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SPECIAL ISSUE
THE HI-FI SHOW PENTA REPORT

HI-FI NEWS & RECORD REVIEW
DECEMBER 1989
US $4.95 £1.70

IFIERS ORELL ARISTON ADC LOUDSPEAKERS NEW
RAUNT SHORT RANGE CASSETTE DECKS DENON
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12
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World Radio History
Cambridge Audio's main Christmas offering this year is the CD3 compact disc player, using its own '16-time 16-bit' formula, and proving to be the best-sounding Cambridge player yet. Exclusive review by Martin Colloms, page 64. (Photography: Tony Petch.) Sharing the cover is Nigel Kennedy, who is interviewed by Christopher Breunig on page 109. (Photo: Tobi Corney.)

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NIGEL KENNEDY

talks to Christopher Breunig

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RECORD OF THE MONTH

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HIGH-END NEWS

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THE REFERENCE BY WHICH ALL CD PLAYERS WILL SOON BE JUDGED.

With the development of the K2 Interface we’ve ironed out one of the most common problems with CD players.

This totally new digital transmission system removes the musically unrelated components from the digital signal, before it reaches the analogue circuitry.

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SONICALLY, THE DIFFERENCE IS CLEAR.

The XL Z1010. From the JVC Super Digifine series of hi-fi components.

As for that well-worn phrase, ‘all CD players sound alike’, we invite you to be the judge.

JVC

FOUNDERS OF THE FUTURE
It is a great pity that the arrival in the UK of the first working Philips PDM 'Bit Stream' CD player ended up causing so much confusion. For those who spent the summer lying in sun without reading a word about hi-fi, here is a brief recap.

In March this year, Philips took a party of journalists to its Dutch headquarters in Eindhoven for the initial Press announcement of its new PDM (Phase Density Modulation) or Bit Stream CD converter technology. Production players were promised for the autumn. By July, the hi-fi magazines were urgently pressing for a Bit Stream review samples. Philips was still working on the PDM chips and was not yet ready to start production, but the Eindhoven 'launch' had created so much interest that the delay was becoming an embarrassment, particularly as Sony had released an integrated amplifier with onboard PDM conversion (reviewed by Paul Miller, August). As a stop-gap, Philips' UK public relations contacts, Mathieu Thomas, persuaded Philips to supply a prototype for members of the UK press to listen to. The machine that Philips' German factory came up with was a mock-up 'CD840', based on a CD582 chassis. It functioned as a normal 16-bit +4 times oversampling player if the 'fixed' audio outlet was used, but also contained an additional board with a DAC3 PDM Bit Stream D/A converter chip set, this feeding what would normally be the 'variable' outputs. Signal levels had been matched, at just under 2V peak, to allow fair comparison. My 'Comment' (September), Martin Collins' test report (October) and all other UK press comment to date has, to the best of my knowledge, been based on experience of this unit.

The mock-up, or rather its ability to provide a comparison between PDM and 16-bit conversion, was a source of confusion from the start, because (it would appear) Philips provided conflicting descriptions of what was actually inside the machine. I was lucky to have been informed, correctly, that the PDM Bit Stream output was present at the 'variable' sockets, while 16-bit converted output appeared at the 'fixed' sockets. Subsequently, though, the PR company (acting in good faith on information it had received) told journalists that both outputs on the mock-up provided PDM conversion! This statement led to erroneous reports in some magazines, which have subsequently had to be corrected. Of course, if the PDM converted signal from this machine had sounded better than it did, things would have been different. But the one thing that anyone could say with certainty about the machine was that it was not a good implementation of PDM. It had managed to lose nearly all of the obvious sonic benefits heard with Paul Miller's butchered Sony 630.

Too complacent perhaps, at getting the CD840 story right, I blundered in last month's 'Comment' when describing Paul Miller's demonstrations at The Hi-Fi Show. The reference to '15-bit' was of course a typographical error, but I must make some more important points clear: the machine I reviewed was 'broadband', as the listeners were not told which player they were listening to; secondly, the PDM set-up did not use the latest 7321 chip as I stated, but was based on an early 7320; thirdly, it did not use high specification optical link, but was connected via coax.

Only after the session were listeners asked which sound they preferred, when the vote was very heavily in favour of PDM. I think these points only serve to emphasise the value of Paul's demonstration. Now, at last, it seems that in the very near future we shall have some practical, well-implemented PDM machines to review.

Next month

Exclusive reviews in next month's issue will include the world's first test report on the first production PDM 'Bit Stream' CD player, the Meridian 208, plus full coverage of a Top Hi-Fi show. We may also be looking at some development from other quarters: but our cover story will be a scoop review of the exciting Celestion 3000 'Acoustic Ribbon' loudspeaker. On the high-end front we will offer the first review of the 'new' Day Sequeria tuner seen at the Summer CES in Chicago. A loudspeaker group will cover £100-$180 loudspeakers from Wharfedale, Tannoy, Mission and other leaders. Technical feature articles will include the third article in Ben Duncan's constructional series 'Amp 02: A State-of-the-art Pre-amplifier.' (We apologise for not including Part 3 in this issue as intended; it had to be held over due to practical and space considerations!)

January's music section will lead on an interview with Peter Donahoe, while there will be a bumer year-end crop of CD and LP reviews: as always, HFN/RR simply offers more content in any comparable publication. Finally, don't miss your chance to win a superb £4000 KEF Meridian system in next month's special competition. The January issue goes on sale on Friday, December 15.
WE’D LIKE TO TAKE A BOW...

... following a survey among readers of Stereophile magazine in 1988

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8% said that they would probably buy Magneplanar, but would like to listen to other speakers first.

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... following a survey by Inside Track magazine among a large number of US dealers

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Magneplan’s position was number one in terms of distribution, number two in terms of after sales service and number three in terms of the sales force rating.

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‘I have the simplest of tastes... I am always satisfied with the best’
Oscar Wilde
Show business

Dear Sir, I drove down from Lichfield and spent most of Saturday at the show. This was my third in four years and it now felt qualified to make one or two observations. First, the general "boomingly" which exists is very noticeable. In an activity directed very much at the individual listener one doesn't often get the opportunity to rub shoulders with fellow enthusiasts (one of the reasons for the popularity of the mags) and it was very pleasant to do so. The last time I encountered such an atmosphere was at CAMRA beer festival - and what's wrong with that?

In my opinion the best sounds were to be found in the HFN/RR room during the Ambisonic demo, but why so loud? The most expensive were in the Absolute Sounds room a CD player (upgradable of course) for £12,000, and the 'hottest' ie in degrees celsius not music content, in the Linn room. I'm afraid the heat in there meant I couldn't stay around long. Consequently I did not hear much of the music but my LP12 is in no danger anyway. Other items worth mentioning were the ceramic hanging baskets from which very creditable acoustic guitar sounds were emanating - the wife would have delighted. I enjoyed all the others, too, and wish them all the very best of good sales and a plethora of satisfied customers.

During the day I purchased Jazz At the Pawnshop, and Test Disc 2, a magnificent recording. I came as early as possible, and arrived just on the two public days. I nevertheless wasted. By the time I was in the tube train heading back to central London I had accumulated and to review a very pleasant day indeed. Thank you...

Andrew Harper, West Sussex

Parking lot

Dear Sir, Your Show Guide said there would be a small charge for car parking to visitors to the show. I find it hard to accept that £4 for three hours parking is a small charge.

J W Davison, Ferryhill, Co Durham

Stereo information

Dear Sir, I am very glad that Decca's reissue of the Mendelssohn Concertos and two concert pieces have been welcomed in your magazine [Sept p.121]. May I add a little information regarding their origins? The concert pieces were a somewhat unusual backing for Liszt's Totentanz and were recorded in mono only, but you may be interested to know that the Concertos were recorded as one of the first experimental stereo recordings in the UK. I recall that Anthony Collins and I went to the studios to hear them and it was an impressive experience. We were very impressed by this new sound, although Decca told us that it was not felt good enough to issue in stereo and it was not until the recent reissue that it became known to the world.

John Taylor, London
Cables can be considered a necessary evil or a positive benefit to an audio system. There's no doubt that your investment in state-of-the-art equipment will be squandered if you hitch it up with ill-suited cables. Cut corners on cables and your whole system just won't hang together.

But there remains the problem of choosing the cable that measures up to your outfit and then getting hold of it. Then you have to find the right terminations and accurately mount them.

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Transcription of the document:

convinced, although the method (hopefully discontinued) of placing the orchestra in the auditorium and the piano on the stage led to ensemble problems and a sense of constricted piano sound, which is the sort of thing that transfers to CD can tend to show up.

Peter Katin, Croydon, Surrey

Transfer fees

Dear Sir, I hold no brief for the flat-earthers, whose fathers deplored the end of real sound as they knew it, when 78 shellac gave way to vinyl. However - and whilst no reflection on the medium per se - far too many CD reissues of old, and not so old, recordings, are of quite unnecessarily appalling quality. Some of these even recorded over the airwaves via 1940s radios! Others of almost equally poor quality offer no excuse other than 'historical importance'. There seems to be little justification for this, other than the quick buck of the nostalgia wagon, via a new medium.

Compact Jazz, Michele, and RCA's Bluebird series (to name just some) show what can be done with elderly originals by those who can be bothered. RCA's re-creation of Jelly Roll Morton's 1927 version of 'The Pearls', is a shining example of everything one could expect from these transfers. Whilst no unmarked graves remain, there seems to be little justification for amongst the worst in my experience.

There's an impossible time element involved in pre-playing every shop purchase. In common with, I assume, many others I obtain most of my CDs by mail order. The only way to discourage this unstate of the recording art would be to return each and every one as unsuitable for the purpose for which it was sold. Sorry for the dealers, but even more sorry for me given current prices.

P Greaves, Jersey, Channel Islands

Polished Speaker

Dear Sir, I have been looking for a good lens cleaning cloth for a long time; and to find a recommendation ('Headroom' Sept) for one which also makes stereo sound better was more than I could resist. I purchased the Pentax version of the cloth and gently cleaned the cones on my speakers.

I wish I could have approached the experiment 'blind'. Because I had read your stimulating article, no matter how dispassionately I approached the trial of speakers.

Ian Bewely, Lakeland Home Music, Penrith

Trick photography

Dear Sir, Ken Kessler's comments on the subject of the Canon cloth ('Headroom' September 1989) caught my eye as I have an interest in photography and a number of lenses and filters in need of post summer holiday cleaning.

Presenting myself at the local Canon dealer I was informed that there had recently been an inexplicable run on the item in question and it was out of stock. The assistant volunteered the information that the Pentax cloth was 'exactly the same': however all stocks of these had been sold to previous applicants for the Canon. An interesting sidelight was cast by the comment that some potential Canon customers had vehemently refused the Pentax alternative - clearly leaving the shop staff quite nonplussed. Not 'musical' enough?

Needless to say my lenses remain dirty; I intend to retaliate by ascertaining the scarest form of hi-fi interconnect and recommending its use in the photographic press for the wiring up of flash slave units.

Phail Back, Coventry

Left home

Dear Sir, I happened to see in your September 1989 issue the review of Dvorak's Overtures with Ancerl on Supraphon 110605-2. In the generally positive comments there was no mention of a curious defect which may or may not be limited to certain copies: the first note of the My Home Overture (Track 4) is missing! The music starts on C (2 counts) and continues C-D-E-F-G (1 count). The first C is totally absent from the recording but is intact on my old mono LP of the same performance. This is disappointing but perhaps not surprising, as I have read discouraging things about track location errors on certain Supraphon Gems releases. How many C's were at the beginning of your reviewer's copy of My Home?

R E Oppenheim, San Antonio, Texas

Yes - Mr Oppenheim is correct. Sorry! - Mus Ed

Hungarian Rhapsody

Dear Sir, I read with great interest David Nicie's article on the Takacs Quartet (p79 HFN/RR September '89). There are a couple of comments I would like to make.

First is that Zoltan Szekely was not the founder of the Hungarian String Quartet. The founder members were Vilmos Palotai, cellist, and Denes Koromzay, the viola player. Both initially joined by the violinists Sandor Vegh and Laszlo Halmos in 1935. [This contradicts Grove, of course! Mus Ed]

Szekely joined them in 1937 when Vegh played second-violin for a year, after which he left to form his own quartet. Alexander Moskowsky joined them in 1938 and it was this quartet - Szekely, Moskowsky, Koromzay and Palotai - who for me, were unique interpreters of the String Quartet literature. Their interpretation of the Beethoven Quartets, in particular, was 'authentic' in the true sense of the word, and their recording of the Schubert G major Quartet is 'light years' removed from any other playing of this work I have ever heard - and this includes the highly acclaimed reissue of the Busch Quartet.

The other comment is that it was a pity not to mention clearly that Denes Koromzay, the viola player of the Hungarian Quartet, is now a professor at the University of Colorado where the Takacs Quartet works under his aegis and have also recorded some Mozart string quartets with him. [For reasons of space, DN's article was cut, regrettably. Mus Ed]

It is refreshing to hear a quartet acknowledge their background and willingness to learn from their great forbears. They come from a school of thought that believes that to press on a stringed instrument (as opposed to discovering sonority) is hurtful to the instrument, themselves, and their audience.

The Hungarian Quartet's goal was the transmission of the composer's ideas and feelings; and it was their knowledge and understanding of the structure of the music that enabled them to achieve a unity which produced an integrated interpretation, in the same way as say, Alfred Brendel is able to interpret a late Schubert Sonata today.

