brigg Fair, In a Summer Garden and On Hearing the First Cuckoo in Spring. Indeed, this triptych together with the 1929 New Symphony Orchestra versions of Summer Night on the River and The Walk to the Paradise Garden comprise a rather special group: Toye brings a real sense of enchantment to this repertoire and his unerringly perceptive interpretations possess an improvisatory fantasy and wistful poignancy that are wholly captivating. Equally, Evlyn Howard-Jones works wonders with a group of Delius's piano pieces: this rare selection was set down in April 1929, six months before that year's Delius Festival. Finally, there's a glorious presentation of Percy Grainger's 1906 setting of Brigg Fair from that legendary choral conductor Charles Kennedy Scott and his Oriana Madrigal Society (what a superb body of singers they sound). In sum, an essential Delius compendium. Transfers throughout strike me as absolutely first-rate.

[H:1*/1(H)] **Andrew Achenbach**

Richard Hickox has re-recorded Delius's Sea Drift: 'complete empathy' with a sublime score; historic recordings of the composer's music are resuscitated on Dutton Laboratories' label



photo: Hanyu Chihai/Chandos

ELGAR:

Violin Concerto □ **Salut d'amour**
Pinchas Zukerman (vln)/St Louis
Orch/Slatkin

RCA 09026 61672 2 (51m 58s) •

Violin Concerto □ **In the South**
Pinchas Zukerman (vln)/LPO/
Barenboim

Sony Classical CD 58927
(71m 41s) © 1966-67 ■

Zukerman's new recording of the Elgar Concerto might be described as 'ravishing'. Certainly he is more the master of the notes than in his earlier Abbey Road recording [in Sony's 'British Pageant' reissue series], but he's quite lost contact with the spirit of the work. The technical difficulties are tossed off with showy indifference: hence, in that sense, he ravishes the music, taking selfishly from the score. Undeniably though, as sound, his playing 'ravishes' the ear. But what few incidents that catch the imagination come solely from the orchestra; and the fillup is 'more of the same'.

I always thought his Bartok (yet to be transferred to CD – the RCA remake was similarly a great disappointment) and Elgar Concertos the best of Zukerman's early work for CBS. The reissue comes with an opulently Straussian *In the South*; it has more interesting characterisation from Barenboim – who had taken his Elgarian cues from Barbirolli – than in Slatkin's accompaniment, and the rather thick, crude sound on LP has been cleaned up sufficiently for a qualified recommendation. (I know AA has strong reservations, but I confess to finding Barenboim's work here exciting – and if this youthful Zukerman reading suggests pseudo-Kreisler, better that than what sounds like undiluted self-regard). RCA's sound is rather flat and bland, but with a good soloist balance.

RCA [A/B:3], Sony [C:2].
Christopher Breunig

ELGAR:

The Dream of Gerontius □ **Organ Sonata** (orch. Jacob)
Rolfe Johnson/Wyn-Rogers/George/
Huddersfield Ch Soc/RLPO &
Ch/Handley

EMI CD-EMX2500
(2CDs, 117m 34s) part © 1989 •

Here's a *Gerontius* of impressive pedigree and power. Vernon Handley once again shows himself an instinctive master of the Elgarian line, charting the Prelude's ebb and flow with complete naturalness and surefooted authority. If not as impulsive or passionate a commentator in

this music as the likes of Barbirolli or Britten, Handley conveys a mastery of pace and timing that's always supremely satisfying, and he obtains a resplendent response from the RLPO (who really do seem to go from strength to strength these days). The sound, too, is admirable: a touch unglowing at first, I thought, but with a sensationally wide range of dynamic and superbly integrated organ contribution, as well as some marvellously full-blooded (and, importantly, well-focused) choral sounds. Indeed, Handley's joint Liverpool and Huddersfield forces combine to pretty electrifying effect throughout, nowhere more so than in an incisive 'Demon's Chorus'.

Anthony Rolfe Johnson makes a near-ideal Gerontius, super-sensitive and golden of tone; Catherine Wyn-Rogers is a generally pleasing Angel, though as yet she can't command the presence and searing intensity of her finest rivals on disc (most notably, to my mind, Marjorie Thomas on the 1954 Sargent recording, now on Testament); Michael George is a nobly sonorous Priest and Angel of the Agony.

Amongst modern versions of this masterpiece, then, Handley's must stand very high. As an enjoyable, if rather arbitrary coupling, 'Eminence' have restored Handley's exemplary 1989 world premiere recording of Gordon Jacob's red-blooded orchestration of the Organ Sonata in G (originally partnered with Handley's first-rate RLPO *Wand of Youth Suites* 1&2 on CD-EMX 2148 – now sadly deleted, but well worth looking out for).

[A*/A:1(*)], Sonata [A:1/1*].
Andrew Achenbach

ELGAR:

The Light of Life
Judith Howarth (sop)/Linda Finnie
(con)/Arthur Davies (ten)/John
Shirley Quirk (bar)/LSO & Ch/
Hickox

Chandos CHAN 9208 (62m 43s) •

If Elgar had stopped composing after *The Light of Life* he might have been forgotten a long time ago. It's a dis-comforting thought. Here was a 38 year old composer struggling for recognition; a commission for an oratorio from the august Three Choirs Festival may have been a heaven-sent opportunity to win favour – and he did win favour. But the success of the first performance in 1896 probably had less to do with Elgar the artist than with Elgar the man filled with personal insecurity and a deep desire for approbation. The *Light of Life* was acclaimed because he conformed to the mores of the day, careful not to offend con-

temporary Anglican susceptibilities. Elgar the incipient colossus does flex his muscles from time to time (there are flashes of inspiration) but the overriding aura is one of comforting, antiseptic religiosity.

Hickox and his forces, aided by excellent Chandos engineering, do their best for the music, investing it with more drama than did Groves [EMI] in his equally fine interpretation but, despite such advocacy, *The Light of Life* obstinately emerges as an uneven work. Nevertheless, let's be profoundly grateful that its acceptance gave Elgar the confidence he so needed. Three years later came the miraculous *Enigma Variations*, which prompted Parry to exclaim, 'Look out for this man's music; he has something to say and knows how to say it'. Maybe Elgar always did, but this time he had to please nobody but himself.

[A:1] Nalen Anthoni

TIPPETT:

Symphony 4 □ **Fantasia Concertante on a Theme of Corelli** □ **Fantasia on a Theme of Handel**
Howard Shelley (pno)/Bournemouth
SO/Hickox

Chandos CHAN 9233 (66m 04s) •

Even next to the athletic corporate virtuosity of Solti's Chicagoans in the fascinating Fourth Symphony, Richard Hickox and his admirable Bournemouth band have little to fear in comparison: this is keen-eyed, thoroughly committed playing, horns and brass in particular making a terrific showing. What cannot be overstated is the mastery of Hickox's imaginative reading: his is a broader, more subtly integrated affair than Solti's, digging far deeper beneath the notes in the ravishing slow movement beginning at Fig. 52 (track 3 – Chandos's indexing is admirable) and maintaining implacable concentration to the last.

Come the *Corelli Fantasia* and, of course, it's the turn of the Bournemouth strings to shine; their rapt response betokens utter dedication, and Hickox gives full rein to the piercing lyricism that is the essence of this wonderful score, not least the embellished lead-up to the central climax (surely one of the passages Sargent must have deemed 'unplayable' before declining to conduct the score's 1953 Edinburgh premiere). Howard Shelley is the dashing soloist in the rarely-heard *Handel Fantasia*, an enjoyable if far less distinctive work completed in 1941. Chandos's sound throughout possesses exciting realism, so this makes an extremely promising start to Hickox's new Tippett cycle.

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

Pinchas Zukerman disappoints in the Elgar Violin Concerto – he's heard to better advantage in the 1966 recording transferred to CD in Sony's 'British Pageant' reissue series

Elgar's choral masterpiece on 'Eminence'; Light of Life 'obstinately uneven' even in the sympathetic hands of Richard Hickox – who has embarked on a Tippett series for Chandos

JS BACH: English Suite 2 □
Capriccio BWV992 □ **Kempff**
 transcriptions¹ – JS Bach, Gluck
 & Handel
Wilhelm Kempff (pno)
DG 439 108-2

(72m 37s) 1st 1976 ■

Gentle, undemonstrative playing, counterpoint clearly articulated, and with many beautiful incidentals (eg: *Largo* from the Concerto BWV1056); yet Kempff's Bach nevertheless seems faded. I suspect those who favour today's less intimate, more objective style may misconstrue these performances, from Kempff's 80th year, as too 'prettified'. (Kempff sought an orchestral palette in his piano transcriptions – his emphatic voicing of major themes involved slight desynchronizing of the hands, producing a 'rolling' effect). The various Bach chorales, Gluck's 'Lament of Orpheus' and 'Dance of the Blessed Spirits', and a Handel minuet make up the second half of this compilation, which is supported by a good biographical note. A characteristic reminder of a great German artist.

[A/B:2/1]

Christopher Breunig

BRITTEN: Owen Wingrave □
Six Hölderlin Fragments¹ □ **The**
Poet's Echo²

*Pears/Luxon/Harper/Vyvyvan/
 Baker/ECO/Britten/Pears (ten)/
 Britten (pno)/Vishnevskaya
 (sop)/Rostropovich (pno)*

Decca 433 200-2

(2CDs, 133m 54s)

© 1962, '69 & '71 ■

This magnificent account of Britten's television opera enshrines as near-definitive a presentation of this underrated score as we're ever likely to get. In the title-role Luxon is superb, and he's backed to the hilt by a cast of *echt*-Brittenites. Decca's 1970 Kingsway Hall production (Harvey/Wilkinson) comes up as fresh as the day it was made, at once superbly balanced and intensely atmospheric in this welcome reincarnation. Both fill-ups are valuable documents, too: Pears and Britten at their inspirational, re-creative best in the six Hölderlin settings (Kingsway, 1961); and the husband and wife team of Rostropovich and Vishnevskaya in the Pushkin cycle Britten wrote during his 1965 trip to Armenia (Maltings, 1968) – Slava's marvellous piano accom-

paniment is worthy of the composer himself.

[A/A*:1/1*] [B/C:1:*] [A:1*]
Andrew Achenbach

BRUCKNER: Symphony 4

BPO/Karajan

DG 439 522-2

(64m 11s) © 1976 ■

Same matrix as the full-priced CD and that in the boxed set – yet, curiously, my earlier copy sounds a little better! This is a more volatile, forceful Fourth (eg track 1, from 1m 30s) than the beautiful 1970 EMI account: a quadrasonic production, incidentally. Those who prefer a more 'classical' approach should stick with VPO/Böhm on Decca 'Ovation'. Also, DG's 1975 Berlin Philharmonie recording now sounds overblown and dated – in fact, the analogue LP gave cleaner results. It's a pity Karajan did no later version. [See also Barenboim/Teldec review.]

[C:1] **Christopher Breunig**

GIULINI & FRANCK

FRANCK: Symphony □ **Psyche**
 – finale

BPO/Giulini

DG 439 523-2

(54m 12s) © 1987 ■

**Music by Franck, Britten, Ravel,
 Schumann & Tchaikovsky**

Philharmonia/Giulini

EMI CZS 767 7232

(2CDs, 152m 48s)

recordings from 1956–62 ♦ ♦

On 'Galleria' a characteristic late-Giulini reading of the symphony: world-weary in (ii), slow too in the 'scherzo' – but grand and exciting as the opening motif returns, encouraged by harps, in the finale. Some beautiful playing shines through DG's cloudy recording. In the concert hall, I think this might ultimately 'lift you out of your seat'. Giulini steers the orchestra through 'Psyche et Eros' in, again, a spacious interpretation: indeed, one half as long again as in Van Beinum's historic Decca version of the complete *Psyche*. The Concertgebouw sounds better prepared, ie more familiar with the music, and the Dutch conductor struck a more heroic and passionate stance.

[B:2]

Both Franck works are duplicated in EMI's 'Profile' set, which also has Giulini's Tchaikovsky 'Little Russian' (a slightly cut finale), the Britten

'Sea Interludes' and *Young Person's Guide*, Schumann's *Manfred* overture, Ravel's *Daphnis* Suite 2 and *Alborada del gracioso*. Perhaps surprisingly, the [1957] *Psyche* finale and the [1959] symphony's *Allegretto* (ii) are within seconds of the Berlin timings; but the outer movements of the symphony are some 3m, 1½m shorter. The Philharmonia are certainly more eloquent and sure-footed in *Psyche*, and although the symphony's *Allegretto* is deliberate, it is also sunnier in mood. In one sense, Giulini had distanced himself more from the music in the Berlin recordings – here there's a sense of the natural momentum sweeping the conductor along in its tide. But I am sure collectors will prefer the

more conventional tempo for (iii) on EMI. Quite good stereo sound for these dates.

Other scores which Giulini re-recorded for DG are better heard here, though I wouldn't put the *Daphnis* – for my taste somewhat too deliberate and saturated in 'lever du jour' – ahead of Cantelli's [Testament ©], or prefer *YPG* [unbanded] to Britten's own LSO/Decca, now variously recoupled on midpriced/budget CDs. But the *Grimes* pieces, absorbingly shaped, rank with such older-generation recordings as Van Beinum's, Britten's own, and the Ravel *Alborada* is vintage Philharmonia. The Tchaikovsky symphony is the oldest recording here [1956], but clean and open in spite of some tape-hiss.

Giulini in the 1960s;

(below) *Benno Moiseiwitsch*



photo: Mike Evans



photo: EMI

A characterful, buoyant reading, well worth restoring, for it catches Giulini in confident mood.

Franck [B/C:1], remainder [1*/2]. **Christopher Breunig**

**ELGAR: String Quartet/
DELIUS: String Quartet**

Brodsky Qt
ASV CD CDA 526

(55m 35s) © 1984 ■

An enjoyable example of the pre-Teldec Brodskys (ASV's booklet photo shows the group in those innocent days before the wardrobe consultant and designer-stubble). These are alert, big-hearted readings, especially of the Delius – a lovely work which, surprisingly, has been largely ignored on record over the years (as far as I know, Decca have never transferred to CD their marvellous Fitzwilliam/Oiseau-Lyre version). In the Elgar, I would still prefer either of the Medici recordings [Meridian or Whitehall] to the present offering, but for the Delius alone this is a welcome reissue. Realistic, if slightly wiry Boyden/Faulkner sound.

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

SCHUMANN: Fantasie Op. 17 □ **Fantasiestücke/BRAHMS: Handel Variations**

Beno Moiseiwitsch (pno)
Testament SBT 1023 (78m 25s)
Ⓜ recorded 1952–3 ■

Romantic playing: warm, contemplative and poetically sensitive to melodic counter-material. Yet Moiseiwitsch absolutely never draws undue attention to his own personality. No-one else's 'Warum?' (*Fantasiestücke*) has questioned more poignantly, nor any rival 'Ende vom Lied' proved more touchingly conclusive. True, Moiseiwitsch occasionally trips over some of the more taxing passages – he sounds a mite over-stretched in Brahms's *Handel fugue* – but even the *Fantasia's* central March has a natural majesty that transcends any obvious lack of brilliance. The *Fantasia* is surely the disc's high-spot, an infinitely malleable account with every dramatic episode timed, and every phrase given its poetic due.

Throughout the programme, Moiseiwitsch's fluid touch makes the most of Schumann's individual brand of tone-painting; there's real depth to the chords,

luminosity to inner voices and an operatic demonstrativeness to top-voice material, as in (for example) the climaxes of the *Fantasia's* closing *Langsam getragen*. While neither as flamboyant as Horowitz's nor as intense as Richter's, Moiseiwitsch's Schumann – his favourite composer, by the way – is something of a personal testimony and should be savoured by those who value Old-World pianism but dislike interpretative eccentricity.

The original tapes were always rather hard-edged, but one soon learns to hear 'through' them, and Testament have done a wonderful job with the transfers.

Schumann [H:1*], Brahms [H:1/2]. **Robert Cowan**

SIBELIUS: Finlandia¹ □ **Karelia Suite**² □ **Swan of Tuonela**² □ **Valse triste**³ □ **En saga**⁴ □ **Tapiola**⁵

¹*Philharmonia/Ashkenazy/*

²*NPO/Kord*³*ASM/Marriner/*

⁴*OSR/Stein*⁵*VPO/Maazel*

Decca 436 930-2

(71m 54s) © 1968–81 ▲

Revamping of an earlier compilation, not to be missed if you don't already have Maazel's utterly gripping account of *Tapiola*. (A pity his VPO *Karelia Suite* wasn't substituted for Kord's. 'The Swan', Phase-4 recording notwithstanding, I find atmospheric enough; AA strongly feels conductor and repertoire were ill-matched!) Another fine bonus is *En Saga*: a reminder of what fine playing the Suisse Romande could muster under Horst Stein – note the brass. (We should re-hear his other Sibelius on Decca: all outstandingly well produced.) Ashkenazy's *Finlandia* is more stirring than his recent Boston remake; and the only major disappointment is a horribly vulgarised *Valse triste* from Marriner.

[A/C:1*/1/2/4]

Christopher Breunig

SIBELIUS: Symphonies 4 & 7

□ **Valse triste**
BPO/Karajan
DG 439 527-22

(65m 55s) © 1965–68 ■

Recoupled on 'Galleria', Karajan's most profoundly impressive Sibelius recording: proof that his obsessive cultivation of orchestral sound was not incompatible with the stark

message of the Fourth Symphony. The Seventh is more diffusely presented, not quite convincing. (The dates show that neither work was undertaken as a single entity.) In this 1967 *Valse triste*, Karajan plays with the score like an emperor with a kitten.

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

Christopher Breunig

VIVALDI: Concertos Op.8:1-6

Alice Harmoncourt (vln)/
Concentus musicus/Harmoncourt
Teldec 4509-93267-2

(53m 40s) © 1978 ■

One of the cornerstone recordings of the 'Four Seasons', together with 'La Tempesta di mare' and 'Il piacere', directed by Nikolaus Harmoncourt, cellist, founder of this period-instrument group (1953), and author of the reprinted Teldec note. The brusquely accented phrases, abrupt dynamic and tempi contrasts and zestful impulses created something of a shock in times when the 'Four Seasons' came essentially in two flavours only: those by ploddingly serious German chamber groups (typified by Münchinger's) or smoothly contoured performances under stars such as Karajan or Stokowski, Perlman or Zukerman. True, the first Standage/English Concert, Holloway/La Grande Ecurie/Malgoire and Toso/Solisti Veneti LPs had made their marks, but this VCM Op.8 set went furthest in its exudation of iconoclastic glee. The sound is coloured – a high level of ambient noise – but acceptable. Playing time, though, is inexcusably ungenerous for such repertoire.

[C:1(*)]

Christopher Breunig

WAGNER: Flying Dutchman

□ **Lohengrin** □ **Parsifal**¹ □ **Götterdämmerung**² □ **Die Walküre** □ **Mastersingers** □ **Tannhäuser** □ **Tristan & Isolde**¹ – **Preludes & excerpts**

²*Kirsten Flagstad (sop)/*
*Philharmonia/VPO/*¹*BPO/*
Furtwängler

EMI CHS 764 9352 (2CDs, 144m)

Ⓜ recordings from ¹1938,
1949–54 ■

A comprehensive selection of the later HMV Vienna recordings, the classic Flagstad/Philharmonia 'Immolation Scene', and prewar Berlin material, supported by a good note by John Hunt (of the UK Furtwängler

Society). Some items were never transferred to LP by EMI; in any case, original 78s and tapes were used for digital remastering here. In particular, 'Siegfried's Funeral March' is rather splendid; however, the sound is in places more 'geriatric' than one had perhaps remembered it: compact disc forces the collector to confront the truth! When I listened again to good Electrola or Japanese analogue copies, differences were minimal, eg the wavering wind/horns after the frenzied opening of the *Dutchman*. A certain leap of the imagination is needed, too, to hear how Furtwängler's Wagner might have sounded not under studio conditions: contrast, for instance the 1942 *Tristan Prelude & Liebestod* on Music & Arts CD-730. Hunt comments on the vividness of the *Ring* extract (1952 – there was an earlier 78rpm set too, I learned) which, at nearly 20m, conveys best the conductor's special insights – not to mention Flagstad's tremendous vocal qualities.

[H:H] **Christopher Breunig**

CAPRICCIO DI FLAUTI:

18 short pieces, 16th-20th centuries, arranged for recorder quartet

Amsterdam Loeki Stardust Qt
Oiseau-Lyre 440 207-2

(64m 24s) © 1985–93 ■

Virtuoso Recorder Music, the pop miscellany *Extra Time*, Italian and Baroque recitals: CDs from Loeki Stardust (the group took its name from a Dutch TV jingle 'Loeki the Lion') have provided such pleasure that I was disappointed to find on this compilation only four tracks new to me. These are two (anonymous) Pavens, Taverner's *In nomine*, and Aston's *Hugh Ashton's Maske* [from 'A Concorde of Sweete Sounde', English Renaissance works – Oiseau-Lyre 436 155-2 ●]. If you haven't heard their arrangements before – the breath-taking *Brandenburg 3* finale, for instance, or the charming 1950s barrel-organ tune *Aan de Amsterdamse Grachten* – then try this midpriced disc, which conveys the varying moods encompassed by these players, drawing from a battery of recorders ranging from an eight inch soprano to a seven foot bass instrument.

[A*:1*]

Christopher Breunig

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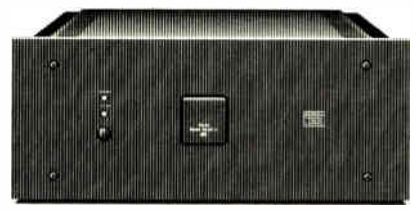


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JACKSON BROWNE
I'M ALIVE

Elektra 7559-61524-2
(47m 13s) ■

Yes, there's more than just a sign of life. In fact, the patient, once ailing, is definitely back and sounding like the pride of the singer/songwriter health farm. Additionally, he's given up passing on well-meaning but sometimes boring messages and now just wants to pass the time of day chatting about his love-life in tuneful and engrossing fashion. 'I don't worry about the ozone layer,' he confides on 'Waiting For You', 'Just let

those rays come through/I don't worry about Madonna and the next thing she might do. I'm just waiting here for you.' Completely the right attitude. Come and warm yourselves by this man. [A:1] **Fred Dellar**

COWBOY JUNKIES
PALE SUN, CRESCENT MOON

BMG 74321-16808-2
(47m 27s) •

It's a comfort, in a season dominated by old hands rehashing old songs (Ramones, Elton, Guns N'Roses, 10,000 Maniacs being only a few examples) to find that the early

promise of Toronto's finest is being fulfilled with new songs worth hearing, sung and played with conviction and loving care. As a songwriter, Michael Timmins continues to mature, his powers of observation growing sharper. As a vocalist, his sister Margo is an increasingly convincing interpreter, and there's no feeling of a woman saddled uncomfortably with a man's song. The band, having contented itself to feel its way slowly along its own path, rather than be pushed into directions they can't handle, has evolved into a supportive little unit. If you've still got that record token kicking around from Christmas, the Cowboy Junkies deserve it. [A*:1] **Johnny Black**

FLYING BURRITO
BROTHERS
EYE OF A HURRICANE

Sundown/Magnum CDS 075
(49m 11s) •

Yes, they're back again, but not just the pretenders who were dancing on Gram Parsons' grave (wherever that may be). This brand-new recording,

though unmistakably sixth-generation Burrito and about as C&W as it gets, features both Sneaky Pete Kleinow and Chris Ethridge from the original 1968 line-up for some much-needed verisimilitude. Their presence is enough to convert this from what might have been a typical let's-tour-on-the-back-of-an-album cash-in into something more substantial. Admittedly, there's a surfeit of John Beland compositions but the group resisted covering a bunch of C&W standards or, worse, re-recording earlier Burrito/GP triumphs. The result is above-average, up-to-the-minute country music which (1) wouldn't embarrass Gram but (2) certainly humiliates Billy Ray Cyrus. [B:1/2] **Ken Kessler**

GUNS N'ROSES
THE SPAGHETTI INCIDENT

Geffen GED24617 (46m 11s) •

Axl Rose sings his record collection and it comes as a pleasant surprise to discover, via his interpretation of 'Since I Don't Have You', that he has the makings of a decent vocal-

KATE BUSH
THE RED SHOES

EMI CDEM 1047
(55m 30s) •

La Bush is still wa-a-ay out there, beyond even the loopy Stevie Nicks. What's amazing is that the not-too-prolific Ms Bush has stretched such a flimsy premise, her trademark Shirley-Temple-on-helium singing, her drug-free but purely hippie vision, into a career which has now passed the 15 year mark. *The Red*

Shoes further consolidates her hold on the genre she created, but more than ever she resembles one of her semi-regular collaborators: she's turned into a distaff Peter Gabriel. Some of the melodies could fit into one of his mid-1980s' hits, while the total lack of shame in her lyrics recalls Gabriel's early stage antics. And yet Bush may be the only singer alive who can get away with Prince-like lines without actually being Prince or covering one of his songs. Perhaps having him as a guest/collaborator along with two(!) ex-Yardbirds (Jeff Beck and Eric Clapton), is justification enough. This isn't her best, but it's more than good enough to sustain her credibility. Or lack thereof. [B:1/2] **Ken Kessler**

If they'd advertised this in good old B-movie fashion, the banner might have read 'She's BAD, She's BEAUTIFUL, She's BATTY'. The madness is all important. With 'Wuthering Heights' she wasn't Kathy but the deranged Heathcliffe. And,

thankfully, she's stayed that way ever since. Sometimes she's been pretentious, sometimes fey, but when she hits the target with regularity, as she does on *Red Shoes*, then in best Pythonesque terms, Kate provides something not only of exceptional musical value but also completely different. The songs are as varied as any 'Now' compilation. 'Rubberband Girl' rocks relentlessly; 'Moments Of Pleasure', just keyboard Kate and a bank of strings, is both mysterious and magnificent; 'Why Should I Love You?', a Princely funk thing that mentions the colour purple in passing, is your complementary ticket to the dance; while 'Eat The Music' is a banana-flavoured visit to a Caribbean carnival. Thing is, though this is Kate's least cohesive, most diverse album, it also makes most sense. And should you personally fail to appreciate the magic, then reading the list of visiting guest stars could fill your day profitably. [A*:1*] **Fred Dellar**

Seems everybody's got an opinion of Kate's new album.

Quite right too. She's probably the most imaginative songwriter of either sex working in Britain today. *The Observer* finds it to be 'Bush's most pensive album yet... its mood of wistful mystery maintained by elaborate arrangements.' *Vox* gives it 7 out of 10, *Q* awards three out of five possible stars, and *Rock CD* reckons that 'If there's one word that captures the essence of Kate Bush, it is possibly "bonkers"', before confirming the *Q* and *Vox* ratings by deciding the album is 'relatively ordinary' by Kate's standards but 'still head and shoulders above most female singer/songwriter efforts.' *The Independent On Sunday* agrees that, as a whole, it's not her finest moment, but finds that 'Moments of Pleasure' is just 'extraordinary' and 'You're The One' is the bittersweet love song of the year.' The man from the *Daily Telegraph* sums it up as 'off the wall, yet on the money' which is about as concise and accurate an assessment as you're likely to get. [A:1] **Johnny Black**



AT E ALBUM

ist. Slash's soaring guitar lead is another unexpected delight but, tragically, the rhythm section is hopelessly inadequate to deliver a platform for the song. After that, it's all downhill. Like the pointless new Ramones album (see review below) the only interest here is in what the choice of songs reveals about the band. Apart from the doo-wop origins of 'Since I Don't Have You', the set is mostly re-hashed punk, with originals by Iggy, The Dolls, The Damned, UK Subs, Pistols and so on. Interesting. No Stones. No Faces. No light and no shade. Even skirmishes with T-Rex's 'Buick Makane' and Nazareth's 'Hair Of The Dog' sound laboured and routine. Axl sounds as if he must once have cared about Johnny Thunder's 'You Can't Put Your Arms Around A Memory', but the band's delivery misses by a mile. This stinks.