For four musicians to achieve such a unity borders on the miraculous and is very rare. We can only hope that the recordings the Hungarian Quartet made will be made available once more so that new generations of string players (those of whom wish to) will be able to benefit from them.

Ian Bewely, Lakeland Home Music, Penrith

Caught in the Act

Dear Sir, I reply to a correspondent from the August issue, Peter Williams, who commented on the matter of recording - or not being allowed to record - from radio programmes. I see nothing in the Copyright Act to confirm this latter widespread belief. The crucial factor is whether a recording is made for private use, or for illegal, public use.

The massive sale of blank tapes alone, confirms the amount of private recording that is done, and it is certainly not all done from commercial records as the record producers would have us believe. Neither the BBC nor anyone else to my knowledge has made clear the lines of the Copyright Act as it refers to broadcasting, but it is there in their own handbook for all to see.

A G Harkess, Washington, Tyneside

Readers' Letters

Letters for publication should be addressed to the Editor and must contain no other material or enquires. Letters seeking advice on technical matters will be answered, resources permitting, at our discretion but we regret that we are unable to answer questions on buying specific items of hi-fi.
THE POWERHOUSE EFFECT

B&W's AcoustiTune Subwoofer brings the big sound experience to smaller speaker systems

If your speaker system is relatively small, its ability to reproduce the lower octaves is likely to be limited. Maybe too much for your satisfaction. B&W's AcoustiTune changes all that.

Now you can add those missing octaves below 100Hz and augment the low frequency performance of your system. With sensitivity that can be easily adjusted, rolling off above 100Hz, so that its source cannot be located by ear.

FINDING THE WAY

AcoustiTune is basically a simple and inexpensive acoustically tuned subwoofer. Developing it was neither! B&W's research programme employed advanced computer aided design to explore and predict virtually every combination of enclosure and drive unit. The result: a band-pass enclosure produced by placing a Helmholtz resonator over the front of a bass reflex system. The advantage: greater sensitivity and flexibility over a simple band-pass system with reduced cone amplitude at the lower end of the band.

ENTER THE SUPERDRIVER

To keep the enclosure as small as possible calls for a driver with both high mass and high magnetic strength. This meant literally splitting the requirements of the driver in two so creating what is in effect a "superdriver" — two bass drivers assembled face-to-face and driven out of phase.

The tiny volume of air between the dual driver unit produces tight acoustic coupling which, at low frequencies, makes them behave as if they were glued together. Feeding the left channel to one driver and right channel to the other acoustically sums the two stereo channels over the low frequency range.

Since the drivers create a 'push-pull' effect, second harmonic distortion is much less than in more normal driver configurations with the driving force rendered totally symmetrical. Distortion is further reduced over a simple band-pass system, because the resonance of the internal port reduces cone amplitude at low frequencies, placing less strain on the suspension.

VARY THE EXPERIENCE

AcoustiTune comes with four separate port tube lengths allowing you to select just the sensitivity you want. These tubes couple the high acoustic energy from inside the cabinet over the low range of frequencies to the outside world.

Each successively shorter tube increases the sensitivity by 2dB with hardly a change in the response. Which means the AcoustiTune subwoofer can be used with any make or size of speaker provided it has a sensitivity of between 80–90dB.

The AcoustiTune port tube system allows for a remarkable range of listening experiences, and you can experiment to discover which style of sound you prefer. You might enjoy the emphasis on a more profound dominant bass, prefer a subtle balance or use the subwoofer to provide a lighter foundation to whatever music you are playing.

ALWAYS AT HOME

No subwoofer is more easily accommodated in the home. Placed flat or vertically it can be hidden discreetly behind furniture, curtains or in a corner.

That apart, your system with AcoustiTune will be somewhat less laid-back in performance. Discover for yourself the Powerhouse Effect.
A new model but conventional technology. Philips CD620 at £200.

PHILIPS CDS STILL 16 BIT

Despite recent refinements to its 1-bit Bit Stream technology, the three latest budget-to-mid-price range of CD players from Philips still employ 16-bit processing, albeit using the new TDA1543 chip: a development of the well-known TDA1541 series.

The 'entry level' CD610 at £160 offers programming of up to 20 tracks as well as cue, review, previous, next, and repeat functions. Random play allows the track selection to be made by the player in a changing and random order. At £200, the CD620 has the added benefit of an autoplay and twin-speed cue and review, while Philips' FTS track selection allows the

FINIAL REBORN?

Reports from the USA suggest that the Finial Laser turntable is to be reintroduced at the forthcoming Winter CES trade show. Using a laser beam instead of a stylus, the Finial had been 'permanently scrubbed' because soaring costs would have doubled the intended retail price to $8,000. Sources now suggest the model will sell for $20,000.

NEW PRE-AMP AND PSU EXPOSED

Sussex-based Exposure Electronics has just announced a new mid-widdies (360mm) dual-mono pre-amplifier design. The Model 11 boasts an improved m-c stage over earlier versions and offers better overload margins, with a reduction in IM distortion. The retail price tag is $580. A record-out selector allows for full tape monitoring and recording options. The matching 250VA power supply unit, designated the 12, has independent channel operation and is priced at $320. Exposure Electronics, 59 North Street, Portslade, Sussex BN1 1DH. Tel: (0273) 425877.

ACOUSTIC RESEARCH has ventured into new territory with the launch of two series of in-car loudspeakers: Premier, intended for custom installations and Performance, for custom-fit or system upgrading. The former incorporates pod-mounted nitrogen-fired titanium dome tweeter with fluid damping; with panel or surface mounting options the Premier Series is suitable for systems rated to 100W and models include their own crossover. The Performance range features AR's computer-generated textured cones, fabricated from a special blend of mica and polypropylene.

AGFA shows Christmas spirit by giving away an F-DX1 ferric cassette with special four-packs. Agfa Genert Ltd, 27 Great West Road, Brentford TW8 9AX.

FERROGRAPH, the name synonymous with reel tape machines, may now be contacted at: Moun6oy Road, Brentford TW8 9AX. Tel: (0753) 888447.

GOLDRING has launched Magic – a new, non-taxic record rejuvenating fluid. Goldring Products Ltd, 8 Greystriars Road, Bury St Edmunds.

HAYDEN LABS has made an arrangement with A & R Cambridge to act as distributor for the Direct Wire cables to the specialist in-car market. Hayden Labs, Chiltem Hill, Chalfont St Peter, Bucks SL9 9UG. Tel: (0753) 888447.

MAPLIN ELECTRONICS has introduced a stereo 6-channel audio mixing console with 7-band graphic equalizer. The XM020C, £279.95, can handle mic/line inputs, and has pan controls, 2 VUs and phone socket. Maplin, PO Box 3, Rayleigh, Essex. Tel: (0702) 552911.

MEGAVOrs contact number is now (0329) 230706 and not as stated in the Sept Headroom column.

PANASONIC, the company behind the Technics brand, is planning to build a block of flats near its Bracknell headquarters in an attempt to attract workers and thus solve the ever-growing problem of skill shortage in the South East.

PURE SOUND is anxious to hear from people who may have been approached at The Hi-Fi Show by anyone claiming to represent the company. Please contact Carl Woodward on 051-645 6690.

CONRAD JOHNSON's D1 CD player, when using its own built-in pre-amplifier, scored 92% on MC's Accuphase/reference subjective rating system. We apologize for making this clear in last month's 'CD player Best Buys' item.
So how did we perfect our award winning CD65IISE?

A lot of people thought there was no way in which it could be improved.

Even the experts were genuinely impressed with the CD65IISE.

(“...a sonic performance which significantly outstrips the competition up to twice its price and beyond” raved an impressed What Hi-Fi magazine).

It received awards by the sackful (including What Hi-Fi’s prestigious Best CD player under £300).

The critics were running out of superlatives. The hi-fi magazines were running out of awards. And we were running out of CD65IISEs.

However, we weren’t content to sit back and let the competition catch up.

Instead, our engineers and designers sat down and took a long, hard look at the CD65IISE. They tested. They probed. They scratched their heads.

How could they make a near-perfect CD player perfect?

Finally, they hit upon the idea of redesigning the chassis in a rigid honeycomb configuration.

This makes the CD50SE even more immune to vibration than its predecessor.

They upgraded the error correction decoder and improved the analogue circuitry.

So you get even more of the music and detail you’ve come to expect from Marantz.

They also managed to add more features while making it easier to use.

And, dare we say it, our design team surpassed themselves in making the CD50SE more handsome than ever.

Of course, it’s hard to believe that we’ve managed to improve the CD65IISE.

So why don’t you ask your Marantz dealer for a demonstration of the CD50SE?

THE NEW CD50SE.

marantz®
Philips has announced that it is to co-operate with the Japan-based Century Research Centre (CRC) to promote interactive compact disc -- a medium which it expects will become one of the most important new-generation electronic products. Meanwhile, as the first CD-Graphics discs are appearing in High Street record shops, JVC has announced a machine to play the new software.

- **CD-1** combines high quality sound, text, picture, data, and motion video on a 5in optical disc. This may be used interactively and simultaneously with a CD-1 player and a TV monitor. It has been developed as a world-wide standard for both hardware and software.

Further details of CRC's plans are to be given at a forthcoming conference in Tokyo where Philips, Sony, and Matsushita are also expected to announce a positive involvement in the medium.

Japanese giant JVC has already built a CD player capable of extracting the extra graphic data stored in a previously unused sub-code. The XL-G512BK, available in the US for $3500, is able to decode graphics, image data, and MIDI data from these subcodes to generate graphics and control MIDI equipment. Unlike CD-V, CD plus G (as it is termed) is independent of the prevailing TV format, be it PAL, NTSC, IBM AM, or MAC.

**Three from Roksan**

Roksan took the opportunity of the recent Hi-Fi Show to unveil some new products for the coming season. These included the Xerxes XPSII power supply which has replaced the original design whilst being retro-fittable to all existing models. It features surface mount technology on a single board.

Output amplifiers are both short-circuit and thermally protected. The new design will be standard with all Xerxes now shipped, and available as an upgrade for £150. To complete the World's Reference Recorder Player System is the Arta Xerxes cartridge amplifier. Used with the Artemiz and Shiraz it provides a fine output. This preamp will fit inside the Xerxes player and uses the XPS II power supply.

Roksan's second tonearm -- the Tabriz and bears resemblance to the more expensive Artemiz. The new version is a one piece, solid aluminium alloy arm tube, and available with conventional or 'intelligent' counterweight. The projected price is under £200.

**BRIEFING**

SCOTCH audocassettes is giving away cinema tickets in a promotion on special packs of its BX C90, CX C90 and chrome XS11 cassettes which carry vouchers to be redeemed by August 1990 over 250 Cannons and Odeon picture houses in the UK. 3M UK, PO Box 1, Backnell RG12 1JU.

STUDIO ACOUSTICS has been appointed UK distributor for Vandersteen Audio products: the American loudspeakers. Three models are currently available: the 5-way 4A at £3382; a 3-way design, the K1270 2CI; and the 2-way 1B version at £759. Studio Acoustics, 12 Bamley Road, Newcom Abbey, Devon. Tel: (0620) 67060.

TDK is offering free Top 20 material to those who save tokens from tape packs. Albums require the collection of 20 tokens, CDs 30, and singles just 10. The Christmas offer is backed by the slogan: 'Don't miss it, TDK it'. TDK UK Ltd, 5 Quennymway, Redhill, Surrey.

TAPECAL is a new tape calibration service aimed at owners of machines without real-time counters. A computer print-out is used in conjunction with the tape machine's counter to calculate an accurate running time. A charge of £6.75 is made and the data, available for any tape format, is promised within two days. TAPECAL, PO Box 71, Southampton SO9 7ES.

At the Hi-Fi News Penta Show, KEF Electronics announced what it called another milestone in the company's history with the advent of a new Reference Series model, the 105 / S; a design incorporating every advance of KEF technology over the past five years in one tall speaker measuring 110 x 28 x 40cm (hwd).

It is a four-way, floor-standing unit employing six drivers with a high sensitivity (92dB spl) 1m) and able to handle high power levels: 50-300W into 4ohms quoted, with a maximum output of 15dB spl.

The midrange and high-frequency assembly houses a symmetrical vertical array of three separate diecast aluminium sealed enclosures: the upper and lower housing polypropylene diaphragm units of 160mm nominal diameter. The centre unit is a coincident source 2-way Uni-Q drive incorporating a 25mm neodymium magnet tweeter. The low frequency section houses two 200mm units mounted in double-cavity configuration and linked with a force-cancelling rod to give tight control where sonic demands are greatest. The new Model 105/3 is available in walnut, rosewood or black finishes or black ash matched real wood veneers complete with screw-in spiked or capped feet. Prices start from £1690. KEF, Eccleston Road, Tivoli, Maidstone, Kent. Tel: (0622) 672261.

**WESTERN STYLE**

A new range of loudspeakers has been launched with the specific intention of bringing out the best in Japanese amplifiers. The DMS series from Yorkshire-based Studio Power is rated at 80Wms, and never dips below 60Wms, they say, with over 90 per cent of the frequency range above 80Wms. This puts far less strain on the amplifier. Based on tall, slim enclosures to reduce reflections from the front baffle and improve the stereo image, large internal volume is another feature of the range and enables all four speakers to reproduce very extended bass. The four models are the DMS100 at £150, the £200 DMS150 with twin reflex ports, the DMS200 at 300, and the £399 design -- the DMS300. Studio Power, 65 Victoria Road, Guiseley, Leeds LS20 8DG. Tel: (0943) 870057.
Nigel Kennedy listens to Nigel Kennedy on Stax headphones

STAX
THE BEST HEADPHONES IN THE WORLD

Path Grou plc, Deacon sough Industrial Park, High Wycombe, Bucks HP12 3BG. Tel: 0494 459881 Fax: 0494 461209
SHOPTALK

BEAVER HI-FI, the central Liverpool store, has completed a major rebuilding programme to take the company into the '90s.