[B:3] *Johnny Black*

**INXS
FULL MOON, DIRTY HEARTS**

Mercury 5160637-2 (40m 00s) •

For a band which doesn't seem to know whether it wants street cred or an audience of pubescent bimboids courtesy of *Top of the Pops*, INXS is remarkably consistent. They provide chunky rock music with just enough twists to keep boredom at bay. But maybe, at last, they've realised that their support base is so broad they can



**LINDISFARNE
ELVIS LIVES ON THE MOON**

Essential/Castle ESSCD 197

(54m 27s) •

OK, so the odds suggested overwhelmingly that this would be finger-in-the-ear, hey-nony-nony dreck unfit for all but the brain-dead, but what do I find instead? One of the coolest new pop/rock releases in months, with hardly a single clue as to the band's earlier persona. Indeed, if anyone's going to hate this, it's your basic



now get away with all sorts of stuff, because *Full Moon, Dirty Hearts* is the kind of anti-tech awakening I just didn't expect. Y'see, this can only be described as a white soul album for the 1990s. Not a blue-eyed, sub-Hall & Oates/Paul Young thing, but a get-down, get-dirty funkfest which at times recalls the late, lamented J Geils Band; it's just convincing enough to ensure that guest Ray Charles doesn't seem out of place. Neither, for that matter, does Chrissie Hynde, but then she's a classic journeyperson rocker who loves popping up Ron Wood-fashion wherever there's a gig. Somehow, though, I suspect the broad support base will respond with a lot of head-scratching.

[A/B:1/2] *Ken Kessler*

**ELTON JOHN
DUETS**

Rocket Record Co 518 478-2

(74m 40s) •

Congrats first to Connie Hillman, Lisa Louie and Sam Stell, the trio credited as Album Co-ordinators. It must have been hell intertwining the strands that brought Elton together with not just his illustrious vocal collaborators, but with producers like Stevie Wonder, Don Was, Chris Thomas and Giorgio Moroder, plus session players like Greg Phillinganes, Billy Preston, Dean Parks, not to mention arrangers Arif Mardin (strings) Andrae Crouch (vocals) and Lee Thornburg (horns). Curiously, despite so many cooks, the broth is not spoiled, although it is alarmingly low on spice. Far superior to Sinatra's recent duets disaster, this is nevertheless only occasionally as tasty as its mix of great songs and performers might suggest. Elton and Don Henley cook nicely to a spunky guitar lick on 'Shakey Ground', and the combination of Elton and Little Richard is surprisingly successful. Sadly, Lenny Cohen's subwoofer assault on 'Born To Lose', which I'd been eagerly anticipating, is a waste of digital memory. And while 'True Love' with Kiki is pleasing, it simply makes me want to dig out the Bing and Grace original. Similarly, Bonnie Raitt works hard on 'Love Letters', but the arrangement is so close to the immaculate Ketty Lester track it's hard to know why they bothered. Still, if this does no more than introduce a generation to some timeless songs, it will have done sterling service.

[A:1] *Johnny Black*

burnt-out Afghan wearer. Take the title track, for instance. Aside from being beautiful and mournful, it sounds like Neil Young meets Jonathan King. There's heavy rock, post-Steely Dan sax-led jazz-pop, balladry, funk, a Gerry Rafferty sound-alike - I think someone made a mistake. Or maybe some loon at Castle whipped up a selection of rare tracks from 11 artists, put 'em together on one CD and called it a Lindisfarne album just for a joke. Whatever. I need look no further for my Favourite Album of 1993.

[A:1***] *Ken Kessler*

**BOBBY MACK & NIGHT
TRAIN
HONEYTRAP**

Provogue PRD70542

(60m 42s) ♦

Mack's second album swaps the sass and chutzpah of his debut for something suggesting almost jaded maturity. A Texas guitar whizz, inevitably likened to Stevie Ray Vaughan, Mack actually harks back to a different sub-genre. Although dedicating this release to the late Albert King, Mack eschews the controlled anger of King for something more sinister. There's a deliciously dark sense of danger, a simmering menace you can trace back to Robert Johnson via Hooker, Hopkins and Elmore James rather than through Albert or BB. *Honeytrap*'s feel is a product not just of the playing but



the actual sonics, a rich, bass-y growl derived from a rhythm section reminiscent of Little Feat and a classic Hammond organ. Mack sings like a cross between the late, lamented Root Boy Slim and Jack Bruce, perfect for cutting through the murk while complementing it. Mack makes the loss of John Campbell a wee bit easier to take.

[A:1] **Ken Kessler**



THE OTHER TWO THE OTHER TWO & YOU

London 520028-2 (42m 50s) •

Overshadowed for years by their higher profile New Order colleagues, Gillian Gilbert and Stephen Morris have crafted something so fresh and bed-sitterish that it could almost be a first album by Everything But The Girl (if they were just starting out now, didn't own acoustic guitars and didn't like the samba). It's very understated, and a couple of listens might be required before the tunes come through, but it is, nevertheless, charming. Even the dance cuts employ the innocent bop of early Depeche Mode rather than the knowing aggression of Kraftwerk. Don't expect New Order and you'll find this splendid.

[A:1] **Johnny Black**

DOLLY PARTON- TAMMY WYNETTE- LORETTA LYNN HONKY TONK ANGELS

Columbia 474626-2

(33m 06s) •

Three genre queens team up as a harmony trio to work their way through the all-time hits songbook, each also providing a new tune of her own, albeit something befitting the 'ye olde' mode. On 'It Wasn't God Who Made Honky Tonk Angels', (Kitty Wells's answer-hit to Hank Thompson's 'Wild Side Of Life'), Kitty herself, an original country royal, donates a vocal. The long-gone Patsy Cline decorates 'Lovesick Blues' – not the first time that Virginia's sweet dreamer has returned to recording duties since that 1963 plane crash. Generally, it's one for the weepers, with Dolly relating the death of a loved one on 'Let Her Fly' and then moving on to list just about every departed Nashville hero (and some live ones) via a re-run of the 1955 Eddie Dean 'I Dreamed Of A Hillbilly

Heaven'. Immaculately produced and mercifully short.

[A*:2] **Fred Dellar**

THE RAMONES ACID EATERS

Chrysalis CDCHR6052

(31m 12s) •

Inevitable. There had to come a day when da brudders would attempt to reduce nuggets to



rubble and this is it, a sorry exercise in garage-punk nostalgia. Why churn out wun-chew-free-fo versions of 'White Rabbit' or 'Can't Seem To Make You Mine' or 'Surf City', songs whose splendour came not from lyrics or melodies but from the uniqueness of their original performances? Classical music compositions are written on paper so that any orchestra can perform them. The spirit of much rock music, in common with jazz, blues or soul, cannot be encoded in notes on paper. If anybody should know that, it is The Ramones. Why, for example, would anybody cover their classics 'Beat On The Brat' or 'Blitzkrieg Bop'? These are Ramones songs, first and last. I remember The Ramones. I adored them, but there is no good reason to do this that doesn't involve money. Note the titles on the track listing, then go find the originals.

[B:3] **Johnny Black**

10,000 MANIACS MTV UNPLUGGED

Elektra 7559-61569-2

(61m 17s) •

The Unplugged formula serves Natalie Merchant well. Most singer/songwriters worthy of the name present their wares more ably when given a relaxed, home-alone backdrop and Merchant is no exception. Arguably, 'What's The Matter Here?', a song about child abuse, has no right to sound as jaunty as it does in this banjo and mandolin setting, and true believers will argue that other aspects of the band's work are unduly softened, even though Natalie's revamp of Patti Smith's 'Because The Night' retains a tremendous punch, despite, or maybe even because of, the use of a string trio. But such argu-



ments are best left to others. To these ears, *MTV Unplugged* is one totally satisfying record. Unfortunately, it's also a document of the band's final gig and so it's goodbye to them and hello to her as Merchant moves out on a solo career. Sob.

[A:1] **Fred Dellar**

TEXAS RICK'S ROAD

Vertigo 518 252-2 (46m 43s) •

This third album, recorded at Bearsville Studios in Woodstock, isn't the big stylistic breakaway which some might prescribe: Texas haven't killed off the slide

guitar. Instead, *Rick's Road* is true evolution, moving away gently from a foreigner's idea of American country blues to something much more authentic. No matter where this band records it will still consist of Glaswegians, but they've got a handle on the spirit of the South to match most other American-wannabees... excluding maybe the Band. Texas are committed to R&B and their secret weapon remains the blessedly-piped Sharleen Spiteri, whose vocals have more resonance and richness than any 25-year-old should be able to boast.

[A/B:1/1*] **Ken Kessler**

THE VELVET UNDERGROUND LIVE MCMXCIII

Sire 9362-45465-2 (67m 33s) •

A hundred years from now, when rock historians will be immune to charges of unhipness by virtue of the passage of time, it will be acknowledged that – perhaps along with the Smiths – the Velvet Underground was the most overrated band of all time. Vocally challenged, musically limited (bar Cale) the street-level amorality of their songs, genuine or not, appealed to certain pre-pre-protean grungers in their state of adolescent rebelliousness, hence the deification. Sadly, as the reunion proves, this does not great music make. Live in the 1960s, they were, to use modern parlance, crap; but 25 years' worth of practice and experience means that now the VU dirges are well-played and well-recorded, while the performance is received by a Parisian audience which is incapable of criticising its heroes. Of the two unexpected, sorely longed-for reunions this year, Big Star's was the more valid. Alas, the Velvet's gig will overshadow it. Note for masochists: there's also a 2CD extended version with 23 tracks.

[B:3] **Ken Kessler**

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GEORGE LEWIS CHANGING WITH THE TIMES

New World 80434 (64m 35s) •

Words are tricky when mixed with music. Trombonist George Lewis is an important force in American art. Born in Chicago in 1952, he adopted the game-plan of the Association for the Advancement of Creative Musicians: there is no extension of music that the black rediscovery of improvisation cannot recast

and revitalize. His computer works have been performed in Banff, IRCAM and Amsterdam. Here the precision of his musical concept is never in doubt, but neither his readers nor his texts match his musical innovations, being theatrical, sentimental and weakly done at that. Why waste time with 'art' settings of 1920s' protests at racism when Ice T does it with infinitely more spunk, wit and art today [A:1]

ROSCOE MITCHELL AND THE NOTE FACTORY THIS DANCE IS FOR STEVE MCCALL

Black Saint 1201S0 (51m 06s) •

Roscoe Mitchell was an important mover in the Chicago free scene of the 1960s. His music still betrays the openness and tenderness of that style. On the opener, Mitchell scatters alto notes of aching sensitivity over the burnished bowings of

bassist William Parker. Abetted by Tani Tabbal on hand drums, Vincent Davis supplies spiky rhythms. 'The Rodney King Affair' starts fragmented and pretty, then jumps into agonized repetitions – Matthew Shipp is particularly robust on piano. The Art Ensemble of Chicago (Mitchell's other showcase) can over-reach and get showy: this concentrates on the music to great effect. [A:1] **Ben Watson**

JAZZ ROUND-UP

Sometimes jazz seems like an eternal seminar on history, as musicians try out new views of the past, seeking a glimpse of what might constitute a future. Arthur Taylor, best known for brilliant drumwork when pianist Red Garland backed John Coltrane in the late 1950s, and for his revelatory book of interviews *Notes And Tones*, has recruited young players for his live album *Wailin' At The Vanguard* (Verve 519677•). Despite punchy sleeve notes about fun on the bandstand, the music seems tainted by respect for tradition. Here,

going back to bop doesn't seem to work. Meanwhile, violinist Billy Bang teams up with Sun Ra in 1992 (shortly before Ra's death), and produces a fresh take on such chestnuts as 'Satin Doll', 'April In Paris' and 'Yesterdays'. Titled *A Tribute To Stuff Smith*, Bang is disconcertingly free with pitch, but once you tune in to his slithery wavelength, there's a lot of fun to be had. Ra comps with understatement and sly humour. In 1974 George Duke decided to look back at the oldest bedrock of jazz from his hi-tech keyboard

vantage with 'I Love The Blues, She Heard My Cry'. The re-issue, *Three Originals* (MPS 519198•) also includes *The Aura Will Prevail* from 1975 and *Liberated Fantasies* from 1976. Duke was playing his ass off with Zappa's Mothers at the time, and there is plenty of Zappa's skittering brilliance here, as well as some of his brilliant musicians: Ruth Underwood is amazing on percussion, Johnny 'Guitar' Watson duets on an on-the-porch blues. Drummer is Ndugu Chancler throughout and, for a while, Duke's wacky funk seems like

the future. However (like flares) the joke palls a bit by the end. For a serious antidote, try *Brother To Brother* (Gazell GJCD4006•) by David Murray and Dave Burrell. Fans complain that Murray is flooding the market (he is astonishingly prolific) but the tension between Burrell's fulsomely sentimental piano and Murray's volcanic saxophone makes this special. Murray makes the old Gospel verities – passion, extremes, fervour – seem like light at the end of the post-modernist tunnel.

Ben Watson



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MAIL ORDER WORLDWIDE

BUTCH MORRIS DUST TO DUST

New World 80408 (60m 42s) •

It is becoming obvious that the David Murray Octet of the early 1980s was a hotbed of talent, breeding the key leaders of the 1990s. Wynton Marsalis merely reveals his backwater aesthetic when he calls Murray 'ill-educated'. The achievements of his ex-players – George Lewis's computer-work, Craig Harris's Tailgaters' Tales, Henry Threadgill's Very Very Circus and now Butch Morris – speak for themselves. Butch Morris specialises in 'conduction' (directing improvisors by gestures) and the results are by turns haunting, weird and exhilarating. New York's best – harpist Zeena Parkins, guitarist Jean-Paul Bourelly and drummer Andrew Cyrille – are deployed to create something both innovative and effective. How does he do it? Listen and tremble with awe.