The largest comparator in Europe is in use to give instant selection of millions of separate combinations, while a separate dem room allows for more personal evaluation. Beaver Hi-Fi, 20 Whitechapel, Liverpool.

INTERTAN has introduced its own credit card scheme in conjunction with Welbeck Finance. The scheme, for use only in the company’s Tandy stores, is to have an associated benefit package for members. InterTan UK Ltd, Leamore Lane, Wallall.

LESET, the specialist audio/video store chain, is expanding. A new shop is opening in Windsor and the company’s outlet in South Molton Street has been awarded one of the new Bang & Olufsen Prime Sites franchises. LeSet, 115 Fulham Road, London SW3.

MORGATE ACOUSTICS of Wensgate, Rotherham, has been appointed a franchised dealer for SD Acoustics and the Esoteric range of products.

THE SOUND ORGANISATION LONDON

has been bought by David Wiley (left) and Derek Jenkins after three months of negotiation with former owner Roger Macer. The company is unusual in that it stocks brands which many regard as ‘anachronism’ to each other, and as such can demonstrate Linn alongside Rohan, and Nam versus Exposure. Multi-room remote systems are not part of SO’s portfolio though, because: ‘Good music in one room is preferable to remote control mediocrity all over the house’. STUDIO 99’s John Teller has been awarded the title of Bang & Olufsen Dealer of the Year.

MATERIALS

Another product announcement from B&W! This month it’s of their Acoustrume sub-woofer which was shown at Chicago and Berlin and is now available in its home market. B&W is quick to point out that this is not just another bass booster though, but is uniquely different from other sub-woofers in that its sensitivity may be adjusted passively to match a wide variety of loudspeakers.

To achieve this, four separate tube lengths are incorporated in the Acoustrume’s compact design. The recommended selling price is £189 for the black ash finish. B&W, Marlborough Rd, Lanc- ing, West Sussex BN15 8TR.

قاً ظففللا هب تصوب مهروض لنا مطاعملا دق 30 ٣٠ مهروض لنا مطاعملا

The music industry has gained what it terms a major weapon in its fight against the increasing number of unauthorized CDs. As material from a growing number of artists like Bruce Springsteen and U2 is being pirated, the District Court of Harлем in the Netherlands has made an important judgment which could have significant repercussions for the producers of illicit discs.

Legal action against a Dutch firm was brought by recording companies when it was discovered that Kierke Amsterdam BV imported into Holland CD bootlegs featuring The Beatles and Bob Dylan. The discs were manufactured in Italy where performers have no legal rights to prevent the sale of bootleg recordings. However, the court rejected Kierke’s argument that, as manufacturer in Italy was not illegal, they could import the product into Holland; a decision which is seen to constitute a significant reinforcement of producers’ rights under the Dutch law of unfair competition, and one which is bound to strengthen the position of music producers.

The record industry division of Shorewood Packaging which manufactured large quantities of cardboard LP sleeves and CD packaging has become the latest victim of the digital revolution. As Shorewood’s director and general manager Roy Ward explained, the general decline in black vinyl and the ever changing market left our American owners with no alternative but to close the Aston Clinton works which employed some 45 people. He stressed, though, that Shorewood would continue its general carton business from Amersham, and announced that the American headquarters has just published a turnover figure of $127 m for the past twelve months. ‘After 20 years of production we can no longer’, he said.

VICTIM OF THE DISC REVOLUTION

AE

Bristol-based Alexander Acoustic Products has continued its policy of developing small loudspeaker systems and announced new models to complement its range. They are based on the company’s philosophy of pushing acoustic technology to the physical limits imposed by materials and current manufacturing techniques. Five models are now available with crossovers which consists of a high-pass filter. No low-pass filter is used; the designs have a neutral tonal balance without complex filtering.

Designed as a replacement for the Alexander 514, the smallest model is the SE2 with an internal volume of just 1.8 litres. The SE5 unit comes complete with dedicated stand for £299, and is claimed to be the ultimate in diminutive hi-fi speakers. Full set-up instructions are included in an accompanying manual.

The Alexander SE6 (£249) is a six-litre infinite baffle, with diaphragms made of carbon-impregnated polypropylene for mechanical impedance matching. The natural replacement for the original 566 is the new SE5 at £189, using the latest soft-port technique which says the manufacturer, enables the speaker to reproduce lower frequencies and be used nearer walls.

Perhaps breaking with tradition, Alexander has launched what is by its standards a medium-sized cabinet: the SE11 at £299. Distributors: Presence Audio, The Old Posthouse, Plummers Plain, West Sussex RH15 6NU. Tel: (0403) 8911777.

LARGER RANGE OF SMALL SPEAKERS

Another product announcement from B&W! This month it’s of their Acoustrume sub-woofer which was shown at Chicago and Berlin and is now available in its home market. B&W is quick to point out that this is not just another bass booster though, but is uniquely different from other sub-woofers in that its sensitivity may be adjusted passively to match a wide variety of loudspeakers.

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VICTIM OF THE DISC REVOLUTION

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Our goal is perfection and many advances have been made since the original Audiolab 8000A. But there are two things we wouldn't change, the model number and the enthusiastic reviews... even with the most delicate signals there is a wonderful musical harmony... something only a few audiophile pre-amps can improve on... the more I think about it, the more I realise I never heard a better integrated amplifier. Ulrich Michalik, Hi-Fi exclusiv 11/89...

The 8000A is immaculately constructed. This is a very competent design technically. Via CD... proves a real winner. Hi-Fi Choice Sep 89... a ready ability to deliver high power levels without any suggestion of strain, it works efficiently and with near ideal control and resolution deep into the bass... the phono input is of comparably high standard... Alvin Gold, Hi-Fi Answers Aug 89...

Call or write for information and details of your Audiolab dealer:
Cambridge Systems Technology Limited,
26 Roman Way Industrial Estate, Godmanchester,
Huntingdon, Cambs PE18 8LN. Tel. 0480 52521.
Confusion abounds over a Hackney Empire recording of A Grand Evening of Victorian Opera. An audio cassette of the performance has been advertised as a Meridian Records product, although the company says that it would like it to be known that it was not responsible for the recording or production.

Confusion may have arisen because Meridian's John Shuttleworth made the recording. But as John told us: 'I stressed at the time to the fact that this was a performance by the orchestra on the night. Any reference to the venue, combined with the poor quality of the placement at the venue, combined with the limitations of microphone placement at the venue, combined with the quality was not sufficient because Meridian's John Shuttleworth is responsible for the recording or to be known that it was not a Meridian production could damage the high reputation the company has built up within the industry.'

HEN/RR understands that a company called Ottocento Editions obtained open reel copies of the performance, and as their John Carter explained: 'We obtained permission from the Orchestra Manager and as a result produced a strictly limited edition of fifty tapes to be made available at £1.15 a time for interested parties. Any mention of this having been a Meridian release is a complete mistake. This was not a commercially available recording - the quality was just not good enough. Next time we will consider using some experienced amateurs to see how they fare.'

As the only vehicle manufacturer in Europe to produce its own radios, Ford has opened a new electronics centre at Dunton House which has the most modern test equipment available and the world's largest anechoic chamber. The total complex covers 22,500 square metres and allows the car manufacturer to use life-size mannequins with sensitive 'ear-like' microphones to measure the acoustic performance of its in-car audio equipment under carefully-controlled conditions.

The engineers at Dunton have maintained close liaison with technicians from both the BBC and IBA over the implementation of the Radio Data System in Britain: technology which brings to an end the need to constantly re-tune a car radio as the vehicle travels from one transmitter service area to another.

FORD'S TOP FOR TESTING

No less than six new products were announced by Bose at the Hi-Fi Show, including additions to the Acoustimass and Direct/ Reflecting technology ranges. From the small bookshelf Freestyle at £199.95 with its patented curved and flared porting system to the £2299 limited edition 901 Series VI Concerto which commemorates the 21st birthday of the product, nearly all tastes are catered for. A variant of the Bose 301, the new 305, was launched at £356, with a new slot porting system. The flagship of the range, the 901 Series VI, has been improved - price is now £1599. There are two additions to the Acoustimass range: the model 3 at £425 is smaller and cheaper than the Acoustimass-5, while the SE-5 for £499 uses Stereo Targeting speaker arrays contained within radically re-styled cube design as a satellite/bass modular system. Bose UK Ltd, Trinity Trading Estate, Sittingbourne, Kent ME10 2PD. Tel: (0795) 475341.
Imagine a man, sitting on a large wooden stage, holding a fan and a small, plain towel.

He's narrating a story that you know back to front. Do you think you would stay to listen?

In all probability, you would. Because the best Rakugo artists make old stories come alive. They add new detail and new subtleties to the narrative you expected.

At Aiwa, we believe a CD player should perform a similar function. A good player, we maintain, should bring new life to a familiar piece of music.

So we have designed the 18-bit XC-005 with an Eight Times Oversampling facility. It minimises interference, allowing the maximum information to be relayed from the disc.

And to keep the information in its purest form, it is transmitted through digital and optical outputs.

So don't be surprised to find an extra voice on a favourite piece of music. Or an unexpected instrument. Or a simple use of echo.

You may have heard the song many times before; the XC-005 will make you listen to it.

THE JAPANESE ART OF AIWA
MÉNAGE À TROIS

The remarkable new Series 3 speaker systems from Mordaunt-Short.
Write or 'phone for a brochure and details of your nearest dealer.
Counterfeiting can put the public at risk. A faulty electrical part may burst into flames. Counterfeit styli wreck records and video tapes not only produce poor pictures on screen, they can damage the equipment. A faulty electrical part may burst into flames.

The concept of 'moral rights' is new to the UK law although such rights already exist on the Continent. The aim is to let authors of copyright works be identified as such and control editing and changes which can damage their reputation.

Until recently performers have only been able to rely on criminal law, which is often difficult to satisfy. The matter came to a head when 'out takes' from old Peter Sellers' Pink Panther films were collected together and edited into a film made: after his death. The new Act gives performers, or their representatives, civil remedy against such unauthorised use of recorded material.

This could stop record companies remixing old recordings without the performers' permission. Reporters have always had as copyright their skilled interpretation of what others have said. But it is new for the speakers to have copyright in their own words. The BBC and independent radio and TV companies lobbied hard to get this provision watered down. It could have stopped radio and TV stations editing interviews before transmission. The act now excludes current events recordings and TV broadcasts but learned journals — and perhaps some specialist magazines — will not be able to edit writers' text. Watch out for some boring, muddled articles!

The record industry was bitterly disappointed when the Government dropped the previously agreed provision for a levy or tax on blank tape to compensate the record companies for the losses which they claim result from home taping. John Deacon, Director of the BPI, described the omission as 'a stab in the back'. Gillian Davis of the record industry world trade body, the IFPI, branded the Government's decision 'unprincipled' and showing 'total disregard for the interests of copyright owners'. Kenneth Clarke the Minister who took the decision, defended it by arguing that: 'It would have involved the Government in the collection of a new tax, with a new bureaucracy required to collect and distribute the proceeds. The cost of administration would have been disproportionate to the amount of money concerned. The bulk would have gone to those already doing very well.'

Clarke's statement was significant because for the first time he referred to the levy as a 'tax'. The record industry had for ten years tried to convince the Government that a levy on blank tape should be regarded as a royalty, not a tax. The government has created a precedent which lawyers are unlikely to ignore.

Rock 'n' roll ain't noise pollution

There's been a lovely squabble in North London over the sale of a £2 million mansion overlooking Hampstead Heath. The locals are up in arms, because it looks as if the only people who can afford to buy it are rock musicians. Boy George had previously bought the one next door. With their prejudices clearly showing, a group of well-heeled locals, including pianist Alfred Brendel, have been 'fearing' that old dilapidated outhouses may be converted into a recording studio.

The Who pop group faced exactly the same opposition when they built a studio in Battersea. The Who made — and proved — the common sense point that the first requirement for any recording studio is that it must be soundproof. This isn't for reasons of social conscience. It is because no-one who is making a recording can afford to have it spoiled by the noise of traffic, aircraft, car horns, burglar alarms, cocktail party razzmatazz or pianists practising, leaking IN.

Inevitably, soundproofing works both ways. It stops noise leaking OUT with equal efficiency. So Brendel belting out Beethoven is likely to make far more noise than a rock studio.
LISTEN TO THE NEW RANGE OF MISSION LOUDSPEAKERS TOGETHER WITH THE SUPERB CYRUS ELECTRONICS IN THE COMFORT OF OUR LISTENING ROOM

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THE EXCEL

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WHAT HI FI, March 1989

EXPENSIVE TUNER??

THEN HAVE THE AERIAL IT DESERVES

You spend many hours and quite a lot of money choosing that new tuner, so don’t ruin the whole effect by fiddling with bits of wire or old aerials. Have the full benefit of the multipath free, clean signal which only a well designed and properly installed unit can achieve. If D.X. is your scene, then go for the ultimate in rotating high gain narrow beam systems like our G.23, with 19dB forward gain, 38dB F. to B. and Acc. Ang. down to 15 Degrees or have a “one off” special built, up to 32 elements.

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Most of those involved in the process of news gathering will agree that major stories have an uncanny habit of breaking either at the most inconvenient of moments, or in places from which it is almost impossible to secure communications. And more often than not, both conditions apply.

Now the mighty BBC has amalgamated its news-gathering teams of Radio and Television under one new directorate headed by the Deputy Director General, one might have thought it could have done a little better in covering a terrorist explosion at a barracks in Kent at 8.30 on a weekday morning. Surely no-one could have foreseen the problems that were to be encountered in sending news reports the few miles to London.

As usual with this type of story, first reports came in relatively soon after the event from major news agencies like the Press Association who had already been notified by the local radio station, and even from inquisitive members of the public who wondered why they had heard nothing on the wireless about the twenty fire engines they saw racing by.

It was clear from an early stage that this was a major story and so BBC TV news dispatched film crews to the scene and one of its 'links' vehicles to sit on a nearby hilltop ready to beam pictures back to London. BBC Radio had a head start over its TV colleagues in that Radio Kent was able to send its radio van from the General Post Office to the scene.

A team of BBC network news reporters was sent from London with tape recorders and cellular telephones. Meanwhile BBC engineers were attempting to establish circuits from Deal town centre to London, and a BBC Radio outside broadcast van arrived within as possible to the bombed barracks, ready to connect to available British Telecom circuits.

Early television crews at the scene shot some 'rushes' and they were taken by dispatch rider to the BBC hill-top 'links' vehicle. This carried two video machines, but both jammed, refusing to budge before any material had been played over. Television's major one o'clock bulletin was fast approaching.

An order went out to TV's outside broadcasts' control centre to send the 'full works' to Deal with sufficient equipment to cover any eventualities. But, arriving at the site some hours later, the riggers soon realized that they had left a box of vital equipment in London. Without it they could do nothing. Meanwhile negotiations were under way with ITN who had established a picture link from the Deal area. The plan was for the BBC to share the free supplies to provide material for its one o'clock.

Shortly before transmission the BBC lost the facility and as a result had no pictures of this major story until over ten minutes into its main daytime news - four and a half hours after the event.

BBC Radio was faring a little better - but not much. Live cellphone reports were keeping summaries fed, with interview material available from Radio Kent, but London wanted its own dedicated circuit - for its 40-minute World at One current affairs slot which was to concentrate on the explosion.

Deal, it seems, has a minimum of available wide-band music circuits linking it with the capital. A situation not helped by its coastal location.

The Telecom inject site at Kent's Tolsford Hill - BT's gateway to the Continent - did provide some contact although the facility extends to just one vision and one audio circuit to London and these were double-booked by ITV and the local ITV company TVS. Although BT engineers worked at full stretch, it was some six hours before a satellite news gathering up-link was established by their colleague in Paris by Telecom International. This is regarded as a major achievement because it usually takes several days to obtain the necessary permission from the DTI.

Providing circuits on demand is increasingly difficult for Telecom's Broadcast Service, as its Rick Whelams explained: 'On the day in question our OB facilities in the South East were tied up, and although we could have called on colleagues in Cardiff or Birmingham, BT International was able to supply. Deal was one of the worst locations: our resources are committed to providing temporary circuits where the main ones have been damaged by Channel Tunnel contractors.'

Another complication was the increase in those putting a demand on the available circuits. The satellite concern SKY is now ordering facilities at all major events to provide 'unrivalled coverage,' and so it was at Deal. Teams of yellow vans were seen connecting SKY's equipment to green junction boxes in the centre of Deal while other broadcasters floundered.

Unsuccessful in its attempt to book music-quality lines from Deal town centre, BBC Radio News made arrangements to use a little studio in the Harbour Master's office at Dover - still several miles from Deal, and necessitating runners to carry the tapes along the coast before they could be played to London. It was not until twelve hours after an event that a music, control and telephone line were installed in a BBC OB's van outside the Dover telephone exchange for the next morning's Today programme which became a three-way presentation between London, Deal - and Moscow where Mrs Thatcher happened to be.

Wooden hut veterans

The BBC's Monitoring Service has celebrated its Golden Jubilee and invited over a hundred guests to its Caversham Park headquarters. The Service, which has been Britain's ear to the world, began 50 years ago from a wooden hut on a hill near Evesham in the Midlands and, initially, broadcasts from German and Italian radio stations were picked up by hill-top aerials and recorded on wax cylinders.

By 1941 nearly 250 bulletins in thirty languages were being monitored daily, and two years later the service moved to its present home in Reading. Today the service is busier than ever, thanks mainly to glasnost in the Soviet Union and Eastern Europe which has meant staff working around the clock to keep up with the expansion in broadcasts inspired by President Gorbachev's reforms.

Information from Caversham is sold to the service's many customers who include BBC newsrooms, newspapers and magazines, Government departments, foreign embassies and universities.

Radio shop re-opens

A major refurbishment at the BBC World Service shop has taken place and means that the sales and display area is now almost twice as large. The shop was opened with a fanfare which made it possible for the shop to stock shortwave radios, over fifty of which were sold in the first few weeks of re-opening. The shop attracts over 45,000 visitors per year from around the world and, with a turnover of £360,000, it is one of the BBC's most successful sales operations.

The opening ceremony in early September was conducted by John Tusa, the World Service MD, seen here by the very popular language-teaching section of the revamped shop.
PD470 Limited edition the sonic performance of the upgraded PD470 must be auditioned. At £279 the PD470 limited edition offers a quality of construction which cannot be beaten. You owe it to yourself to hear it now.
Reader surveys tell us lots of things — all good, practical stuff which helps to shape magazines, like 'Do you want more/less/the same?', but the best responses as far as the contributors are concerned are direct reactions, the results usually finding their way to 'Views'.

Headroom often inspires incredulous letters. Most of these are in response to one of the most bizarre occurrences in recent experience, the emergence of Jean-Pierre Farkas and his freebie tweaks. It's refreshing to find lateral thinkers whose props include air bubbles cut from packing material, little metal balls of watch-crown dimensions and other throwaway scraps.

Jean-Pierre is a fascinating chap whose space-cadet demeanour obscures a quick and questioning mind. It may just be his Age of Aquarius innocence which allows him to pursue practices which are anathema to others (J-P was at The Hi-Fi Show in September) I've written about his tweaks a few times, soliciting reactions to hands-on experience.

The experiment I chose to monitor is the LP support technique which Jean-Pierre revived, accomplished with the use of three watch crowns under the label area of the disc. In the interim he modified the practice to employ three 'air bubbles' cut from the stuff which is wrapped around delicate objects prior to handling in transit; I have sheets of the stuff, so I offered to supply some to any reader who sent a stamped, addressed envelope. The response was much better than I anticipated, with over 50 readers making the effort. With each strip of bubbles I sent out, I cautioned the reader to alter the height of the tonearm, because I didn't want a sonic change caused by incorrect vertical tracking angle (or stylus rake angle) attributed to the Farkas bubbles. One thing I learned as a result is that arm height does not appear to be all that critical.

The response was uniformly pro-Farkas. I expected everyone to hear an audible change; the 'survey' was to determine whether or not it was an improvement. Because this was a casual study, I won't attribute statistical values; rather, I'll offer direct quotes from those who participated. I've also listed where possible which turntable was used. None of these have been 'creatively edited', so you can assume that the context supports the quotes.

E Hyde, Singtonborne, Kent: 'More dynamic; detail improved. Ambience also. Overall: better.' (Mr Hyde cautions others whether or not it was an improvement. Because this was a casual study, I won't attribute statistical values; rather, I'll offer direct quotes from those who participated. I've also listed where possible which turntable was used. None of these have been 'creatively edited', so you can assume that the context supports the quotes.

S A Watson, Maidenhead (Linn LP12): 'Bass rendered significantly less muddy, overall increase in transparency.'

Barry Calcutt, London (Rega 3): '...better clarity, separation and (perhaps?) tighter bass.'

Mike Wimbury, Tiverton, Devon: Prefers the metal points to the bubbles.

S A Watson, Maidenhead (Linn LP12): 'A marginal improvement in presence and separation of instruments.'

Matthew Parris, Bracknell, Berks (Thorens TD160): On familiar recordings, Mr Parris found the Farkas treatment to '...reveal hidden depths that I haven't heard before, particularly the use of reverb and echo.' Going through the letters, I couldn't find a single anti-Farkas response, and even the least enthusiastic respondent cited as a main objection the practical considerations. This include the general unsuitability for use with warped discs and the inconvenience of re-locating the bubbles if you don't stick them to the platter. But I'll leave you with some words from J R Carter of Upton, Gainsborough, who replied with a five-page manuscript.

Mr Carter really went to town with this one, trying three entirely different turntable/arm/cartidge combinations of varying vintages. He concluded that 'improvements were made upon all three turntables which can best be described as greater clarity in bass and midrange, a general reduction in smearing, better transients and a wider, deeper more stable image. An extended period of listening on a wide range of material from solo piano through rock to opera all showed great improvements. Nice one, Jean-Pierre!' What impressed me most about the replies was the consistency of the findings. Keeping in mind that the experiment cost nobody more than two stamps and that Jean-Pierre does not actually sell his tweaks a few times, soliciting reactions to hands-on experience.

The General, London (Rega 3): 'Improvements were made upon all three turntables which can best be described as greater clarity in bass and midrange, a general reduction in smearing, better transients and a wider, deeper more stable image. An extended period of listening on a wide range of material from solo piano through rock to opera all showed great improvements. Nice one, Jean-Pierre!' What impressed me most about the replies was the consistency of the findings. Keeping in mind that the experiment cost nobody more than two stamps and that Jean-Pierre does not actually sell his tweaks a few times, soliciting reactions to hands-on experience.
For a while there our boffins were giving us cause for concern

Two, plus two, equals... six? Oh no, we thought, coming up with wizard hi-fi products time after time has finally taken its toll on our boffins' precious grey matter. Then again, they do say that genius is but a short jog from insanity.

"No, no, no", said Mad Mike our chief boffin, "It's you who's got it wrong, not us". (We hoped he wouldn't get violent.) "You see we've invented two brand new CD players...a mid-price model to join the Alpha range, and the transport only Delta 170.

"The Alpha incorporates a whole range of features normally associated only with much more expensive machines (such as twin power transformers to minimise sound-degrading internal interference) and a robust aluminium chassis. There's 20 track programming and an optional remote control. We reckon its sound quality is unbeatable in its price range; just like our universally commended Alpha amp.

"The Delta 170 is Britain's first CD transport. Whereas a normal CD player reads the digital data from the disc then converts it into an analogue signal, the Delta 170 simply does the first part...and does it with breathtaking accuracy. You need a separate digital to analogue converter (such as our award-reaping Black Box) to turn the transport's output (coaxial or optical!) into an amplifier-ready signal. To put it another way, the Delta 170 is dedicated purely to providing a digital signal of the highest possible integrity. It's a machine only for the most demanding audiophile.

"With our two existing units, the Delta 70.2 and the Black Box, there's now a choice of six configurations: Alpha CD alone, Alpha CD plus Black Box, Delta alone, Delta plus Black Box, 170 transport plus Black Box, and Black Box plus any other player with digital output.

"In other words, Arcam now offers a range of British CD players compatible with every audiophile's budget. So you see, two plus two equals six. Easy."

Thank goodness for that, we sighed. One lot of men in white coats around our design department is quite enough, thank you.

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Please send me more information on Arcam CD.

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All you have to do to win is answer 10 simple Beatle-lore questions listed below. The first correct entry pulled out of the hat will win the CD player, the book and both box sets. Two runners-up will each receive the CD singles box set and the book. If nobody answers all 10 questions correctly, the highest scoring entry will win. In case of a tie, the winner will be the person who writes the wittiest reply to our tie-breaker.

Please send your entry, to arrive before 15th January 1990: Beatles Competition, HFN/RR Editorial, Link House, Dingwall Avenue, Croydon CR9 2TA.

The Rules
1) The competition is open to UK readers only. All entries must be on the entry form provided: photocopies will be accepted but only one entry per reader will be considered. No other correspondence must be included with entries.
2) There will be no cash or other alternative to any of the prizes offered. The winner's choice of CDs is offered subject to availability.
3) Employees of Link House Magazines or associated companies, or of EMI, Philips or Village Books or their agents, will not be eligible.
4) All entries must be received by 5th January, 1990, 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.
5) The prize winners will be notified by post and the results will be published in the April 1990 edition of HFN/RR.
6) Entry to the competition is taken to indicate acceptance of the rules.

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World Radio History
I will very probably never again mean about a British show venue - not least via attending the 38th Japan Audio Fair at the Ikebukuro Sunshine City complex in Tokyo early in October. Despite the cheery title, Sunshine is just a high rise complex of hotels, shops and exhibition halls within striking distance of the Ikebukuro subway station. First, and for me foremost, DAT. The Tokyo newspapers had promised 'more than 26 models including portables'. The trade wing of the Japanese government had been encouraging the hardware firms to strike while the iron was hot and major on DAT. Before the record industry could renege on the deal a few months earlier. In the event DAT was low in profile. Yes there were DAT decks and portables, but only Aiwa made anything six months to most. Aiwa's new, very small portable (shown behind glass walls at the Berlin Funkausstellung) is called the Scarper Serial Japan, and sells for $2,000 yen (around £350). It is a dinky little beast and I was sorely tempted to go shopping for one. But just in time I twigged the fact that Sony's SpinSound (Serial Copyright Management System) was based, and it does not record at 44.1kHz, so, like all the first generation DAT decks that have been sitting unsold on Japanese shop shelves, it will not dub digitally from a CD.