[A:1]

ART TATUM I GOT RHYTHM 1935–1944 VOLUME 3

(57m 36s) •

Twenty-one original American Decca recordings: two solos (a brilliant 'Tea For Two') from 1939, nine small band tracks from 1937 and 1941 and ten trios with guitarist Tiny Grimes and bassist Slam Stewart from 1944. The only let-down is a corny vocal from 1935, 'Take Me Back To My Boots And Saddle'. Otherwise it's prime Tatum, combining show-off runs with assured swing and direction, well transcribed off 78s (some surface hiss, but a crisp piano sound). If you find 1950s' solo Tatum over-done, this is a revelation: virtuosity firmly harnessed to taste and wit.

[H:1*]

STANLEY TURRENTINE IF I COULD

Limelight 518444 (54m 52s) •

Produced, arranged and conducted by Don Sebesky, this sits midway between the late-nite tenor-and-strings of 1970s Creed Taylor and the quality chamber bop of Pablo. Turrentine's easy, sensual tenor is just what such undemanding fare requires, giving it warmth and weight. The old hands (Hubert Laws on flute, Sir

Roland Hanna on piano, Ron Carter on bass, Grady Tate on drums) give their firm, swinging best. What more could you possibly want? Neo-classical pretension? Get out of here!

[A:1]

CASSANDRA WILSON BLUE LIGHT 'TIL DAWN

Blue Note CDP 81357 (56m 11s) •

The diva of new song in beautiful form: truly a voice to convert those uncomfortable

with the glitzy aspects of jazz singing (such as myself).

Visually, it's a shame that Blue Note (unlike JMT, her previous label) pass by her haughty good looks for the usual soul bimbo come-hither glamour. Some of the song choices – Robert Johnson, Van Morrison – nod towards the lucrative 30-something market (*Mojo* magazine, MTV's *Unplugged*), but who cares? Wilson always programmes intelligently, a different idea each time: here the concept is

acoustic blues. She's a musically mature personality whose thrill is to direct the music; a striking combination of authority and risky tremor. Charlie Burnham's emotive violin could stand more exposure than the single track it gets here (I'd love a live recording of the band she showcased in London).

Marketing fol-de-rol be damned, a great album – Don Byron and Olu Dara completists should investigate, too.

[A*:1]

Ben Watson

BUT-IS-IT-JAZZ? MUWORKS ROUND-UP

Despite the current talk of 'breaking boundaries' (seemingly de rigueur for every music/dance/arts brochure), it's still dangerous for musicians to refuse the slots offered them by promoters and reviewers. Great players can slip from view just because their music does not 'fit'. Sonny Sharrock, Ronald Shannon Jackson and Butch Morris play improvised music at the height of invention, but they are denied the support given 'respectable' jazz. It is not just a matter of a few musicians hollering away in cellars unremarked: entire record labels disappear from view.

A case in point is Muworks, a company run by guitarist **Robert Musso**. Having just issued their fourteenth compact disc, the label can justifiably be proud of having documented material that falls between every commercial stool. It ranges from Musso's own new-agey industrial-folk, reminiscent of **Bill Laswell's** experiments – *Absolute Music*, (MU1002•), *Active Resonance*, (MU1008•), to all-out free improvisation. *Improvised Music New York 1981* (MUW1007•) is forty-two minutes of delirious spontaneity involving the guitars of **Sonny Sharrock**, **Fred Frith** and **Derek Bailey**, plus **John Zorn**. Seldom has Bailey's harmonic acuteness been so well attested; he cuts into the electric textures with surgical grace. The man in the eye of the Muworks storm is alto-saxophonist and flautist **Thomas Chapin**. He was **Lionel Hampton's** musical director for six years,

coiling a whole history of R&B and swing into an incisive and highly original sax sound. His band **Machine Gun** – named after Peter Brötzmann's epochal album of 1968 – revives the abstract beat music **The Red Crayola** and **Lora Logic** hinted at in 1979. His jazz-educated lines respond brilliantly to his band's post-punk flurry, all the areas **The Golden Palominos** were too buttoned-up to discover. **Machine Gun**, usually recorded live, combine an enthusiastic rock wallop, sounding thin but punchy, with the harmonic sophistication of the latest advances in jazz (ie, **Ornette Coleman**). *Machine Gun* (MU1001•) and *Open Fire* (MU1003•) are terrific; the first a pure statement of intent, the second fusing **Keith Moon**-style drums with **Soft Machine** pastoralism, along with three ferocious guest-spots for **Sonny Sharrock**. *Pass The Ammo* (MUW1011•) is flawed by the bohemian bellowing of poet **John Richey**, whose own *Lunar Bear Ensemble* (MU1006•) is disposable the vocals rehearse all the problems of being an 'artist' in New York with as much grace, wit and intelligence as a bellicose drunk leaning at the **Knitting Factory's** downstairs bar.

Chapin demonstrates his sheer range in an album with **Borah Bergman** *Inversions* (MU1009•), post-Cecil piano and ripping alto in dervish-duo knife-fights. Chapin's melodically charged, unsoupy flute recalls **Eric Dolphy**. **John**

McCracken & Outloud *Blood From A Tone* (MU1010•) places him in a rock context: the stylistic variety (circular-breathed sax extensions, glottal funk, guitar psychedelia) evinces the pleasure of discovery rather than programmed calculation, and **McCracken** delivers some beautifully exotic post-Sharrock guitar. *Radius* (MU1005•) is **Chapin's** in-the-tradition jazz outing, and features a *non-pareil* hard bop rhythm section (**Ronnie Matthews**, piano, **Ray Drummond**, bass, **John Betsch**, drums): fresh, rolling jazz-noir to set beside **Zorn's** *News For Lulu* project. **Chapin's** reading of **Fats Waller's** 'Jitterbug Waltz' does not pale beside those of **Dolphy** and **Blythe** – no mean feat.

As a sideman, drummer **Pheeroan akLaff** is practically the guarantee of a momentous gig; his own album *Sonogram* is a disappointment, sounding like a toned-down **Decoding Society** – though his own solos (and those of **Sonny Sharrock**) are never less than brilliant. The peak of excitement (and a nice paycheck to the man whose record named **Machine Gun**) is reached by *Headfirst Into The Flames* (MUW1013•) by **Last Exit**, free-jazz shrapnel from the best band in the universe: **Sharrock** and **Brötzmann** writhing in ecstatic grotesques, **Bill Laswell** and **Shannon Jackson** as unstoppable as ever.

Jazz fans – from every compartment – have a lot to thank **Mr Musso** for.

Ben Watson

**ACE
HOW LONG**

Music Club MCCD 123
(65m 16s) ♦

Bargain-priced (£5.99) 16-track 'Best of', with plenty of early Paul Carrack for fans of the UK's most underrated songsmith. Exquisite, soulful music from a pub rock outfit which somehow survived into the punk era (but only just). [A/B:1/1*]

**BAD NEWS
THE CASH-IN COMPILATION**

DoJo CD152 (68m 29s) ■

Barely amusing, sub-Spinal Tap spoof about an imaginary HM band. Consisting mainly of the Young Ones, it was guaranteed exposure plus acclaim from legions of uncritical worshippers. Lots of swearing, one or two sharply observed moments and a fetching massacre of 'Bohemian Rhapsody', all the more amusing considering Brian May's involvement. [A:2/3]

**DAVE BARTHOLOMEW
SPIRIT OF NEW ORLEANS**

EMI 0777-7-80184 2 1
(64m 41s; 63m 37s) ■

Subtitled 'The Genius of Dave Bartholomew' and that's no exaggeration. This 2CD, 50-track set contains some of his own performances plus those he masterminded; think of DB's relationship to post-war New Orleans musicians as you would of George Martin's to the Beatles. Earl King, Fats Domino, T-Bone Walker, Smiley Lewis and most of the other New Orleans greats of the 1950s feature here. He was the Renaissance Man of New Orleans R&B, a songwriter, arranger, musician, A&R man and overall wizard whose part in the birth of rock'n'roll cannot be overestimated. [H:1*]

**BLUE MINK
THE BEST OF BLUE MINK**

Music Club MCCD 117
(31m 21s) ♦

Eighteen-track, budget-price reminder of a strange outfit which had stranger hits, like the precious 'Melting Pot', from a time when 'politically correct' meant 'vote-winning'. Roger Cook and Madeline Bell were lineal descendants of Sonny & Cher and precursors to Abba,

marrying lyrical novelty, mild soul and great pop to create perfect chart fodder. Fun from the late 1960s/early 1970s. [A/B:2]

**PATSY CLINE
FOREVER AND ALWAYS**

Sony Music 472864 2
(26m 16s) ■

A meagre 10 songs from one of C&W's finest chanteuses, predominantly heartbreakers, for those who've yet to buy the budget-priced box-set. Phenomenal performances, so emotional as to make Piaf seem like Lady Thatcher. But with a playing time like this, be grateful it's mid-price. [A/B:1/1*]

**DEEP PURPLE
THE GEMINI SUITE LIVE**

RPM RPM114 (44m 36s) ■

Even labels like RPM are allowed lapses, because stuff like this excites chronic completists. Here, at last, is the previously unreleased live set from September 1970, when the classic line-up filled the Royal Albert Hall with the strains of Jon Lord's 'Gemini Suite'. As all intelligent people realise, classical and rock mix about as well as tubes and transistors, so what you get is turgid pretension which even ELP would find ludicrous. This material is said to be previously unreleased, but perhaps the members of Spinal Tap were in the audience? Because surely this is a joke. [A/B:3/4]

**DEVO
HOT POTATOES**

Virgin CDVM 9016
(62m 37s) ■

After the run of 2-on-1 CDs, all the Devo you really need to consider: a 19 track 'best of'. All of the technoid essentials are here, including a couple of versions of 'Whip It', 'Jocko Homo' and the oddest cover yet of 'Satisfaction'. Far more digestible than whole Devo albums. [A:1/2]

**THE EQUALS
THE VERY BEST OF**

See For Miles SEECD374
(71m 06s) ♦

Twenty-five tracks from the band featuring a young Eddy Grant before he went dread. Crunchy power pop with a unique feel and sound, best

exemplified by the Equals' greatest moment, 'Baby, Come Back'. Better-than-interesting late Sixties rock. [B:1/2]

**THE FABULOUS
THUNDERBIRDS**

**THE FABULOUS
THUNDERBIRDS/WHAT'S THE
WORD**

BGO BGOCD192 (69m 44s) •

BUTT ROCKIN'/T BIRD RHYTHM
BGO BGOCD193 (68m 03s) •

Their first four LPs on two CDs. This is the sound which established white Texas R&B as a worthy genre on its own. Though with less impact than the exponents of the first British blues revival, this outfit worked wonders for all manner of Texas bluespersons, including blood relative Stevie Ray Vaughan. Juke joint perfection, R&B to party to, like a southern version of the J Geils Band. [A/B:1] for both.

**THE FACES
FIRST STEP**

Warner 7599-26376-2
(47m 52s) ■

LONG PLAYER
Warner 7599-26191-2
(45m 19s) ■

A NOD IS AS GOOD AS A WINK...
Warner 7599-25929-2
(36m 09s) ■

OOH LA LA
Warner 7599-26368-2
(30m 33s) ■

Almost the complete canon from a band which, 20 years after the fact, proved far more influential than the asshole punks who derided them could have feared in their worst nightmares. The Black Crowes, Dogs D'Amour, Quireboys and a few dozen other boozy boogie outfits owe it all to this band of joyous party animals. Rod Stewart at his peak, backed by the only group which could almost match the Stones – as a body of work, this has to be [A:1/1*]... but you could tell Rod's solo career was taking off toward the end.

**ELLA FITZGERALD
ELLA WISHES YOU A SWINGING
CHRISTMAS**

Mobile Fidelity UDCD 586
(33m 52s) ♦

Twelve seasonal chestnuts

recorded by the wondrous Ella in 1960, with Frank DeVol leading the orchestra and Norman Granz twiddling the knobs. The gold plating gives it an even more festive feel, an absolute holiday delight from start to finish...even for agnostics. [A:1] [Note: for an even more festive effect, paint the edges green...]

**EDDIE FLOYD
RARE STAMPS**

RCA 74321 16003 2
(51m 21s) •

Astounding 25-track compilation containing the whole of *I've Never Found A Girl* and *Rare Stamps* (with the duplicated tracks appearing only once), plus some singles tracks. The bulk of the hits are here ('Knock On Wood' is track 12) plus duets, covers (a stupendous 'Bring It On Home To Me') and originals which keep many Staxophiles insisting that Floyd deserved to be as big as Otis. Smooth and classy, with a beat that just don't quit. [A/B:1/1*]

**HALL & OATES
LIVE AT THE APOLLO**

RCA 74321 16003 2
(51m 21s) ■

Mid-price reissue of the live set in which Hall & Oates pay homage to their heroes, David Ruffin and Eddie Kendrick. Half a Temptations' set rather than a proper Hall & Oates effort, it would have been that much better as a double CD with the entire gig in place. Hall & Oates fans get the lions' share, though, so judge it on whether or not you worship the old Motown masters as much as Daryl and John do. [B:1/2]

**EMMYLOU HARRIS &
CARL JACKSON
NASHVILLE COUNTRY DUETS**

Magnum CDS 074
(47m 33s) •

Slightly misleading this, as it's more Jackson than Harris, and fans of the latter might feel short-changed. But they shouldn't, because Jackson is a veteran and these 1984/5 sessions are pretty much standard country fare. And, of course, the style will be familiar to those who know that Emmylou just hates to sing alone.

[A/B:2]

**BLIND WILLIE JOHNSON
THE COMPLETE BLIND WILLIE JOHNSON**

Columbia 472190 2
(44m 06s; 50m 53s) •

Part of Columbia's Roots'n' Blues series, this 2CD package contains 30 tracks, said to be Blind Willie's complete recorded output. Although more gospel than blues (but easily digestible by fans of the latter), his music is a key stage in the development of the blues and, as this material was all recorded during 1927-1930, it predates Robert, the better known Johnson. [H:1], plus a [*] for the documentation.

**LOS LOBOS
JUST ANOTHER BAND FROM EAST L.A.**

Slash/London 828 446-4
(advance cassette) •

Worthy 41-track double 'best of' covering the career of what is probably the most successful 'world music' band of all, the outfit that mixed rock and Latino with more skill than anyone since homeboy Valens. Loads of previously unissued material and a dandy booklet. [A:1/2], and a [*] for what Zappa-ologists will agree is the coolest title of the year.

**MARTHA & THE MUFFINS
FAR AWAY IN TIME**

Virgin Universal 0777 7 87957 2 8 (68m 51s) ■

Seventeen tracks culled from three LPs by a great Canadian New Wave outfit, post-punk to early/mid 1980s. Classy power pop with just enough anger to provide street cred, the Muffins' sound was simply too professional, polished and musical to allow it to sit neatly alongside Britpunk. Still, they charted here with 'Echo Beach' and wound their way through some great material (including a fine cover of Spedding's 'Motorbikin') before calling it a day. A lost treasure. [A:1]

**McGUINN, CLARK, HILLMAN
RETURN FLIGHT VOLS I & II**

Edsel EDCD 358/EDCD 373
(50m 01s; 60m 03s) •

Effectively, three-fifths of the original Byrds, and thus more 'valid' than incarnations which

only contained McGuinn from the first line-up. This pair of CDs offers virtually everything the trio produced in the late 1970s/early 1980s, the sad fact being that the sound is deliberately 'un-Byrds-like'. It is above-average West Coast country-flavoured rock which really doesn't bear comparison with what the Eagles had delivered in the interim years. But Byrds-maniacs will understand the [A:1] rating.

**MATCHING MOLE
MATCHING MOLE'S LITTLE RED RECORD**

BGO BGOCD 174 (43m 05s) ◆

Another of Robert Wyatt's post-Soft Machine ventures, a fine, typically idiosyncratic effort blending the then-current 'British eccentric' sound of fellow travellers like Kevin Ayers with the jazz fusion that overwhelmed former sidekicks. A clean, powerful set that doesn't suffer the made-in-a-barn feel of so many of its contemporaries. It's wa-a-ay left of centre, but with an ear to the till. [A:1]

**MOTORHEAD
ALL THE ACES**

Castle CTVCD 125
(58m 28s; 44m 36s) •

Overwhelming 15-track 'Best of' featuring Motorhead's finest moments; hard to believe this band is an off-shoot of Hawkwind. 'Ace Of Spades' in two versions, a live take of their eponymous anthem, 'Orgasmatron', and best of all, a limited edition bonus (in all formats) of The Muggers Tapes, eight rare tracks from an amalgam of two members of Motorhead with Johnny Thunders and Speedy Keen, from 1978. A fitting tribute to the godfathers of thrash. [D:1]

**WILLIE NELSON
45 ORIGINAL TRACKS**

EMI Country Masters CD EMI505 (63m 49s) •

Early Willie. He hasn't changed all that much, despite a sartorial move from clean-cut and youthful to seriously grizzled. This is the kind of country music that forces you to admit that exponents of the genre - especially Willie and his ilk - can write melodies and lyrics to rank with the most sophisticated pop material you can

name. This 2CD EMI set is a fine introduction, a reminder that Nelson should be honoured as much for his songwriting ('Crazy' is but one key moment) as his performing. [A/B:1*]

**NEW VAUDEVILLE BAND
WINCHESTER CATHEDRAL**

Philips 514 348-2 (48m 56s) ■

The (retro) novelty of creating a 1920s sound in the middle of the 1960s had an obviously short shelf-life, even though the NVB managed to chart mightily with the title song. But after you've heard that hit, what remains comes off like a soundtrack to Jeeves & Wooster. Bogus. [B:3]

**ALAN PRICE
THE BEST OF**

Music Club MCCD109
(62m 25s) ◆

Eighteen tracks from the one-time Animal, revealing just how unlikely was his short stint in that band. Price's heart belongs to jazz, music hall and classic pop, and you'll be amazed at just how familiar is this body of work. Provided you can get past the sickly 'Simon Smith and His Amazing Dancing Bear'. [A/B:1/2]

**QUEEN
NEWS OF THE WORLD**

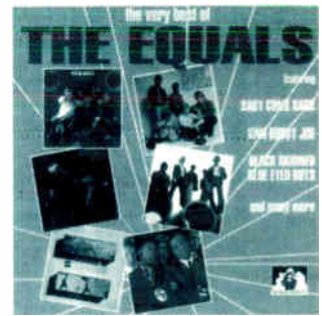
Mobile Fidelity UDCD 588
(39m 31s) ◆

MFSL's second gold Queen CD, this 1977 smash kicks off with the thunderous 'We Will Rock You'. Classic Queen which sounded dandy in standard form; this is simply icing on the cake, which extends to the kind of packaging collectors adore. No Queen fan will be able to resist. [A*:1/1*]

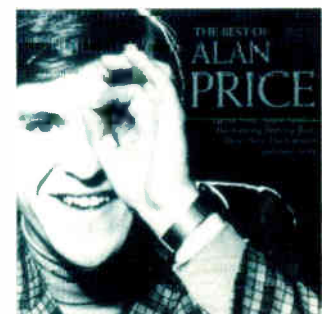
**ROCKIN' SIDNEY
MY TOOT TOOT**

Ace CDCH160 (66m 19s) •

Seminal zydeco figure Rockin' Sidney scored big with the title track, provided a dandy track for the Fabulous Thunderbirds with his classic 'You Ain't Nothing But Fine' and produced a lot of zydeco devoid of the sameyness which afflicted other practitioners. This set consists mainly of 1980s' material, but the CD has been augmented by tracks Sidney



**MATCHING MOLE'S
LITTLE RED RECORD**



reissues

recorded for the Jin label, 1959–1964. [A/B/H:1/2]

PAUL SIMON ANTHOLOGY

Warner 9362-45408-2
(75m 35s; 72m 56s) ♦

A 2CD version of the 3CD limited edition box-set, but lacking very little. Almost all of the great Simon & Garfunkel material and a disc-and-a-half's worth of solo stuff right up to the present. Some of the finest, smoothest, most intelligent popular music of the post-war period, material surely to be regarded as standards by future generations. From 'The Sound of Silence' through the *Grace-land* triumph, an essential set. [A/B:1*]

CARLA THOMAS THE SINGLES PLUS! 1968–1973

Stax/Ace CDSXD 093
(74m 36s) •

'Best of' containing 23 tracks including all the crucial singles of the period, plus album tracks. Quintessential late period Stax soul, with immaculate in-house production, the requisite tacky sleeve art, a great live take of 'Gee Whiz!' and duets with William Bell and Johnnie Taylor. Ms Thomas remains one of soul's most undervalued practitioners. [A/B:1/1*]

THE UNDERTONES TEENAGE KICKS

Castle CTVCD 121 (66m 23s) •

Twenty-five short, sharp lessons in power pop from one of the best of the post punk bands. Rendered distinctive because of the warble of one Feargal Sharkey, the 'Tones will be remembered for such tight little masterpieces as 'Get Over You', 'My Perfect Cousin' and the anthemic title track. So good, it's almost a justification for the late 1970s. [B/B:1/2]

URIAH HEEP LANSDOWNE TAPES

RPM RPM115 (77m 26s) •

Another killer rarity package from RPM, previously unreleased tracks from 1969–1971, the link between Spice and the first incarnation of Uriah Heep – stadium fillers par excellence. Or not, if you were a rock critic. Perhaps the most loathed (by the critics, that is) of all the

primordial HM bands, Heep still managed to build up a loyal following. If any of these fans are still alive, they'll love these pre-fame treasures. But be warned: Iron Maiden, the dumbest HM act ever, cites Heep as an early influence. [B/C:2/3]

SARAH VAUGHAN SONGS OF THE BEATLES

Atlantic 7567-81483-2
(44m 20s) ■

Proof that not all Beatles cover albums have to suck; then again, this is Sarah Vaughan. This 13-track set from 1981 isn't too imaginative song-selection-wise, with the expected 'Something', 'Eleanor Rigby', 'Yesterday' ad nauseum, but what makes it interesting is a backing band containing three Porcaros, Lee Ritenour, Dean Parks, David Paich and others who turn sessions into audio-ophile erotica. [A/A*:1]

MERCY DEE WALTON ONE ROOM COUNTRY SHACK

Ace CDCHD 475 (55m 45s) •

Twenty-four early tracks, many previously unreleased, from the great Mercy Dee Walton, a Texas bluesman best known for a slithery voice which worked like T-Bone Walker's guitar. Excruciatingly sexy blues with instant appeal to Hooker fans, urbane sass complementing rural origins. Compiled by Billy Vera, who's rapidly becoming a top archive dredger. [H:1*]

VARIOUS AS YEARS GO BY

Deram 844 014-2 (72m 45s) ■

An astounding 28 tracks squeezed on to one CD to illustrate the scope of the Deram catalogue in the 1960s and act as a perfect accompaniment to the book of the same title by David Wedgby and John Tracy. Marc Bolan, Tom Jones, John Mayall, Amen Corner, David Essex, Billy Fury, Small Faces, Dave Berry, Joe Cocker, Lulu and others. [A/B:1/2]

VARIOUS BACK TO THE 70s

EMI 7233 8 27230 2 8
(76m 53s; 73m 30s) ♦

Subtitled '40 Chart Busting Seventies Hits', this impressive 2CD set is jam-packed with

chart-toppers, grouped loosely by genre: stadium-type rock, glitter, disco and just about everything else bar deep punk. Artists include Kate Bush, 10cc, Slade, Don McLean, Mud, McCartney, Al Green, Gary Glitter, Blondie, Elvis Costello – this is the best single-purchase '70s compilation yet, devoid of filler and as broad-based as it gets. [A:1*]

VARIOUS BRITISH BEAT BEFORE THE BEATLES VOLS 4,5,6,7

EMI 0777 7 89223/4/5/6
(45m 45s; 45m 47; 45m 20s; 44m 53s) ♦

The completion of a monumental study of British pop music before the Beatles arrived, the last four proving what the first three suggested: it got better rather than worse. This quartet covers 1959–1962, the music now including worthy tracks from Johnny Kidd, Emile Ford, Marty Wilde and even Adam Faith (currently plaguing us with his first new album in years). While these tracks hardly point to what four lads from Liverpool would do to the world of pop, they do suggest that something was afoot. Conversely, this material makes the Beatles' arrival even more of a non-sequiter. [A/B:1/2/3]

VARIOUS BRUMBEAT – MOTORCITY MUSIC

Sequel NEXCD 251 (70m 36s) ♦

Television tie-in for the short series of the same name, a study of Birmingham's contribution to rock in the 1960s. And it's a killer, with rare tracks from Carl Wayne & the Vikings, the Uglys, Nicky James, the Hellions, the Rockin' Berries and the inevitable Moody Blues and Move tracks. Twenty-eight selections, a fine booklet and another chapter in rock history gets its due. [A/B:1/2]

VARIOUS OLD TOWN DOO WOP VOLS TWO & THREE

Ace CDCHD 471/472
(69m 09s; 71m 11s) •

Another 56 tracks, rare street-corner vocalising to complement the more obvious collections. The Capris, the Chimes, the Four Pharaohs, the Fi-Tones, the Clefones – even the

names are redolent of the 1950s. Brylcreem music with a vengeance. [A/B/H:1/2]

VARIOUS RANDALL LEE ROSE'S DOO WOP SHOP

Ace CDCHD 392 (72m 29s) •

Thirty-track doo-wop extravaganza for those whose appetites were whetted by last year's flood of a capella-ness. This staggering selection includes milestone tracks from Dion & the Belmonts, the Jive Five, the Chimes, the Earls and others. And for those outside the Greater London area, Randall Lee Rose is the Capital Gold deejay who compiled this. [A/B/H:1/2]

VARIOUS THE SURF SET

Sequel NXTCD 249
(55m; 51m 27s; 52m 49s) ♦

Without question, the last word in surf music: three CDs containing 72 tracks, representing every important group. Yes, Sequel secured pukka hit songs from the Beach Boys, the Fantastic Baggys, Jan & Dean, Dick Dale, the Surfaris, the Rip Chords, the Pyramids, Ronnie & the Daytonas and every other major surf act to yield a true definitive. Here's where class shows: not only does the set include all the key surf smashes, it also contains themes from major beach movies, probably THE most significant media expression of the surf ethos. Flaws are few (what insufferable schmuck decided to include two Joe Meek tunes?), so buy this with confidence. [A/B/C:1/2]

VARIOUS A TRIBUTE TO WILLIE DIXON

Charly/Chess CD RED 37
(70m 25s) •

This is the first in what will undoubtedly be a flood of Dixon commemoratives, but he does deserve the honours. Willie Dixon was the most influential bluesman of all time, but as a writer and producer, rather than as a performer. Here are 24 of his finest compositions and arrangements, covered by the stars who made them blues standards: Muddy Waters, Koko Taylor, Howlin' Wolf, Little Walter, Bo Diddley and the man himself. [A/B/C:1/2]

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.