Contrary to popular prediction, there was no big show of SCMS at Sunshine. Only JVC had a deck with the SCMS logo imprinted on the metalwork. Sony had a DAT deck with an SCMS paper label stuck on the front. Others just showed first-generation decks, sometimes with trivial modifications. The simple truth is that the SCMS specification has not yet been finally fixed. No manufacturer is going to do the work necessary to modify the microprocessor chips until the specification is cast in a tablet of stone. Companies which are already making DAT chips will need around six months to modify the masks from which the chips are produced. Mass production will take another two months.

The SCMC decks which JVC and Sony showed are modifications of existing circuitry. They were not production models and were clearly labelled 'prototype'. There is also widespread confusion over two vital issues. No-one yet knows whether the software industry will support a DAT launch with pre-recorded music cassettes. Also the hardware companies have no clear policy over whether they should wait for the legislation in which the record industry is seeking to make the use of SCMS compulsory. Often two spokesmen for the same company gave completely different stories, one saying that the company will wait for legislation and another saying that legislation may take so long coming that we will record on DAT.

Only one thing looks certain. That DAT with SCMS will not be ready for full scale launch until Spring 1990, and as this is a hard time to launch any new 'indoors' technology, the push on DAT - if there is one - will be in the run-up to Christmas 1990.

Although there are some special offers on old DAT gear in Tokyo hi-fi shops, the price has not yet fallen as far as the first reports predicted. It turns out that although DAT is not selling, the shops have such slow stocks that there is no need for a fire sale.

In the long term, far the most interesting piece of DAT technology at the show was Sony's four head deck. Although only a prototype, this points the way to the future. Doubling the number of heads on the drum lets the machine read-after-write (to monitor off tape during recording) or read-after-read (to read each block of data twice, and so compensate for head clogging). The four head drum was developed by Sony for Hewlett-Packard, to use in the new DAT computer data recorders. In was only a question of time before it spun off into DAT audio decks. Sony also showed a car DAT player with half size head drum (15mm) and a table top CD recorder, using magneto-optical technology. This plays back conventional CDs as well as recording onto black CDs. But the recorded MO discs will not play back on a conventional CD player.

Interesting, but commercially a dead end.

There was a significant absence - Dolby S type noise reduction. Although Dolby Labs has been offering the system to the manufacturers of conventional analogue audio cassette decks, I could not find a single prototype at the Tokyo show. Every manufacturer continues to add new portable and table top analogue decks (which is obviously the pointer to their ambivalence on DAT) and Dolby has booked space in the Mirage Hotel for the Las Vegas CES in January. This may be the launch pad for SPY.

Anyone walking round the Tokyo show could not fail to be struck with the heavy presence of SCMS. The catalogue shows the SCMS logo imprinted on the metalwork. Sony had a DAT deck majoring on BBE signal processing, albeit mainly and mercifully inuggable blaster systems. It sounded every bit as bad as I remember from the only demonstration in the UK, at the Bristol Hi-Fi Show. JVC, by the way, is still plugging away at the family of 'phonics' systems which create wide headphone stereo from loudspeakers - but only if you stand or sit in a tightly defined spot in the room. Ten years ago it was 'Biophonics'. Now it's 'Live phonics'. And it's still 'no thanks' as far as I'm concerned. The sound is subconsciously tiring, because the system relies on adding phase shifts which fool and fatigue the ear.

Sony is much better at picking names. A new mid range system, very attractively styled, is called 'Phy'. It might just catch on.

So as DAT sinks slowly in the East and we bid an unkind farewell to the awful Sunshine Centre, I'll hand in the HFNR/RR show reporter's notebook for the time being. I only hope that next year the Japan Audio Fair moves back to Harumi, and the importers return to the Hotel Den.
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A room is a resonator. When a sound wave reaches a room boundary, it is reflected at full strength less whatever portion is absorbed by or transmitted through the boundary. When it reaches another surface it is reflected again, and again, until so much energy has been extracted that the remainder can be neglected.

It happens that typical domestic living rooms have dimensions that are comparable with the wavelengths of low frequencies in the audible spectrum. This coincidence is often troublesome when we wish to create or reproduce in such a room. To see why, consider what occurs when we generate tones of various frequencies in a room of, say, 18 × 12 × 8 ft.

If we begin with extremely low tones and slowly raise the frequency, nothing dramatic happens until we reach 31.41Hz. A sound-wave of a pure tone (a single frequency) consists of alternate compressions and rarefactions of air particles, smoothly varying from one condition to the other in a sinusoidal pattern, and moving at a quite uniform speed of 1,130ft/s. The distance from one compression maximum to the next for a tone of 31.41Hz is 1.130/31.4, or 36 feet: twice the wavelength. A 31.41Hz wave compression, reflected from one end wall, travelling the 18-foot distance to the other end wall and then back to the first, will arrive precisely at the right time to be reinforced by the compression part of the tone being generated at the centre of the room, and so on as well as at 31.4 and 62.8Hz.

High-pressure zones are always at the ends of the room, covering the entire wall surfaces for simple single-dimension resonances. A high-pressure zonal plane is also at the centre for even-numbered multiples of single-dimension resonance frequencies, a low-pressure zone for odd-numbered multiples.

It will be inferred correctly that each of the other two room dimensions has its own set of resonance frequencies, beginning with the frequency whose half-wavelength is equal to that dimension. In our hypothetical room there would be resonance frequencies associated with the 12-foot width at 47.1, 94.2, 141.3, and 188.5Hz; and so on as well as at 31.4 and 62.8Hz. Where the stimulus is a plane extending from floor to ceiling, it reflects diagonally from four adjacent boundaries. The normal frequencies are determined by both of the involved boundary dimensions and by their submultiple values. Thus, if we call the length, width, and height dimensions x, y, and z, respectively, then the normal two-dimensional modes are found by

\[ f_{nx,ny} = \frac{\pi}{a} \left[ \frac{n_x}{x} + \frac{n_y}{y} \right] \]  

where \( n_x \), \( n_y \), and \( n_z \) are any whole numbers representing the submultiples of the x, y, and z dimensions involved in any normal resonance frequency. If a value of zero is assigned to an \( n \) in one of the equations above, a single-dimension normal frequency is obtained because the equation reduces to (1).

Using \( n \) values of 1, 1, 2, 2, we calculate four xy normal frequencies to be 56.6, 99.5, 78.5, and 115.2Hz for the xz dimensions, 77.3, 114.7, 94.5, and 154.6Hz; and for the yz frequencies, 84.9, 1,189, 117.7, and 169.8Hz. Figs 1b and 1c show the pressure distribution patterns in a horizontal plane through our sample room for xy n values of 1-1 and 2-1 = \( n \left[ x = y \right] \) when the room is excited by tones of 56.6 and 78.5Hz, respectively.

There are a total of 32 two-dimension normal frequencies below 200Hz in our room: 17 xy (1 and w), xz (length and height) and 6 yz (w and h). And yes, there is still one more set of normal frequencies, this last set determined by all three of the room dimensions:

\[ f_{nx,ny,nz} = \frac{\pi}{a} \left[ \frac{n_x}{x} + \frac{n_y}{y} + \frac{n_z}{z} \right] \]  

where the symbols are consistent with preceding equations. This is the general expression for resonance frequencies of a rectangular room. If one or two of the \( n \) values are set to zero, a two-dimension or single-dimension frequency is found.

The lowest normal frequency in the three-dimension set for our room is 90.51Hz. This set becomes dense more...
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World Radio History
quickly than the others, however, and there are 20 modes below 2001Hz.

It is intuitively evident that the transmission of sound in a room will be affected by the resonance modes. Absorption of sound energy by room surfaces, open doorways or windows, and by room furnishings and people will damp the resonances — will make the peaks and minima less acute and more spread out in frequency, so that transmission of sound will be more uniform.

Fig 2a is a frequency plot of all the single-dimension resonances below 2001Hz in the listening room we have used as an example. It has dimensions of 18 x 12 x 8 feet, comfortable in size and shape. As it turns out, there is quite a gap between the lowest normal frequency and the next — more than half an octave. And even though there are only a dozen such resonances, six of them are in pairs. The reason for the pairing is that we carelessly chose dimensions related to one another by a simple fraction, 6. The normal frequency for an oblique resonance of 1.5 is the same as for n=2, and so on.

We might have done a lot worse, as Fig 2b proves. With a small margin of error, rectangular rooms having the same enclosed volume have the same number of normal resonances within the same frequency band. A room with dimensions of 12 by 12 by 12 has the same volume (1728cuft) as the room in our first example; it has 12 single-dimension modes below 2001Hz also. Ah, but look at the distribution! Four widely-spaced clusters of three identical normal frequencies. A cubical room is the worst possible rectangular shape from an acoustical point of view. Next on the list of badly-proportioned rooms would be one with two identical dimensions and the third either twice or half the others. It is clear that equal dimensions and those related by long simple fractions should be avoided.

We see that there is always one odd one out between the first two normal resonances for the longest room dimension. We can place two resonances, spaced at equal geometric intervals, within this octave by making the length dimension equal to $2^{1/3}$ times the width and $2^{2/3}$ times the height. In a large room these proportions (1 to 0.794 to 0.640) may be awkward to realize. Retaining the same volume as in the other rooms, 1728cuft, this room's dimensions become 15.12 by 12 by 9.52ft. Again, we find 12 single-dimension normal frequencies below 2001Hz: see plots in Fig 2c.

At the low end of the frequency scale, where there are few normal frequencies, it is clear that the single-dimension (axial) resonances are spaced perfectly evenly, which would facilitate a smooth transmission curve for the room. However, the two-dimension (tangential) and three-dimension (oblique) resonances haven't yet been considered, and there is a criterion for resonance distribution other than equal low-frequency spacing. M Louden suggests that the criterion should be closest adherence to the theoretical curve for the number of normal frequencies within a given frequency band in a room based on its individual dimensions, boundary surface area, and its volume. Louden calculated the standard deviation of these numbers from the theoretical values, with n values through 5, for 125 rooms of varying proportions and then ranked them in order of decreasing acoustic quality as standard deviation from the theoretical curve increased.

The ten top-ranking rooms in Louden's list have the following proportions:

- 1: 1, 1.9, 1.4
- 2: 1, 1.9, 1.3
- 3: 1, 1.5, 2.1
- 4: 1, 1.5, 2.2
- 5: 1, 1.2, 1.5

Axial normal frequencies for Louden's highest-ranking room are plotted in Fig 2d. (Once again there are 12 of them below 2001Hz.) Dimensions in the proportions of 1.9 to 1.4 to 1 must be, for a room volume of 1728cuft, 15.45 by 12.13 by 9.52ft. Distribution of the lowest-frequency resonances appears to be inferior to that for our third room, but the picture changes when we add the tangential and oblique resonance frequencies in Fig 3. Now it is clear that Louden's proportions produce the least tendency toward clustering and the smoothest increase in normal frequency density with increasing n. Of the four rooms examined. Our initial evaluations of the other three rooms do not change: Of the three, No 3 is best, No 1 next, and No 2 the worst. The cubical room shows nine simultaneous resonance modes at 194.1Hz, and six modes each at six other frequencies!

Another investigator, LW Sepmeyer, has calculated to two decimal places several sets of very good room proportions. He gives three sets as ratios of 1:1.14:1.99, 1:1.28:1.54, and 1:1.60:2.53. To compare them with the rooms of Fig 3 we assume the same room volume (1728cuft) as for all, and come up with dimensions of 10.29 by 12.13 by 9.52ft and 14.74ft and 7.74 by 12.38 by 18.04ft. All normal resonance frequencies below 2001Hz for these three rooms are plotted in Fig 4.

The mode distributions are comparable to those for the good rooms of Fig 3, and by extension to the best rooms listed by Louden. Any of these can be made to yield excellent sound. Some have dimensions that are more practical than others from a construction viewpoint.

Part 2 will continue a discussion of room resonances and how to tame them.

References


Morse, PM and Ingard, KL, Theoretical Acoustics (McGraw-Hill, New York 1966.)

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Among the exhibitors were most of the leading 'mainstream' British hi-fi companies and a number of Japanese manufacturers, as well as a host of specialist UK companies and virtually all the importers/distributors who bring 'high end' and other specialist foreign products into the UK. One pleasing aspect this year was the great number of trade visitors from Europe, the USA and the Far East. Confirming the strong Danish influx, Falborg, MAG and Posselt offered new and unusual speakers, while the Primacoustic contingent arrived with examples of its new speakers and the 928 electronics, and Gryphon had a sample of its dual-monaural pre-amp. One North American company was exhibiting at Penta with the express aim of attracting a UK distributor and widening its appeal in Europe. D'Britain audio systems from Vancouver has a complete portfolio of electronics including the Integra Reference pre-amp and MF 120 monoblocks. But before detailing the imported products, we had better look at what the British had to offer...

UK ELECTRONICS

A major new product from Musical Fidelity was its B1 integrated amplifier (reviewed by HFN/RR last month) and MF had a prototype mock-up of its scheduled FM-only tuner, the T1, expected to sell for £250 and designed to match the B1. DNM's re-vamped Cambridge Audio range was shown, including the new CD3 player (featured in this month's cover story). The rest of the range has been re-styled since the acquisition of the company by Hi-Fi Markets last year. Last month's cover shot was seen in reality at the show, as Meridian proudly displayed its new 206 CD player - a derivative of the 207Pro model without the pre-amp section. Also launched minus pre-amp was the M60 loudspeaker, derived from the D600 digital active design, lacking the control sensor and digital circuitry, yet retaining the D600's elegant floor-standing enclosure. Inside each M60 are a filtered power supply, three active filter networks and three 65W Class AA power amps, driving two 160mm polypropylene cone bass/mid drivers and a 25mm aluminium dome tweeter.