FEBRUARY 1994



Tannoy has launched a mark II version of its popular Sixes loudspeaker range, including the 605 pictured and featured in our buying guide

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

			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
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. Mild power reduction.</i>	0223 861550	16 Key					20	●	10	93	**	***	
Arcam Black Box 5 £450	A&R Cambridge <i>Enticing, easy-going sound; perhaps not particularly quick or detailed but supremely confident. Works best with Arcam's Sync Lock anti-jitter link.</i>	0233 861550	Hyb						●	11	92	**	***	
Arcam Delta 70.3 £700	A&R Cambridge <i>With a distinctive character, gave a very well focused but rather close view of the stereo stage. Though well balanced it fell short on transparency and on rhythmic quality.</i>	0233 861550	BS Key	●				20		11	91	*	*	
Arcam Delta 170.3 £700	A&R Cambridge <i>Faster, more lucid and animated than the earlier D170, this transport could provide strikingly clear sounds with a suitable DAC. Well built and very good value.</i>	0233 861550	Key	●	●			20	●	8	92	**	***	
Audio Alchemy DDE/DDT £420	Path Premier <i>Gutsy, full-bodied sound with a few rough edges but quite good rhythmic qualities. Good value, but improves further with the addition of Audio Alchemy's power supply upgrades.</i>	0494 441736	BS						●	6	92	**	**	
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	*	*	
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	**	*	
Creek CD60 £500	Creek Audio <i>With a coherent sound through the midrange and treble spectrum, the Creek has a neutral quality with good 'timing'; but less expressive-sounding than some competitors.</i>	081 361 4133	16 Key					20	●	4	92	*	*	
Denon DCD-890 £270	Hayden Laboratories <i>Able to sustain listener involvement quite well, the Denon has firm and well defined base, 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	**	*	
JVC XL-Z646 £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 £300	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 CD72SE £549	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	●			*	*	
Meridian 200/263 £1390	Meridian Audio Ltd <i>The excellent 200 transport can now be combined with the Delta Sigma 263 to provide crisp definition and good stereo, though with a question mark over rhythm and pace.</i>	0480 434334	DS Yes		●	●	●	99	●	5	93	**	*	
Meridian 206 £995	Meridian Audio Ltd <i>In contrast to MC's reservations over the Delta Sigma 263 DAC, AG gave a warm reception to the 206 player: light, agile and smooth-sounding, totally free from 'grain'.</i>	0480 434334	DS Yes		●			99	●	9	93*	**	**	

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.	081 989 0692	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.	081 989 0692	BS	Yes	●	●		●	●		7 93		**	**
Micromega Logic £569	Micromega UK Difficult to rate for value, this rebuilt Philips player produced excellent results from its digital output, and the musical effect was quite engaging with good transparency and stereo.	081 989 0692	BS	Key		●	99		●		11 91		*	*
Micromega Leader £849	Micromega UK Largely resembling the duo decoder, the Leader is another Philips-based player capable of a large a spacious sound with an exceptional and communicative midrange.	081 989 0692	BS			●	99		●		1 92		**	*
Mission DAD 5 £300	Mission Group Smoothly civilised performance, self-effacing and compatible with the somewhat sharp-sounding Cyrus amps. Minor failings included slight treble phasiness and slightly light bass.	0480 451777	BS			●	20		●		5 92		*	*
Mission DAC 5 £300	Mission Group Sweet and clean-sounding, with above average dynamics (better than the DAD 5 player); stereo images were well focused with pleasingly natural perspectives.	0480 451777	BS			●		●	●		11 92		**	**
Musical Fidelity CD2 £349	Musical Fidelity Ltd With an impressively tactile quality, the CD2 had a very distinctive mid/treble character: but it could be let down by a tendency to lose clarity on some material.	081 900 2866	16	Yes		●	24				1 93		*	*
Musical Fidelity CDT £499	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 £220	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		**	***
Orelle 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		●			●		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		**	*
Phillips CD 950 £349	Philips Consumer Electronics Good definition and detail and articulate bass were plus points of this first Philips DAC 7/CDM9 model, which gave a slightly lean balance and average dynamics.	081 689 4444	BS	Yes		●	30		●	●	12 92		*	*
QED Digit £139	QED Audio Products Ltd Ultra-basic Bitstream add-on DAC could improve the sound of earlier CD players with digital outputs, but you might be better off buying a complete new player.	0206 51166	BS						●		6 92		*	**
Quad 67 £790	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		**	**
Revox C221 £1162	Studer Revox UK Ltd Pro player with exceptional disc-handling performance and facilities (cueing etc.). Slightly harsh by audiophile standards, but enjoyable and 'unprocessed' sounding.	081-953 3533	BS						●		6 92		*	*
Roksan ROK-DP1/DA1 £1690	Roksan Digital Ltd Described as organic and fluid-sounding by AG, the Roksan combination certainly gives a big sound image but with a definite character of its own.	0895 436384	BS	Key	●	●	●	99	●	●	5 92		**	*
Rotel RCD 955AX £280	Gamepath Ltd Technically identical to its multi-bit predecessor, the 855, the 955 sounded transparent and musical. Early samples sounded below par, but this was quickly corrected.	0908 317707	16	Key		●	20		●		5 92		*	**
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		*	*

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
Sonographe SD22 £995	Audiofreaks American re-cased Philips player (though with many tweaks inside): sounds musical, sweet and superciliously analogue-like, but is rather expensive in the UK.	081 948 4153	BS	Yes		●		99			3 92	**	*	
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 £1500	JE Sugden & Co Ltd Well matched combination based on TDA 1541 16-bit technology, with COM9 transport mechanism. The SDA-1 DAC was particularly liked for its rhythmic qualities.	0924 404088	16	Yes		●	●	20		●	5 93	**	*	
TEAC CD-P4500 £280	TEAC UK Ltd Somewhat old fashioned even in 1992, the 4500 had a slightly closed-in midrange and a lack of slam and articulation in the bass. Dynamics and rhythm were barely average.	0923 819630	BS	Key	●			20	●		8 92	*	*	
TEAC VR-DS10 £850	TEAC UK Ltd 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.	0923 819630	BS	Key			●	20	●	●	6 93	*		
TEAC P-700/D-700 £1498	TEAC UK Ltd Polished, self-effacing sound quality makes this an easy player to match with more characterful budget equipment. A neutral performer, though one that deserves a sympathetic setting.	0923 819630	20		●	●	●	20	●		11 93	**	*	
Technics SL-PS620A £230	Technics Elegant two-box combination. Rounded performance, mellow sound. Handles most daunting of instruments giving bold earthy dynamics, but soft on focus.	0344 853157	PWM	Yes	●		●	20	●		2 93	*	**	
Technics SL-PS740A £270	Technics 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'.	0344 853157	PWM	Key	●		●		●		10 93	*	*	
Theta Data Basic £1190	Absolute Sounds Presents complex sound-pictures to form a lucid and intelligible account of events. Up among the best, with solid and authoritative bass, this is semi-affordable version of the Data II.	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 outlets	Tone controls	Headphones	Date reviewed	Performance	Value
Adcom FGP555 /GFA545 £998	Celestion International Ltd 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.	0473 723131	100	6	●		●	●	1	●			12 92	*	*
AMC 3030 £529	Campus International 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.	0494 431290	30	6	●		●		1	●	●		8 92	*	*
Arcam Alpha 5 £230	A&R Cambridge 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.	0223 861550	40	4	●		●		2	●	●		11 93	*	*
Arcam Delta 290 £450	A&R Cambridge Remote control integrated with smooth, detailed performance and adequate power output. Remote facilities match rest of Delta range. Phono section is £50 extra.	0223 861550	75	4	●	●	●		2	●	●		2 93	*	*
Arcam Delta 120 MkII £550	A&R Cambridge Bridgeable, bi-wire terminals, well made and undercuts most of competition. Partners most equipment well. Sounds clean, neutral and lively.	0223 861550	100	2				●	2				10 92	**	**
Arcam 110 pre, d/a £750	A&R Cambridge Innovative digital pre-amp with remote. Assignable tape output. A well presented compact package with decent all-round sound. Improves many one-box CD players.	0223 861550		2	●	●	●	●		●			7 90	*	*

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
Art Audio VP1 Pres £750	Art Audio <i>Seemingly totally transparent, tonal balance is neutral and dynamics wide enough for any programme material, but revealing on poor recordings. Passive or active replay modes.</i>	0602 653604		5	●	●	●					4		*	*
												93			
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			
Audio Innovations L2 £699	Entel Ltd <i>Comfortable-sounding valve amp, spacious with good image depth. Lacking low-level detail and sparkle, the treble was sweet and smooth, the bass full and round and quite deep.</i>	0483 425702		4		●	●					4			
												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, but ambience and stereo depth are perfect.</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 £1195	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		●				
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		●			*	*
Copland 301/504 £3500	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			
Creek 4040 S3 £219	Creek <i>Hardly in the Audiolab league for polish, with a tendency to roughness at high levels, but an enjoyable, lively sound with plenty of pace. The phono section (m-m only) seems to lack weight.</i>	081-361 4133	30	3	●	●			1	●	●	4		*	*
												91			
Creek 4140 S2 £249	Creek <i>Improved in numerous details, this once coloured and 'lumpy' sounding amplifier has a new veneer of competence and neutrality. With sympathetic system matching it can give good results.</i>	081-361 4133	30	3	●	●	●		1		●			*	*
Creek 6060 £499	Creek <i>With its old-style press-button controls this Creek design still has a full range of facilities (including m-c phono) and a gutsy, tangible and characterful sound.</i>	081-361 4133	65		●	●	●		2	●	●	3		**	*
												93			
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			
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 Kardon <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 unflagging.</i>	081 207 5050	30	5	●	●			4	●	●	9		*	*
												92			
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			
Kenwood KA-3020 £160	Trio-Kenwood UK Ltd <i>An exceptionally vivid and lifelike budget amplifier, this unassuming Kenwood model performs as well as many good £200 amplifiers, albeit with slightly less power. Build quality is good.</i>	0923 816444	45	5	●	●			2	●	●			*	**

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
Kenwood KA-4040 R £250	Trio-Kenwood UK Ltd <i>A remote-control version of an existing model (but designed to avoid any sonic compromises), this model still had an 'edgy' feel, with loss of nuances and a tendency to listener fatigue.</i>	0923 816444	60	5	●	●			2	●	●	2			
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		*	*
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		*	*
Marantz PH22/MA22 £1400	Marantz Hi-Fi Ltd <i>Marantz in its up-market, no expense spared mode. Power amps offer punch, delicacy, speed and control, together with power and politeness. Two per side is preferred.</i>	0753 680868			●	●	●					4		**	*
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			
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		**	*
Musical Fidelity A1 £299	Musical Fidelity Ltd <i>This seemingly evergreen integrated is still a popular model, with winning combinations of subtlety and control, and fine stereo imaging. Its low power (25W) is a limiting factor.</i>	081 900 2866	25	4	●	●	●		1					**	**
Musical Fidelity A120 £549	Musical Fidelity Ltd <i>While the phono stage was not thought particularly impressive, this amp comes into its own on the line input, atmospheric and musical. Bass is deep and warm, treble neutral and airy.</i>	081 900 2866	40	5	●	●			1			11		*	*
MF Preamp/Typhoon £498	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		*	*
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		*	
Musical Fidelity Tempest £200	Musical Fidelity Ltd <i>More civilised than the B1, but with some loss in rhythm and dynamics counter-balanced by gains in purity and sweetness. Good stereo focus coupled with decent transparency.</i>	081 900 2866	35	6	●				1		●	10		*	*
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		**	*
Musical Fidelity F22/F15 £2900	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		**	*
NAD 302 £170	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		*	*
NAD 304 £230	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		*	**
Naim NAC 82/NAP 180 £2780	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		**	*
Onix DA21S/SDAP2 £400	Onix Electronics <i>Firm, dry and tight bass with plenty of weight and scale, while the midrange has neutrality and realism. The SDAP 2 power supply helps with difficult loads.</i>	0273 517358	50	4	●	●			1			2		**	*
Onix DA24/DA401 £800	Onix Electronics <i>On its disc inputs the pre-amp was well liked, though had a slight glaze or hardness in the treble, while the DA401 lacked bass slam, with a balance on the bright side: could be fatiguing.</i>	0273 517358	50	4	●	●	●	●	1			6			
Papworth TVA50 £1299	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			

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
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 A400 £280	Pioneer Hi-Fi GB Ltd <i>The first convincing minimalist Japanese mainstream amplifier, the A400 is light, airy and exquisitely detailed, but can sound over-dry and analytical with many budget ancillaries.</i>	0753 789789	60	5	●	●	●		1		●		*	**	
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	*	**	
PS Audio 5.6/Delta 250 £2580	Absolute Sounds Ltd <i>Sharp, detailed sound with notable precision and 'timing' plus deep powerful bass. It could 'wake up' insensitive speakers, if more admirable than likeable. Careful system matching is needed.</i>	081 947 5047	80		●	●	●	●				5 93	*		
Quad 606 (II) £673	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 RA-930AX £170	Gamepath Ltd <i>Tone controls and switching for two speaker pairs are provided. It stands up to 'purist' competition, with a distinctly warm presentation, but with less explicit stereo than some.</i>	0980 317707	30	3	●	●		●	2	●	●	1 92	*	**	
Rotel RA935BX £200	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 £750	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	**	**	
Sansui AU-X911 DG £899	Sansui UK Ltd <i>A big and impressive soundstage, with a good stab at transparency. Treble quality was dominated by a wispy and delicate touch, but without undue sibilance.</i>	0204 862026	120	10	●	●	●		2	●	●	6 93	*	*	
Shearpe Phase 2 £495	Shearpe 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	*	*	
Sonic Frontiers SFL-L £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 woolliness 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-A600 £200	Technics <i>Mid-forward presentation produces plenty of musical excitement, neutralised by low frequency power and sparkling treble. Stereo is ultra-precise and open. Slight muddling of low-level detail.</i>	0344 862444	48	3	●	●			2	●	●	11 93	*	**	
Technics SU-VX600 £200	Technics <i>With tone controls and a good-sounding phono stage, but could lose its poise at high volume levels. Stereo images were flattened and bass tended to softness.</i>	0344 853157	40	6	●	●			2	●	●	11 91	*	*	
Tube Technology Prophet £1310	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	4		●	●	●					4 93	*		
Tube Technology Unisis £1299	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	30	4	●	●			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	**		
Wharfedale 2050A £250	Wharfedale Loudspeakers Ltd <i>This integrated does not breathe life into the music in the way some amplifiers can, but it has real finesse and offers good analysis of subtle textures: best on simple material.</i>	0532 601222	50	5	●	●	●		4	●	●	1 93			