As announced in last month's news, Ariston Acoustics' new 5090 speaker has broken new ground and launched a compact disc player to complete its range. The company's image speakers have been revamped with new drivers and baffle designs resulting from intensive design work. Also from this busy Prestwich company is a new, FM-only tuner at £225 to match its amplifier range, now including new pre-power combinations. Ariston also showed its latest integrated amp (reviewed in its current form in this issue: see page 67).

It was valves galore in the British-Built Audiophile Products room as the A905 BB100 tube amplifier could be seen glowing away. Bill Beard's latest enterprise has built what it claims to be a no-compromise product: the BB100 is a unique line-stage-only integrated model with an optional phono stage for an extra £295. Heybrook Hi-Fi has diversified! A special collection of six framed prints has been announced, with a musical theme. The prints are from paintings by Rosina Watchmeister and start from £49.00. Back to the main business in hand, Heybrook has launched the P3 power amplifier, providing more power than the P2, while the C3 control pre-amp boasts even more refined solid-state technology than the C2.

Amplifier design provides the key to the brand-new JDI range, which are distributed by Castle Acoustics Ltd. Visually stunning in black, the pre-amp is the result of three year's intensive work and is priced at around £2500. Also designed and built in West Yorkshire, the JDI monoblock power amp are £850 per pair. Making a debut with its beautiful Catalyst integrated amp was Cyclone Systems Ltd. This design provides solderable terminals for the speaker leads, while a separate phono stage is housed in a plated steel case. New integrated amplifiers from Orell included the SA-040ES (reviewed this month), a higher power version of the existing SA-040, and the SA040I, a new design based on discrete op-amp technology in a high feedback configuration utilizing NMOSFETs. Stands and supports form a complete product range for Project, who have hand crafted hi-fi furniture, from speaker stands to turntable stands — all made from the finest wood in the required finish to suit any environment. 'Cleaner' styling was the keynote of Nene Valley Audio's new products. At the high-end is the Statement monoblock power amp, of push pull transistor configuration and rated at 150W. For your £3000 you also get four separate power supplies — one for each gain stage.

NVA is now able to offer complete systems, and was demonstrating its own new turntable, Cube loudspeakers, cables and stands. An all-new range was shown by T&R Industries under its 'Precison' banner. Included in the range are the APP6, a two-chassis pre-amp, and the MPP9 mono power amplifiers rated at 150W and with a good build quality.

Tucked away, and sharing a room with SD Acoustics were the exotic range of products from Tim de Paravicini. The latest pre-amp from EAR is the two-chassis G88 with its eight valves and a host of facilities: a change from the minimalist designs of old. The power supply is up to the usual audiophile standard on one expects from the company, however.

For those wishing to construct, or even modify valve equipment, PM Components was on hand with...
with an astonishing array of vacuum devices for all manner of audio and RF applications.

Dubbed 'the UK's latest leading-edge pre-amp', the Finestra from EC Audio Ltd is said to offer a more refined look with its acrylic enclosure. Whatever, the design claimed to emphasize maximum enclosure. Whatever, the design claimed to emphasize maximum information retrieval, with transparency and neutrality named as priorities.

Woodside Electronics was showing the Radford range, including the recently-launched CD player (reviewed in September). Even more recent was the announcement of the company’s DAC1 outboard DAC for £499 and SC26 pre-amp. The only new product from Radford to encompass values, this pre-amp costs £1190 complete with line and phone inputs, £978 for the line-stage only version.

**UK ANALOGUE**

Despite the digital revolution, there was no sign of a CD player in the SME room just the superb range of turntables, and examples of the 300 series on every conceivable turntable from Linn to Oracle. Roksan unveiled a number of new products (see 'News') but deserve special mention here for the stunning room-set which they created within the large and acoustically-favourable space of the Sir Francis Drake Bar. Black draped figureheads, metal pillars - all combined to give a spacious, inviting display area in which visitors could spend time freely, listening, sitting or moving around. Linn stuck to its analogue guns and showed the husk turntable with Akito arm and the new LVIII as an option. The speaker range could be heard along with the Intek integrated amp. Revolver celebrated the one hundred years of the gramophone with its historical exhibition of turntables through the ages, including its own latest designs for 1990, firm in the belief that the medium will continue for another century. Its Standard, Super, and Rebel tonearms were also shown. Oxford Distribution, the recently re-vamped company associated with Oxford Acoustics, was busy establishing its new dealer network. A portfolio of some sixteen British designed and manufactured products is expected and early samples were shown, including loudspeaker stands and interconnect cable. A number of brands will be distributed by Oxford who still market the Oxford Crystalite and Crystalite II turntables, together with the Mistralle reference amplifier.

An improved version of the Opus 3 Continuo turntable was on display in the Presence Audio Room, fitted with revised Decca London tonearm complete with the latest version of the London Super Gold cartridge - the long-awaited London Supreme is still under development.

The flagship Excel and improvements to the 1000 series in the shape of 1012, 1022 and 1042 mark the new line-up of cartridges from Goldring. Cartridge news from Ortofon, now with a UK distribution division again, included the MC4000 now in a Mark 3 version with improved tracking and a slightly higher output. Kelvin Labs provided a sanctuary in which to hear the new Rock Reference turntable and the latest in the range of Kelvin electronics, including the new Integrated, praised by Paul Miller in the October issue of Home Audio. Exhibiting jointly, Origin Line and Lynwood Electronics each had their own coups. Lynwood its super phono stages, to interface turntables to CD-only amplifiers, and Origin two new speakers - so new, in fact, that prices had not been decided. Oasis A and B turntables together with the Jubal tonearm and range of speaker stands were also displayed by Origin, while Lynwood was also showing its mains filter.

**IMPORTS**

High-end importer Absolute Sounds offered its traditional ticket-only demonstrations of carefully-set up high-end systems, which proved to be among the most popular attractions at the show. New products shown this year were numerous, and included the Goldmund Mimesis 9 power amplifier and Magneplanar MG1-4 speakers but perhaps the most exciting revelations were the Krell Digital CD transport and D/A converter, and the Apogee Stage loudspeakers, both demonstrated for the first time in the UK. With other lines featured including Martin Logan and Jadis. Absolute Sounds once again offered an unmissable opportunity for Show visitors to hear some exceptionally impressive systems.

Major announcements were made by Path Group which has acquired UK distribution for the Mark Levinson range, which now includes the Model 26 dual mono pre-amp with low gain phono module and separate power supply, selling at £4920. Other important news from Path was the availability of the new Aragon D/A converter, the D2A (!), an 18-bit 8-times oversampling three-input box said to be fully upgradeable. Price £1395.

With new models from Oracle, Rowland and Infinity on show, Gamepath Ltd maintained its strong high-end presence this year. From Oracle came the new Paris turntable, a lower-cost model which aims to maintain the Oracle philosophy of audible excellence in a visually-elegant package. Rowland’s Consorsance pre-amplifier offers a comprehensive digital display and full remote control, while the Infinity Modulus loudspeaker (already seen in the US at summer CES) is a high-quality miniature loudspeaker of distinctly ‘Euro- pean’ aspect, designed for versatility.

Never short of new product announcements are the people from Audioscreens, although we understand they are 'reaching saturation point'. The full Conrad Johnson range of electronics was displayed together with the latest tube amplifiers, model from Oakley, the Image 5 and now the Image six with a reinforced phone stage and increased gain. Finished in champagne gold, price £599. Glowing valves from Japan filled the Audio Concepts room as the Air Tight ATC-1 pre-amp and both ATM-1 and ATM-2 power amps were tried along with the American DCM loudspeakers, which Audio Concepts has reintroduced to the UK market after an absence of some years.

A whole new range of Carver products was shown by distributor HW International (see 'News'). Amongst these was the stunning Silver Seven 550W mono 'Magnetic field' power amp, along with Carver's vacuum-tube reference C-19 pre-amp, with dual tape monitors, absolute phase switch, infra-sonic filter, and variable turnover points on its individual left and right tone controls.
Linn launched the new Bank (opposite page, top), while Arvins's Oxys (far left), represented affordable US realistic design. Arcam showed the new Alpha CD player (staked, opposite page), while Bill Brand's new BB Audio company showed that tube amp. Deni Microscope (opposite page, below) was also seen sticking to analogue, while Delben showed a new all-metal drive-unit speaker, while Sumo showed the new smaller Somax panel (above). Laser Dist. Distribution (left) keeps the LaserVision format alive, while Oxford (below) added Triangle speakers from France to its own range.

The Wadia range of digital processors is now being handled for UK distribution by Acoustic Energy, which also showed new styling of its loudspeakers, in a silver finish, and launched a new model, the AFS, to complete its four-model range.

The ever-expanding Linx range of electronics (now British-built) was shown across two exhibition rooms, along with products imported by The Musical Design Company. The West German floorstanding Audioplan Kontrast speakers were shown, along with the Micromega CD players and the Canadian Meitner PAG6 infra-red remote pre-amp and MTR101 100W mono power amps were demonstrated.

Said to be "beyond high-end", the Cello range (distributed by Astun Audio) consists of no-compromise equipment now also used by a number of professional recording centres. In a silent display area the new Encore pre-amp, with its 1 Meg Ohm input (designed to eliminate line-level matching problems), was seen cover-off, revealing Cello's high standard of build quality.

Two tuners from Magnum Dynalab were shown in the Ion System room: the £400 FT-11 with three presets; and the FT-101 at £600, supplied complete with a SR100 high-efficiency indoor FM aerial. Klaxone electronics were seen alongside Audio Dimension's Black Pearl isolation platform: both said to be attracting a great deal of interest. The Klaxone amplifiers were used with the intriguing Shan speakers, a high-quality miniature design, for live demos. The Danish firm Audiophile introduced a new series of amplifiers dubbed 'Sign Audio', which included the SC-01 pre-amp and the SA-01 power amp rated at 160W/ch. The 70W/ch SA-1 integrated design was also demonstrated. High-end designs from Raymond Lunley, Daxa, Dolan, and Cardas were shown by distributors Magavox Electronics.

A new importer, Electroactivity of north London, has already secured the Arkell's Oxys turntable and Lead Balloon support, Gold Aero valves, GNP Valkyrie speakers and Electron JH90 valve amp – products we shall doubtless hear more of.

Much of the Wessex Ballroom area was taken-up by the many arms of Zenonelc, which showed all its items from Monster cable to the German Heico loudspeakers. The Nikklo electronics and CEC turntables and CD player from Japan were seen alongside Partington speaker stands, including the Dreadnought and new SAM series.

**BACK IN THE MAINSTREAM**

Digital signal processing technology is the key to Sony's new FS PDM pre-amplifier which saw its debut at the show. It is the result of a special development project linking the company's professional product engineers with the ES hi-fi team. The result is the TAE1000ES, available through the elite FN dealer group: priced at £700, it is supported by a separate, optional power amplifier, the TAN40ES at £400. The essence of the pre-amp is to provide a 'home concert hall' experience, by making all the equalization, reverbation and delay effects in the digital domain.

CD giant Philips was showing a 1-bit player using its PDM Bit Stream technology multi-bit/PWM model 5320 CD player (to be reviewed next month) at £169, alongside its latest cassette deck, the £2135, while the P1 drive is £250 and the D1 converter, £1779, reflecting the company's policy to re-establish itself as an up-market brand. TEAC's latest integrated CD player, the £299 CDP 400, employs the MASH decoder technique and has a centre-located drawer.

Hayden Labs took the opportunity to announce major new lines from Denon. Four cassette decks include the replacement model to the DRM07, the £130 DRM400, while the new DRM600, 700 and 800 (see this month's review) were all on view. Three domestic video players and one portable were previewed as well, ranging from the 'budget' CDCD520 to the CDCD920 at £800. A new six-strong range of amplifiers from Harman Kardon accompanied its '3D Bit Stream' CD player (using MASH technology) at the Harman UK stand. Another company to announce a major new line-up was Marantz. Virtually all the company's existing range was superseded by new models. The long-awaited LSR95 loudspeaker was shown, marking the beginning of the new Music Link series banner for top-end products. Included in this are the DMA 1, 40W class A/B receiving amp and DAC1 pre-ampl controller.

Aiwa broke new ground and announced new separates: two new stand-alone amplifiers (the company's first for eight years) and a quartz digital stereo tuner, intended to match the company's existing range of cassette decks. The SA-005 stereo integrated amp features a CD direct monitor switch and is rated at 50W/ch, while its bigger brother, the AX-007, is rated at 80W/ch.

Midi systems complete with Dolby surround sound decoding abound in the Trio Kenwood room, where four separates including the company's latest range of CD players could be seen.

Feedback from some companies about the 1989 show has been encouraging. The whole range of the Alpha MK10, by Alphason. New speakers launched by the company included the bookshelf MK10s at £110, while the £200 MK20 bottom-firing stereo loudspeaker is ideal for corner use or as stands for smaller, satellite speakers. A genuine ribbon speaker design, in the form of the Alphasonic MK30, was on show, while the less costly MK30 features soft-dome tweeter. The company is also moving into $105.
The Studio 1 speaker is an unprecedented addition to the range of TDL transmission-line speakers, easily accommodated within the domestic environment. The TDL Studio 1 is a smaller, more affordable speaker that occupies no more floor space than a conventional speaker placed on a stand; yet its bass performance extends through the bottom octaves with the ease and authority for which the transmission-line is renowned. Similarly, the treble employs the same metal dome tweeter technology as in the professional TDL Reference Standard transmission-line speaker. Providing an aural illusion of a far larger sound source, the TDL Studio 1 places within reach, an authentic transmission-line speaker.
Are The Proms balanced for the serious listener — or for those wanting musical wallpaper?

by Angus McKenzie

We were lucky to have had several visiting orchestras from outside the UK, including the Berlin Radio Symphony (Ashkenazy conducting), the Oslo Philharmonic (Janssen), the Gothenberg Symphony (Järvi), and Chamber Orchestra of Europe (with N Harmoniconcour). Ashkenazy was also with his RPO in a concert including his own orchestration of Mussorgsky's Pictures at an Exhibition. [He has made a Philharmonia recording for Decca.] This was an extremely fascinating performance, and a good alternative to Ravel's rather too detailed orchestration. The Chicago SO with Chorus conducted by Sir Georg Solti, gave us a lively account of Berlioz's Damnation of Faust, and the relay was also shared by television whose balance a friend was impressed with. Time and time again I heard too many close mics in use, which made the sound almost ridiculous. Another problem was that some percussion climaxes were ruined by limiting and thus failed to impress. This could partly have been due to poor balance, and it was not easy to pinpoint the cause. Perhaps the main trouble was due to an excessive amount of kick on the bass drum.

The National Youth Orchestra gave us Walkure Act 3, and it was quite remarkable how youngsters could cope with such a busy score. I also listened to the European Community Youth Orchestra conducted by Bernhard Haitink: a most impressive occasion. The orchestra was founded by Abbado some years ago, and about 140 young musicians performed Bruckner's immense 8th Symphony. This orchestra has all its members between the ages of 14 and 23, whereas the National Youth has an upper age limit of 19 years. Even so, the European orchestra gave an astounding performance and this was coupled with a somewhat better sound than I heard on most other nights. A most remarkable innovation was the solo percussion concert with the outstanding musician Evelyn Glennie. The percussion works was amazing enough, and it is very easy to forget that Miss Glennie is totally deaf, and relies on the feeling of vibrations to give her a sense of pitch.

I had a good listen to the concert conducted by Slatkin on the 24th August. The Mozart Concerto K491 really was rather poor in sound quality, and there was a muddiness that brought my mind back to some of the poorest relays in the mid '70s. Lower frequencies were very vague, and some sections of the orchestra were rather close whilst others were too distant. The piano did not seem lifelike, and the string tone seemed restrictive. Gone was the sweep of strings that I have heard playing back tapes from the '60s. Also gone was the depth of perspective that some balances used to get some years ago.

The Elgar First Symphony was a little better, but there was still a lack of life on the strings. The sound was just too small and muddied. How I long for a much simpler mic technique. On Friday 29th August, the French Philharmonic Radio Orchestra under Janowsky gave a concert including the Tchaikovsky Violin Concerto, and once again I was appalled by the 'sharp' sound on the strings, and I was disturbed by some apparent distortion, especially at HF. During the second half of the programme, I was telephoned by an old BBC Engineer friend of mine who had retired, and who specifically asked what had happened to the broadcast sound from the Royal Albert Hall. We both noted that the sound in the Schumann Symphony was, again, distorted and very scratchy. Quite clearly, the BBC will have to do something about their balance and also re-think their policy about limiting. It seems that Auntie has forgotten the difference between listening and hearing. They really should concentrate on giving the best sound to the listener, and a satisfactory one for those just 'hearing' the programme as musical wallpaper!

How wonderful it would be if we could caveshop in the hall with just a pair of low noise mics with fixed gain, driving line amps and a digital distribution system with digital PCM transmitters, to digital receiving equipment in the home. Only recording engineers can capture the entire dynamic range of a concert and I certainly treasure the wide-range tapes that I have been able to make over the years. These underline the real range of an orchestra, and many recorders would find it fascinating to hear how enormous that dynamic range is. Let's hope that we will hear digital sound on radio one day. In the meantime we must put up with a badly squashed Radio 3 with its frequently poorly balanced sound.

Much of the musicianship was as good as I have heard at The Proms this year. The programmes were good too, and this year was much more interesting than I noted, say, in 1987. Let's hope that next year will bring us better sound, with less 'fiddling'.
Music is Beautiful

Where elegance and science transcend the machine and its function...
Where the subtlety and intimacy of musical emotion is revealed...
Where the art of pleasing oneself finds no greater self expression...
Where ownership becomes an absolute privilege.
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A World Of Difference!

There is indeed a world of difference between conventional D/A processors and the Decoding Computers by Wadia.

The difference begins with four high-speed AT&T DSP chips operating in parallel at 36 MegaHz in a powerful CPU that provides 72 million instructions per second capability — equivalent to 100 PCs!

But this is just the beginning . . .

Wadia's revolutionary DigMaster software is augmented by the Spline — the only decoding polynomial known that regenerates the slope of the original signal as it moves through the sample points. It is optimized in the time-domain — therefore, the impulse response is clean, the intertransient silence is absolute. It is the decoding software preferred by professionals — and it is available only from Wadia.

Wadia's new Sledgehammer output buffer provides 400mA of peak current drive with a 1300 Volts/microsec slew rate for a sound that is rich and solid.

The Wadia enclosures are machined from solid aluminum and heavy metal plate. The integrity and homogeneity of the enclosure is a subtle but important factor in performance. Any cross section of an electronic enclosure is a complex maze of eddy current, ground current and thermodynamic flows.

A World of Difference? A prominent recording engineer said it all — "With the Wadia, CDs have the musicality of the best analog sound, but with the added punch and impact, wide dynamic range, extended bass response, and freedom from noise that makes digital recording so attractive."
RAMESES LOUDSPEAKER
A new loudspeaker featuring all-
new technology has been an-ounounced in Australia. AMT Pla-
narsystems' Rameses consists of four towers standing six feet tall
and 16in. wide. Two of the towers contain the subwoofers, each side
containing two 10in bass drivers, the front baffle decoupled from
the internally braced ¼in Medite cabinet. The bass drivers feature
rigid alloy diecast frames, an edge-
wound voice coil for improved
dynamics and a rear-mounted pole
piece for extra transparency. The
diaphragm is made from a mixture
of resin and microspheres' sand-
wiched between two layers of
Kevlar. The other towers operate from 100Hz and above and are
constructed as dipole. Over 470
magnets per tower are mounted
on a rigid steel frame and decou-
pled from the diaphragm so as not
to resonate. Each panel is con-
structed in three sections which
operates as a point source while
maintaining its line source advan-
tages. Due to be launched at CES,
the Rameses will sell for Aus
$14,000; it will be followed by
smaller models. Audio Q Imports,
649 Burwood Road, Hawthorn,
Avon, NS2 I 6QI.

COUNTERPOINT'S
AFFORDABLE PRE-AMP
Counterpoint has introduced two new
valve hybrid pre-amplifiers: the 'New Generation Tube' SA-
1000 (£998) and SA-3000 (£2151) which employ valves in all
stages where voltage amplifica-
tion is required; some stage devices
support the valve stages to
improve sound quality and circuit
performance, and to extend tube life. Both units are full function
designs, with the SA-1000 featur-
ing auto-mute upon switch-on for
high end. The units are housed in a
chassis 19x4.50x12.68in (whd).
Absolute Sounds, 318 Worple
Road, London SW20 8QU.

CARDER WIDENS RANGE
Carver has announced a new line-
up of high-end products to com-
plement the company's CD player
already introduced to the UK
through its distributor.
On the speaker front, two new
models are available: the 1900
Silver Edition and the 2352 Plati-
num Edition Amazing Loudspeaker
which boasts 60in full-range rib-
don driver and 4 specially-
designed 12in long excursion sub-
woofers. A claimed frequency
response of 25-40kHz at ± 3dB is
quoted with 800W handling power.
The Silver Edition, mean-
while, features a 40in ribbon and
3 12in subwoofers for its 600W
handling. The models were first
demonstrated in the country at
The Hi-Fi Show and initial
response was very encouraging.
Also added to the Carver range
are two tuners: the TX12 (at £425) is a remote controlled
asymmetrical charge-coupled
detection FM/AM design with 20
presets, auto-manual tuning, dual
antenna inputs and stereo/mono
switch. The TX.11b tuner design
enjoys added AM facilities includ-
ing noise elimination circuits.
Headed the new Carver ampli-
plier range is the model Silver
Seven-t. At £950 this 550W mono
power amp accompanies its larger
Silver Seven Vacuum tube brother,
capable of 375W mono for
£1,700. These simultaneous high
current/high voltage monoblock
reference magnetic field designs
are said to give substantial low-
impedance load drive and ultra-
smooth tube perform-
ance. HW Interna-
tional, 3 Eden
Grove, London

WOODSIDE GOES DIGITAL
To prove that it has entered the
digital age, Woodside Electronics
has launched a separate digital to
analogue converter to accom-
pany its WSJ CD player. Flagship
units are the new Sonata which
begin with the Canadian-
designed Aria full-range virtual
point source planar. The same
dynamics and a rear-ported pole
source centred behind a tensioned
Mylar diaphragm. There is no
crossover or equalization in the design
and no delay lines or electronics
employed. Sumo products are now
being distributed in Britain by ATC
to whom all enquiries should be
addressed. ATC Loudspeakers
Technology Ltd, Gypsy Lane,
Aston Down, Stroud, Glos. Tel:
(0285 76) 561.

PATH REVAMPED
High end distributor Path Group is to create a new audio
division to concentrate on the Aragon, Mark Levinson, Proceed, Madrigal,
and Stax agencies. Path Premier as it will be known is to remain in
High Wycombe, while the accessories division, on which the
company was founded, will transfer its operation to Birmingham.

Path recently acquired the
rights to Madrigal Audio Labs' range which has added not only
Mark Levinson products but a new
'lower cost' range, Proceed, as well
as Madrigal HPC ('Helical Planar
Copper') interconnect CPC ('Co-
planar Copper') special audiophile
loudspeaker cables.

In an effort to achieve a flat
response at the eardrum rather
than at the entrance to the ear
canal, Stax has introduced its ED-1
diffused field equalizer. The first
model is suitable for the Lambda/
pro and Lambda Signature phones,
with equalizers for other Stax
phones to follow soon.
Also from Stax is the DAC-X11
(£8,000) outboard 20-bit D/A con-
verter with 8-times oversampling.
Featuring three coaxial and three
digital inputs, absolute phase
inversion is included in the design
specification which revolves around a complex mathematical
formula-based decoding technique.
whose algorithm corrects errors such as resistor tolerances.
A unique vacuum tube output of
12AX7, super cathode follower,
ensures excellent system isola-
tion. Path is also handling the aptly
named Aragon D2A 18-bit DAC
(£1595) designed by Mike Moffat
of Theta fame. The unit is fully
upgradable through its modular
concept permitting the latest in-
vogue decoding technique.

Three inputs, one optical and
two coaxial, are provided on the
D2A, together with absolute phase
reverse and 8-times oversampling.
Path Group, Desborough Indust-
rial Park, High Wycombe, Bucks,
HP11 3BG. Tel (0494) 459981

SUMO - NEW SPEAKER, NEW DISTRIBUTOR
With the announcement at the
HFN/R sponsored Hi-Fi Show that it is to introduce a new, smaller,
planar speaker to its range, Sumo is to have a new distributor in Brit-
tain. The Sonata, due in the UK
in mid 1990, is the second in a line
that began with the Canadian-
designed Aria full-range virtual
point source planar. The same
principles have been applied to
the new Sonata which generates
sound from a theoretical point
source behind a tensioned
Mylar diaphragm. There is no
crossover or equalization in the design
and no delay lines or electronics
employed. Sumo products are now
being distributed in Britain by ATC
to whom all enquiries should be
addressed. ATC Loudspeakers
Technology Ltd, Gypsy Lane,
Aston Down, Stroud, Glos. Tel:
(0285 76) 561.

HI FI NEWS & RECORD REVIEW
DECEMBER 1989

K K
The Original Musical Experience remains bound in our soul. Surrender your preconceptions about music reproduction.

Experience the performance.

JEFF ROWLAND DESIGN GROUP

Exclusive United Kingdom distributor
Gamepath Ltd
25 Heathfield
Stacey Bushes
Milton Keynes
Bucks. MK12 6HR
0908-317-707
Fax: 0908-322-704
Ref: 9401633 GAME G

Model 7 Differential Mode™
Mono Power Amplifier
The best examples so far of high-end electronics lines aimed at specific types of customers are the radically-styled, remote control separates from companies like Primare and Meitner. These products opened up the field to consumers who want high-end performance but don't want massive amplifiers, laboratory styling or hair shirt minimalism. Gryphon has decided to endow its new pre-amplifier with an identity by going in the other direction: minimalism at the limits.

This in itself is nothing new: there are plenty of facility-free, absolutely basic control units out there. What Gryphon has done is to create a wonderful contradiction. They've made minimalism luxurious. The Gryphon Pre-amplifier is the basic pre-amp for those who want peerless build quality, gorgeous styling, sensuous 'feel' and high-end cred. It is about as far removed from the ultimate minimalist product — a 10k pot in a coffee tin — as you can get without adding any non-essentials. The company describes its offering as: 'a state-of-the-art pre-amplifier for the absolute purist, but one who wants it to ooze quality and exclusivity'.