Loudspeakers

			Drive units	Bass size (mm)	Sensitivity (dB, for 1W, 1m)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions (mm, hwd)	Date reviewed	Performance	Value
Acoustic Energy AE-1 £767	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>	081 556 4365	2	130	88	8	200	Free	W	295x180x225	1	**	*
										89			
Alphason Orpheus £1070	Alphason Designs Ltd <i>Interesting hybrid bass-reflex with separate Iso-dynamic tweeter. Bright and detailed with a fast bass and open and clear-sounding treble. Controlled and unfatiguing sound.</i>	0942 897308	2	203	88	8	175	Both	W	660x280x340	1	**	**
										91			
Apogee Centaurus Minor £1345	Absolute Sounds Ltd <i>Adds punch and slam of a dynamic cone bass unit to ribbon tweeter smoothness, but at the expense of some refinement. Unlike full ribbon models presents an easy amplifier load.</i>	081 947 5047	2	6		6	100	Free	V/W	675x335x225	7	**	*
										91			
AR M2 £300	Entel Ltd <i>Larger version of the M1, classic 'baby' of AR's 'holographic imaging' range. Still good value, with accurate stereo performance a strong feature.</i>	0483 425702	2	200	90	4	125	Free	V	413x235x356	4	*	*
										92			
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 600.1 £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 detracts from warm</i>	0903 750750	2	150	88	4	100	Free	V	425x210x235	12		
										93			
B&W 620.1 £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			
Celestion 1 £110	Celestion International Ltd <i>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.</i>	0473 723131	2	105	86	8	50	Wall	V	274x160x215	11	*	**
										92			
Celestion 100 £540	Celestion International Ltd <i>Outstanding treble purity combined with rich and colourful upper midrange give a fine and detailed presentation. Work best in a fairly large room and need their dedicated stands.</i>	0473 723131	2	165	84	8	120	Free	W	425x210x256	11	**	*
										91			
Celestion 300 £1099	Celestion International Ltd <i>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'.</i>	0473 723131	2	165	84	8	120	Free	W	970x210x326	10	*	
										92			
Celestion 700SE £1435	Celestion International Ltd <i>Superb midband and silky-smooth top from the Celestion classic combination of metal tweeter and Aerolam cabinet. Special Edition components add weight and richness, but still too 'polite' for some.</i>	0473 723131	2	165	82	8	120	Free	M	375x200x235	2	***	*
										91			
Celestion 3 II £130	Celestion International Ltd <i>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.</i>	0473 723131	2	130	88	8	75	Free	V	310x185x215	10	**	**
										93			
Celestion 5 II £170	Celestion International Ltd <i>Warm and coloured lower midrange and blowsy, ill-defined bass is disappointing. Treble smoothness and clarity are to a high standard. Coloration adds 'honk' to male vocals.</i>	0473 723131	2	150	88	8	90	Free	V	350x206x250	10	*	*
										93			

Loudspeakers

			Drive units	Bass size (mm)	Sensitivity (dB, for 1W, 1m)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions (mm, hwd)	Date reviewed	Performance	Value
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 robs 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	Klipsch <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
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	V/W	250x162x175	10	**	**
Linn Index II £250	Linn Products Ltd <i>Bright, striking mid and treble especially suitable for rock material. Close to wall position controls bass balance but some coloration evident. Requires good-quality stands.</i>	041 644 5111	2	160	87	8	70	Wall	V	436x208x235	4	*	*
Linn Kan II £530	Linn Products Ltd <i>LS3/5A-sized baby offers minimal compression and a forthright and detailed nature, but can sound relentless and needs careful matching with ancillary equipment.</i>	041 644 5111	2	110	86	8	0	Wall	W	303x188x164		*	
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	***	***
Marlin Logan Aerius £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	**	*
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 £170	Mission Electronics <i>Bi-wire version of the £99 76i 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	*	**
Mission 780 £200	Mission Group <i>Good overall tonal balance and lack of boxiness. Treble is a mite forward. Little real bass extension and some roughness around 400 Hz and 1 kHz. Placement critical to performance.</i>	0480 451777	2	130	89	6	75	Wall	W	295x180x260	4	*	**
Mission 781 £250	Mission Group <i>Ultra-clean and highly articulate mid and top. Solid bass with just a trace of excessive warmth. Treble performance is excellent. Position near, but not close, to rear wall.</i>	0480 451777	2	170	91.5	6	100	Free	W	430x225x283	4	*	**
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	**	**



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Certainly it is hard not to be captivated by such an accomplished and well behaved player. AUDIOPHILE December 1993

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Digital Replay
Amplification
Loudspeaker

Loudspeakers

			Drive units	Bass size (mm)	Sensitivity (dB, for 1W, 1m)	Nominal impedance (ohms)	Amplifier power (max)	Recommended position	Finish	Dimensions-mm (hwd)	Date reviewed	Performance	Value
M A Monitor 1 Gold £190	Monitor Audio Ltd <i>Highly 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	*	*
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	*	
Mordaunt S Classic 20 £395	Mordaunt Short Ltd <i>Exceptional midband gives good depth and transparency. Bass is solid down to 40Hz with good tune-playing ability, despite some 'plumminess'. Some deviations from neutrality.</i>	0705 492777	2	165	87	8	75	Wall	W	430x270x330	12	*	*
Naim SBL £1710	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	*	
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	*	*
Pentachord 'A' £420	Pentachord Loudspeakers <i>Tremendous speed and precision from full-range metal cones. Credible spatial relationships and image layering. Lucid, high resolution mid-band. Slight lack of treble 'air'. Needs matching subwoofer.</i>	081 788 2228	2		87	8	100	Both	W	275x205x200	9	*	*
Philips DSS 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	*	
RCF Mytho 1 £595	RCF UK <i>Suitable as nearfield monitor, with bass tailing off at more than 0.5m listening distance. Delicate and natural treble is well matched to a fine, clear midrange.</i>	0268 570808	2	130	88	8	150	Free	W	160x280x240	10	**	*
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	*	*
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 LS8a £500	Swisstone <i>Like a LS4A with an extra bass unit (working up to 400Hz only) the 'two-and-a-half-way' LS8a offers good bass extension for the money, if now somewhat eclipsed by the new Studio models.</i>	081 640 2172	3	210	90	8	100	Free	V	860x255x245	1		92
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	**	**
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	*	
Ruark Talisman £700	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	**	**
Ruark Rhapsody Classic £800	Ruark Acoustics Ltd <i>Aimed at those who want an impressive 'period' look in wood; suffers a bright, thin balance and some coloration, with woolly bass.</i>	0268 728890	2	186	89	8	100	Wall	W	660x330x310	5	*	
Shahinian Arc £1395	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	*	*
Sonus Faber Minima £1500	Absolute Sounds Ltd <i>Big sounding, exotically finished miniature assembling a deep, tall and wide soundstage. Sweet, detailed, precise and quick with a penchant for equally exotic amplifiers. Sounds best played loud.</i>	081 947 5047	2	140	88	4	150	Free	W	340x200x310	6	**	

Loudspeakers

			Drive units	Bass size (mm)	Sensitivity, / dB, for 1W, 1m)	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 <i>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'.</i>	0323 843474	2	130	82.5	8	50	Free	W	300x190x170	12/92	**	*
Spendor S20 £575	Spendor Audio Systems Ltd <i>In many ways a 'bigger LS3/5A', this Spendor mini-monitor has the classic BBC balance but with more bass extension. Build and finish are to high standards.</i>	0323 843474	2	170	84	8	100	Free	W	380x220x260		**	*
Tannoy 605 II £190	Tannoy Ltd <i>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.</i>	0236 420199	2	140	86	8	90	Free	W	400x276x190	12/93		
Tannoy 605LE £190	Tannoy Ltd <i>Strongly focused definition, clarity and sense of immediacy, matched by lively and fast dynamic resolution. Can sound lumpy and ragged and falsifies tonal colours. Needs well balanced ancillaries.</i>	0236 420199	2	17	87	8	90	Free	V	400x276x188	1/93	*	
Tannoy 607 £210	Tannoy Ltd <i>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 phasey quality.</i>	0236 420199	2	200	88	8	100	Free	V	500x320x230	10/91	**	***
Tannoy D700 £1970	Tannoy Ltd <i>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.</i>	0236 420199	3	26	93	5	200	Free	W	1165x460x430	7/93	***	**
TDL 0.5 £500	TDL Electronics Ltd <i>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.</i>	0494 441191	2	135	85	6	100	Free	V	200x304x655	1/91	*	*
TDL Studio 1M £975	TDL Electronics Ltd <i>Power-hungry transmission line offering transparency and air with bass performance exceptional for the price. Higher- efficiency polyprop version is £700.</i>	0494 441191	2	185	83	4	100	Free	W	770x230x335	11/93	**	**
TDL Studio 4 £1500	TDL Electronics Ltd <i>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.</i>	0494 441191	3	300	87	6	200	Free	W	270x438x1125	6/92	*	
Thiel CS1.2 £1219	MPI Electronic UK Ltd <i>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.</i>	061 777 8522	2	170	87	4	150	Free	W	915x265x265	6/92	**	
Townshend Sir David £1225	Townshend Audio Ltd <i>Multi-layer, ultra-heavy enclosure gives remarkable bass solidity and definition from metal cone bass unit. Tremendous authority and control. Mid/top balance errs on the side of assertiveness.</i>	0784 455866	2		85	7.5	75	Both	W	640x270x210		**	*
Vandersteen 2Ce £1395	A&R Cambridge <i>Big convincing soundstage with laid-back quality, and a flawlessly integrated midrange and treble. Low bass is weighty but correctly proportioned in large rooms. Coloration is low and transparency high.</i>	0223 861550	4	230	88	7	160	Free	W	1020x460x261	10/92	**	*
Wharfedale Diamond V £130	Wharfedale Loudspeakers Ltd <i>Superb articulation and analysis for budget speaker, with engaging voicing and full bass for enclosure size. Warmth, expressiveness and subtlety match a deep and solid stereo soundstage.</i>	0532 601222	2	120	87	8	100	Free	V	265x178x190	11/92	*	***

Tuners

			Number of presets	Presets 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 <i>Exceptional sound quality combined with excellent standard of design and mechanical construction plus near perfect lab results. One of the best audiophile tuners</i>	061 777 8522	16	F	●	K		●	●	●		9	9/92	***	**
Arcam Alpha 3 £200	A&R Cambridge <i>A welcome addition to the Alpha range. Well built and easy to use. Solid-sounding, good stereo image and tonal warmth. Extended bass scale and weight.</i>	0223 861550	16	F	●	B			●			2	9/93	*	**
Arcam 150 TV Tuner £230	A & R Cambridge <i>Versatile stereo television tuner producing high grade video and Nicam audio. An audiophile product finished to the usual high standard. Now a bargain.</i>	0223 861550	8	U		B		●	●	●		6	9/92	**	**

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
Arcam Delta 280 £350	A&R Cambridge <i>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.</i>	0223 861550	20	●	F	●	B	●	●	●	●	7	**	*	93
Audiolab 8000T £700	Cambridge Systems Technology <i>Sound inspires confidence, natural yet maintaining a power and translucence that reveals a wealth of depth and detail. Vivid stereo and unsurpassed bass quality.</i>	0480 52521	39	●	MLF	●	K/B	●	●	●	●	5	***	**	93
Aura TU-50 £300	B&W Loudspeakers UK Sales <i>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.</i>	0903 750750	16		F		B	●	●	●	●	3	**	**	91
Creek T40S3 £250	Creek Audio <i>Milestone if disappointing design, with design flaws and below par sound quality; but better things are expected now Mike Creek is back at the helm</i>	081 361 4133			F	●	K		●	●	●	5			91
Denon TU260 £120	Hayden Laboratories <i>Basic design producing good, open sound with excellent ambient detail from classical recordings. Good sense of width and depth despite depression in mid-treble.</i>	0753 888447	20		MLF		B	●	●	●	●	5	*	**	91
Denon TU580RD £220	Hayden Laboratories <i>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</i>	0753 888447	30	●	MF	●	B	●	●	●	●	11	*	**	93
Harman Kardon HK9400 £300	Harman Audio UK <i>Poor relation to TU9600 which will fit happily into moderately priced systems. Muted ambience and lightweight bass a disappointment in a generally competent design.</i>	081 207 5050	24		MF	●	B	●	●	●	●	3	*	*	91
Kenwood KT-3050L £170	Trio Kenwood UK <i>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.</i>	0923 816444	39			●	B	●	●	●	●	11	*	*	93
Linn Kremlin £1779	Linn Products Ltd <i>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.</i>	041 644 5111	80	●	F	●	B	●	●	●	●	1	**	*	92
Marantz ST-72L £260	Marantz Hi-Fi Ltd <i>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.</i>	0753 680868	59	●	MLF	●	B	●	●	●	●	4	**	**	93
Nakamichi ST-2 £400	B&W Loudspeakers UK Sales Ltd <i>Ergonomic exterior plus good construction produce open, spacious and well detailed sound. Good bass and treble extension but lack of image depth.</i>	0903 750750	30		F	●	K/B	●	●	●	●	2	**	*	93
Onix BWD-1 £505	Onix Electronics <i>Hand-built, well thought out design which benefits from external SOAP psu. A serious audiophile tuner with unusual tuning modes: hard to beat.</i>	0273 517358			F	●	K		●	●	●	7	***	**	92
Philips FT-930 £160	Philips Consumer Electronics <i>Poor RDS implementation weighs against sonic abilities. Solid bass lines, articulate mid and crisp top spoil by lack of depth and scale leaving the listener detached.</i>	081 689 4444	40	●	MLF		K/B	●	●	●	●	2	*	*	93
Pioneer F301-RDS £200	Pioneer High Fidelity (GB) Ltd <i>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.</i>	0753 789789	36		MF	●	B	●	●	●	●	2	*	**	93
Quad 66FM £519	Quad Electroacoustics Ltd <i>A British winner usable only with Quad's system remote. Good, strong bass lines, natural mid and smooth, velvety treble helped convey good stereo.</i>	0480 52561	19	●	F	●		●	●	●	●	5	***	**	93
Rotel RT-950BX £200	Gamepath <i>Mixed FM performance. Voices closed in and nasally. Large classical forces appeared ragged and muddled lacking depth and lucidity. Rock and pop well presented.</i>	0908 317707	20		MLF	●	B	●	●	●	●	3	*	*	92
Sansui TU-X711 £430	Sansui UK Ltd <i>AM section fared better than FM where narrow IF restricted soundstage. Dull mid produced muddled image. Bass lines punchy but lacking top-end zing.</i>	0204 862026	20	●	MLF	●	B	●	●	●	●	7	*	*	93
Sony ST-505ES £250	Sony Consumer Products UK <i>Sony packs a lot into this advanced RDS tuner. The sound is full-bodied and rounded with good definition. Stereo image is superbe, the soundstage three-dimensional. Bass is tight, treble first-rate.</i>	0784 467000	30		LMF	●	K/B	●	●	●	●	11	**	***	93
Yamaha TX-350L £130	Yamaha Electronics UK Ltd <i>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.</i>	0923 233166	40	●	MLF	●	B	●	●	●	●	8	*	*	91

GLORIOUS DECCAS...



Classic SXLs remastered and on 180g vinyl with original artwork

We've noticed the renewed interest in LPs, the odd indicator that LPs still have a place in the hearts of music lovers (for example, Elton John recently stating without hesitation, on national television, that he prefers LPs to CDs and only sold his library because of 'space considerations'). And here are two more batches just screaming for places in the Accessories Club catalogue...

One is a Decca reissue selection, complete with original sleeves. First titles are 'Espanola', the classic NPO/Frühbeck LP, and Clifford Curzon's stereo recordings of Grieg's Piano Concerto, the Litolff *Scherzo*, and Franck's Symphonic Variations. But there is a catch: the print run is limited to 2500 copies per title.

From the same stable - Alto High-Fidelity/FMS Fenn Music Service GmbH - are jazz LPs of newer vintage but equally high pedigree. Alto Edition's re-pressings of milestone Steeplechase LPs should have jazz collectors salivating heavily. The samples I've tried include the Dexter Gordon Quartet's *Swiss Nights Vol.1*, Cedar Walton Quartet's *Second Set* and the one I'd been after for years, Archie Shepp's stupendous *Trouble In Mind*. Again, we're looking at 180g pressings in limited numbers, so you do have to move quickly.

These are but a small sampling of what's available. If you're tempted, 'Phone the Accessories Club on (0234) 741152 for a full listing.

Ken Kessler

● No, you won't be able to pull a fast one over the kind of collector who has been buying the original SXLs at £80 and upwards: the label is a good replica, but isn't quite in 'period', being silvery-grey rather than matt black. It doesn't carry the DECCA motif in crotchets or the inverted matrix over the catalogue number. The pressing still comes from a ZAL matrix, but the lettering is different, the cut is further from the label than Decca practised (more like DG's wide spiral-out areas) - wider rim too. And the 180g pressing is stiffer, some 30g heavier than a New Malden, pre-PolyGram copy. So do these LPs *sound* like Deccas? Answer: pretty well. The more solid pressing somewhat mellows the sound, taking just a little from the tangibility of the Albeniz. This (at midprice on CD, with additional items) remains a hi-fi demonstration LP, whereas the older Curzon recordings - the Litolff you can't get on CD - are primarily for nostalgists. They'll love the slightly hollow, broad spread of piano tone and any edginess of strings smoothed over by the general ambience. It all sounds very much of the era!

Christopher Breunig

Use this form to order accessories

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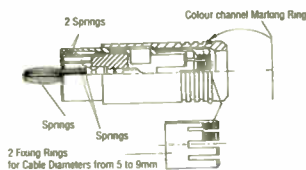
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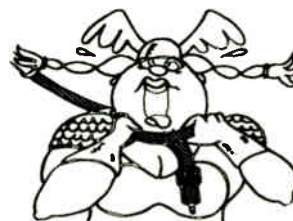
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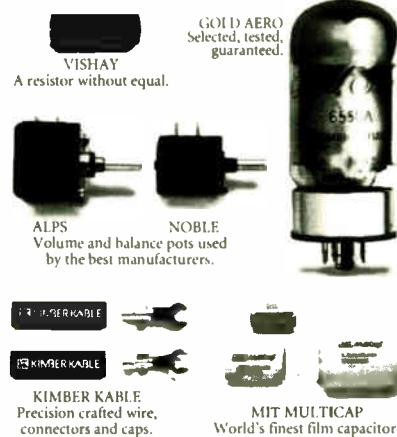


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After Robert Johnson, T-Bone Walker, B B King... who else but Elmore James? By happy coincidence, both Ace and Charly have released box-sets celebrating this all but forgotten hero of the early British R&B movement

Proclaiming someone the 'Father' of his field is dangerous unless you're backed by consensus. Attributing pre-war founding fatherhood of any sort within the world of the blues you're on thin ice once you stray past Robert Johnson. Ergo, identifying anyone other than the composer of 'Stormy Monday Blues' as the Granddaddy of Electric Guitar and you're gonna have to deal with T-Bone Walker's fans.

Me? I won't argue because the evidence proves Walker's right to that specific title. What I'm concerned with here is the Man Who Came Next, the most obvious link in a chain which goes Robert Johnson - T-Bone Walker - B B King. And that man is Elmore James, the least well-known of the four and the one whose posthumous fame is all the more miraculous.

If this were 30 years ago, I'd be writing an obituary rather than an appreciation. Elmore James died on the eve of the first British blues explosion, in May 1963 at the age of 45, without ever knowing that he was about to be lionized by John Mayall, Jeremy Spencer, Brian Jones and other seminal figures in the movement. But, along with Sonny Boy Williamson, James's role as one of the early heroes of British R&B has been all but forgotten; unlike B B King, Buddy Guy and John Lee Hooker, he didn't live long enough to tour with his 'students'.

Premature death, ironically, is often enough to ensure lasting fame;

it worked for Buddy Holly and for Robert Johnson. Both died embarrassingly (read: romantically) young and left minuscule bodies of work, the amount not matching the sheer brilliance. (Proof that it's always quality rather than quantity.) In James's case, his death wasn't 'tragic enough', if such can possibly be said about someone dying so young. James didn't even start to record until he was in his early thirties, but he had a fairly prolific final decade, so a dearth of material wasn't a myth-making part of his legacy. If he'd died with only 36 songs in the can, he'd be worshipped by everybody.

It was a heart condition that killed him, the same faulty organ ensuring that his career was hampered by ill health. Still, James did manage to criss-cross the US, playing juke joints and clubs and building up a reputation which somehow spread across the Atlantic. He worked for many years with Sonny Boy Williamson II, crossed paths with Robert Johnson and Arthur Crudup and even recorded with a pre-Tina Ike Turner.

Let's not get this out of proportion, however much I wish to portray Elmore James as the greatest of all the post-war bluesmen. His recorded work was limited to the smaller indie labels, he didn't live long enough to experience the crossover market (or, to be more precise, the end of the 'race music' distinction) which allowed blues players like B B King and John Lee Hooker to reach the audiences they deserved, and he had only a few hits in the R&B charts. But however 'forgotten' he may be, Elmore James might have been the most influential blues guitarist of all, and not just because he produced a signature riff as distinctive as the Chuck Berry pattern which virtually provided Keith Richards with a career. More than even T-Bone Walker, James showed what the blues could mean to white boys weaned on rock.

James's main claim to fame was the electrification in 1951 of Robert Johnson's bottleneck classic, 'Dust My Broom'. This masterpiece has suffered more interpretations than any of his other songs; James, however, made it his own in the way that Joe Cocker commandeered 'With A Little Help From My Friends'. It's impossible to break down and analyse the personal experiences which shaped James's sound; let's just say that the pain and anguish in his vocals matched perfectly the tortured sound of his guitar, both of which matched the lyrics. And it's a sound which, however much it's filtered, screams at you from the first Butterfield Blues Band album, most

early Fleetwood Mac and anything else involving a guitarist with a glass or steel tube over one finger.

Industrial-strength Elmore is the best way to hear unbridled slide, and the event which triggered this column is the simultaneous, wholly coincidental release of two Elmore James box-sets from rival reissue labels, Ace and Charly. The sets only overlap on one track - Elmore's debut for Trumpet - and combine to provide what appears to be (even after consulting Leadbitter) the Complete Elmore James. If you'd rather hear a sample of Elmore before investing in a box-set or two, try either of the mid-price CDs, *The Sky Is Crying* (Charly CDBM12♦) and *Standing At The Crossroad* (Charly CDBM28♦). Ace, too, has a load of Elmore on single CDs.

Ace's 3CD set, *Elmore James and His Broomdusters - The Classic Early Recordings* (ABOXCD4♦) comes in a slick 6x12in case with a full-colour, 40-page booklet which I think deserves a Grammy nomination. It reads like a mystery, tells you all you need to know and perfectly annotates the music which covers 1951-1956, James's time with Meteor, Flair, Modern and Trumpet. This box, arguably Elmore in his prime, rates alongside the groundbreaking Robert Johnson set; sadly, Elmore hasn't got the same USPs.

Charly's 4CD package, *King of the Slide Guitar* (CDREDBOX4♦) arrives in a CD-sized slipcase and dovetails perfectly with Ace's, picking up where Ace leaves off and ending with James's final sessions in 1963. But in addition to providing us with his complete output for Fire and Enjoy, Charly also includes the various Chess/Checker sessions which Elmore recorded despite obligations to another label. Both sets offer plenty of unreleased material, full documentation and no grounds for mutual exclusion. I just wish it was all in one bumper box, with everything in chronological order. After you hear what this man did with a guitar, you'll understand, though, why two box sets aren't one too many.

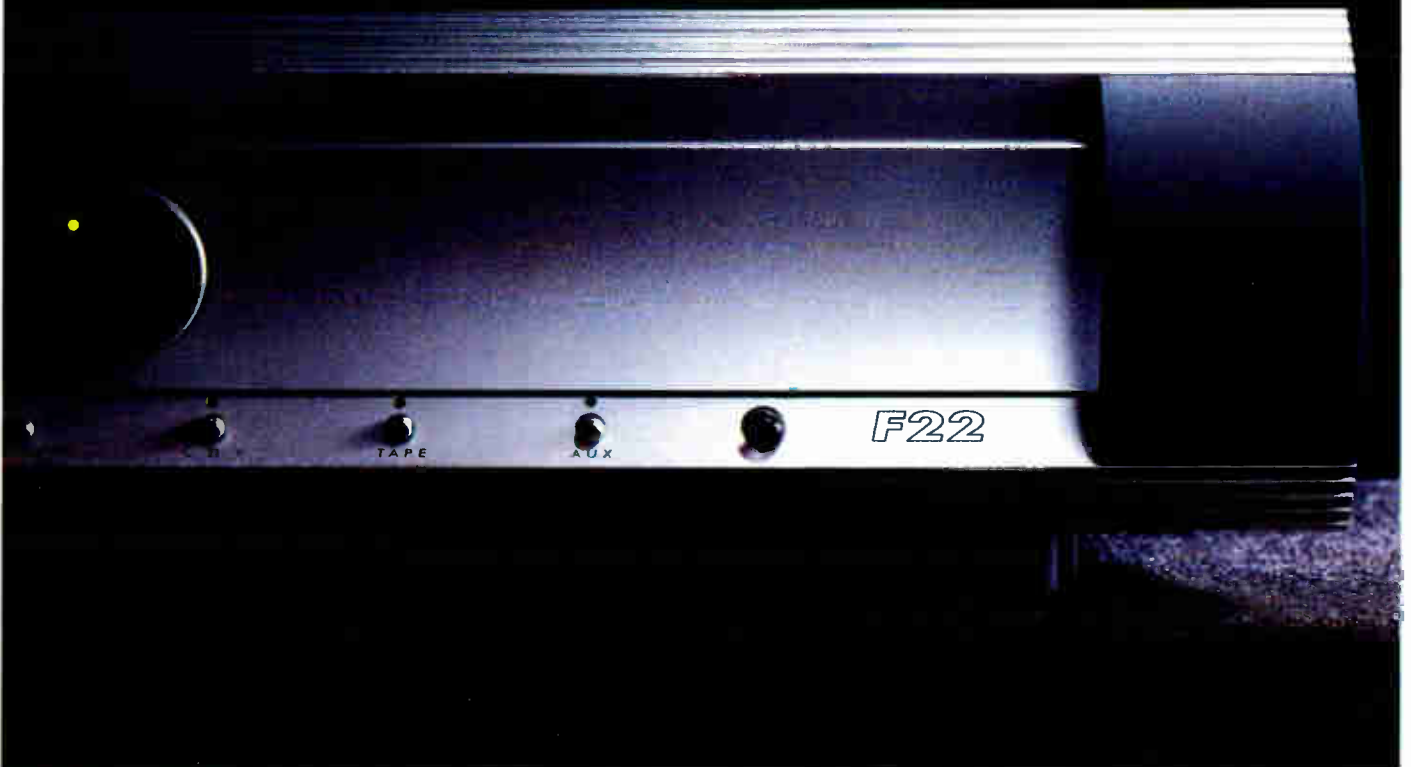
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