This unapologetic stance was emphasized by the inclusion of separate left/right stepped attenuators and separate left/right source selection. Because I hate separate left/right controls and broad-step attenuators, I must admit that its inclusion is a by-product of the design which is absolutely unavoidable; you have to accept this or look elsewhere. The Gryphon pre-amplifier is, like all Gryphon products, of true dual-mono construction and the only connection between the two channels is the face plate and a couple of spacers between the separate enclosures.

Gryphon has followed its Phono Stage and Head Amp with the all-in-one Pre-amplifier. Is it greater than the sum of its parts?

by Ken Kessler

All you see on the facia are, from left to right: left source select and volume, and right source select and volume. There's a Gryphon logo separating the two halves, and red fibre-optic cursor indicators, but that's it. The faceplate is a slab of black Perspex, while the knobs are engraved gold discs with rosewood centres.

At the back are WBT gold-plated phono connectors for gram, CD, tuner, tape, and auxiliary; two main outputs (for bi-amping or running two systems), and small screw-lock connectors for the power supplies. There's no tape loop by the way, so making recordings means staying away from the volume controls while the recording is in progress. Each chassis has its own earthing post and there's an additional socket above the phono input for accepting phono-plug-style loading resistors for establishing the correct values for moving-coil cartridges. Gryphon supplies various values plus a spare set for custom loading.

I should add, at this point, that I used the m-c version of the Gryphon, but it's also available as a line level only pre-amp or for m-m use. The line level, or m-m versions come with two heavily regulated and filtered outboard power supplies — again in keeping with the true dual-mono architecture — while the m-c version is powered by four separate supplies housed in small, beautifully finished enclosures and the leads are long enough to allow you to 'hide' them if such is your wont. Gryphon recommends leaving the pre-amp on at all times (advisable, as the warm-up period is long but essential) so you won't need access to the main on/off switches. There are no on/off switches for the m-c sections' power supplies.

The only other notable external features are the TipToe-style feet for superior mechanical earthing (coasters are supplied to protect your furniture). Also supplied with the m-c version is a clear Perspex tray, pre-drilled to hold the resistor plugs when not in use and a pair of white gloves to wear when handling the pre-amp. Apparently, the company can supply acrylic top covers for those of you who like to drool over glorious pre-amp internals; once you've looked inside a Gryphon, you won't think that the idea is so crazy.

The Gryphon is packed with quality hardware, starting at the front with the hand-made, Swiss, 24-position passive resistor volume controls. I can't see any company coming out with a 144-position, or more, pot at an affordable price and of reason-
When Bob Carver set out to design the new range of Carver Hi-Fi his goals were to create products with striking musical realism, that were different from the accepted design norms both internally and externally.

The Silver Seven-t perfectly demonstrates Bob Carver's achievements. A high power mono magnetic field power amplifier providing 550 watts into 8 ohms, from 20Hz to 20KHz with no more than 0.5% THD. When bi-amped in a stereo system, the mono design maximises channel separation and minimises distortion, and above all else, the Silver Seven-t provides a supremely accurate and musical performance.

The Carver range of amplifiers, CD players, tuners and speakers all share Bob Carver's principle — when it comes to hi-fi, they're uniquely better.
able dimensions. But Gryphon is absolutely unapologetic about this and the company is prepared to alienate the types of customers who find this a nuisance. Behind the volume pot you find one of the very few wire links in the Gryphon, as the majority of connections are direct – a result of the unit's compact layout. Behind the pot is the line pre-amp board, followed by the RIAA network, followed by the m-c board. Gryphon also supplied the blank board which is found in the m-m version so I could try my cartridges 'straight in', but I reverted to the m-c board because I needed more gain with the Roksan Shiraz and Tsurugi cartridges. The other half of the chassis, the area behind the source selector all the way back to the Gryphon, avoided the mains filtering network. Those who recall my review of the Gryphon Phono Stage and Head Amp in the March 1989 issue will realize that the m-c version of the pre-amplifier contains both of those items plus a line amp, while the m-m version of the pre-amplifier contains a Gryphon phono stage plus line-amp.

A number of concerns determined the design of the pre-amplifier, in addition to the adherence to dual-mono architecture. Other Gryphon obsessions include: fully discrete construction; the use of a non-resonant, non-magnetic chassis; mechanical earthing; star earthing; zero negative feedback; the aforementioned separate, regulated power supplies; modular construction with little or no internal wiring. (Upgrading is possible from line-only to m-m to c-c with easy-to-fit boards.) Although that list contains a number of buzzwords, non-importers will have no idea what the Gryphon is talking about. It is the out, which means packing products with 'designer' components. Instead, the design team opted for premium components, fashionable or not and, in some cases, custom components, including the C-core transformers, or items sourced from the computer industry.

Gryphon also devotes a sizable portion of the owner's manual to earthing techniques, some of which may prove awkward for those who have to run two separate earth wires from its turntables or tonearms to the separate left/right earthing posts. I can't really advise because this aspect of installation is entirely systems dependent. I earthed everything to one post and found no gains by adding a second channel on the phono earthing.

Even though the review sample enjoyed a run-in period through constant use at The Hi-Fi Show in September, I noticed that the sound continued to improve over the course of the three weeks leading up to my deadline. This was confirmed by both Gryphon and the importers Pure Sound. The ice-cold Gryphon sounds clinical to the point of edginess, while the warmed-up and run-in version sounds almost as lush and sweet as some all-value designs.

No interface problems were noted with the components I used, although the pre-amplifier seemed particularly fussy about the cables used between it and the DAX (but not when fed straight into the Counterpoint).

The only functions you have to deal with are source select and volume setting, and I learned that you soon get used to two actions where previously one would suffice. To eliminate the need to re-set the volume every time you change discs or LPs, the source selector's first setting, marked 'O', is a true mute. I used this frequently instead of the volume controls because the settings are hard to see unless the pre-amplifier is at eye level. Although the action is silky and positive, with an audible click at each setting, the gradual variations on the volume control are not that clear, and you'll often set the level only to find that one channel is louder than the other. As to the mute's convenience, it's one move away from the phono setting and two from CD; when you're using the auxiliary, you have to turn the knob 180 degrees. Perhaps Gryphon could follow Concordant's lead and put a mute in between each source setting?

---

Gryphon

Manufacturer's specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<td>Frequency response</td>
<td>16-15Hz</td>
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<td>RIAA tracking</td>
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<tr>
<td>Weight</td>
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</table>

Supplier

Pure Sound, 52 Green Lawn, Birkenhead, Merseyside L72 2DY. Tel: 051-645 6690

---

I was expecting the pre-amplifier to sound just like the phono stage head amp combination, which it did for a while. But, unlike the latter, which reached optimum performance more quickly, the Gryphon pre-amplifier, the unit under review eventually shed its cut-glass presentation. Detail retrieval was of a high order from the outset and it remained so throughout the review period, so don't think that the 'softening' involved any compromises. The top-end stayed clear and crisp, the transients maintained their 'attack' and desired edges, but the overall character acquired a warmth missing in the separate versions, regardless of the line stages. The Gryphon is sensational even before it reaches a state of grace. If it's possible for a hi-fi product to demonstrate one individual characteristic which creates its sonic identity – however good it may be in other areas – the Gryphon is a standout from initial switch-on because of its consummate control, or precision if you prefer. Images are rock-solid and positioned with the accuracy shown by a top diamond cutter. On a sonic rather than spatial level, the Gryphon produces bass which is shorn of any unwanted flab and it does this without truncating the desired decay of acoustically generated notes. What improves is the way that the occasional heavy-handedness is replaced with a more smooth and graceful approach. Vocals which were too crystalline – eg the majority of female country & western singers – acquire liquidity.

The final response is quite unlike the initial impression. Gone are fears that this is a northern European exercise in solid-state excess (have you heard what the Germans do with high-end solid state electronics?) The Gryphon manages to combine the analytical properties of reference calibre components with the musicality of high-end products.

The Gryphon earns a 'reference' tag because it is gloriously quiet and non-intrusive. Its soundstaging capabilities, especially with CD, are among the best: a deep and wide stage containing life-like images in a correct relationship to each other. Added to the exceptional speed, control and lack of smearing, these qualities are just what a reviewer needs when assessing other products.

What the Gryphon lacks, in comparison with some of its competitors, is absolute transparency. The sound of the Gryphon is mildly textured. It is not offensive and is noticeable only on sparse works, but solo parts, especially on cappella, at each end of the scale will show slight traces of grain. But this doesn't stop the Gryphon from being one of the four or five finest pre-amps I've ever employed. At £4995, the Gryphon is far from inexpensive but hardly outrageous. The performance, construction and components will place this in a thinly populated class. Which brings us back to niche marketing: the Gryphon pre-amplifier is the ultimate choice for the enthusiast who wants the sound with no frills other than the luxury imparted by the fit, feel, and finish.
"The Quietest, most coherent MC Step-up i've used."
HI-FI News & Record Review, England, March 89

"This product marks a new high, which is currently unrivalled."
SUONO Magazine, Italy, Oct. 89

"There is none of the unnatural characters that normally reminds you that you are listening to Hi-Fi."
STEREO SOUND, Japan, August 87

"It is quite simply, one of the finest blends of luxury and sonic excellence available today."
HI-FI News & Record Review, England, March 89

"The musical performance is pure "State of The Art.""
L'AUDIOPHILE France, March, 89

"One truly unique and superior quality of this Gryphon is the 3D-image. Your listening room expands, the walls dissapears and finally ... the original scene materializes ..."
SUONO Magazine, Italy, May 89

"I automatically stopped "testing" and started listened to music, perhaps that was the true magic of the Gryphon ... - it was simply so musical ..."
SONIC REVIEW, Hong Kong May 89

"The Gryphon is superb, inside out. Its genuinely musical. "The truth" that every Audiophile is looking for lies here in Gryphon ... - I love it!!"
HI-FI REVIEW, Hong Kong, July 89

Gryphon Audio Designs AFS, Hermodsgade 3A, 8230 Aabyhoj, Denmark, Phone 4586151588, Fax 458615533

Wadia 2000 and 1000 Processors

The American Wadia range is setting new audiophile standards for digital replay

by Martin Colloms

The 1000 and our first 2000 came with direct outputs, but later the 2000 was upgraded twice and we had a chance to try one with the latest buffer installed (Sept '89). At an additional cost, these buffers provide a low output impedance suitable for any load, including professional studio lines with balanced and unbalanced output connection. Again, the latest 2000 units have the buffer included.

All the processor decoders feature passive output filtering and de-emphasis, and have an absolute-phase invert switch on the front panel. They also have a black anodized finish (save the covers for the 1000 model) which did not appear to be particularly durable.

Technical details

The input selector section is merely a piece of buffering/amplification to logic level, plus switching. This unit's output, still SPDIF, is transmitted via a professional optical communications interface using AT & T devices, and a low-loss quartz optical fibre. Given some reservations concerning the usual domestic TOS link and its operating speed, the system chosen by Wadia is orders of magnitude better (up to 50 M-bit/sec data rate) and more costly.

The optical signals are received at the 2000, converted to logic levels, and fed to the industry-standard Sony CX23053 interface chip, which decodes the SPDIF data. Once the correct clock frequency has been identified and synchronized, the digital audio data appear on the TOS bus and are led to the DSP section. There the signal is oversampled and processed in a high-speed computer section, with two DSP chips per channel working in parallel at 36 MHz, functioning (in computer jargon) at a total rate of 72 MIPS. The PROM chips carry the proprietary filter software, with the first generation called 'Frenchcurve'. The output word-length is 36-bit, and is properly dithered to generate the correct 18-bit code for Wadia's own boxed DA converters working at 64 times the base sampling rate. These are 18-bit devices (or related types) and are described as transversal, summed multi-port designs incorporating digital delay-lines and with a claimed overshoot-free transient response. Fast summation of the coded audio voltages occurs, and neither sample-and-hold nor deglitching is required.

A unique aspect of the filter software is the mathematical algorithm for 'Frenchcurve', which avoids the brickwall multi-pole approach wherein ever-more stages are required to reduce pass-band ripple. Instead, Wadia operates in the time domain, seeking a best-fit interpolation, 'Digimaster' augments Frenchcurve with an extra computation which adds 2nd-order interpolation rather than a linear dot-to-dot bit optimized in the frequency domain. One consequence of this is an excellent impulse response, achieved at some sacrifice of ultrasonic filtering. 'Digimaster' increases Wadia's resolution and adds a low-pass filter to the output.

Sound quality

Usually I find digital replay disappointing, with a Goldmund player apparently showing more musical integrity as well as greater ease and better drive. Despite the limitations imposed by middle-grade encoding quality for much digital programming, an aspect we may hope to see considerably improved in future, CD replay via the Wadia showed signs of taking on my LP system. Although different in presentation, not least due to the differences in tonal balance, the Wadia processors began to stake their claim for a place at the high-end.

Vinyl disc replay typically suffers from a...
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mildly downtilted response as the frequency rises, with the region beyond 5kHz being subject to individual cartridge variations, and the octave above 10kHz also the region of further variations. Although meeting test standards at the disc rim, where the groove speed is highest and recorded 1HF wavelengths therefore greatest, the LP suffers inevitable tracing losses which define a treble cut of several decibels towards the end of a side, making the medium somewhat dependent on the velocity of recorded modulation in terms of both response and distortion. In contrast, whatever the intrinsic tonal characteristics of the digital medium, it does replay nominally 'flat' referred to the original master, with vinyl disc tending to sound duller, richer and more full-bodied by comparison. This fundamental difference has to be accepted, and makes it difficult to compare analogue and digital replay directly without paying a great deal of attention to flattening the PL response and avoiding heavily modulated inner bands. Yet despite these problems, the Wadia processors gained their spurs by demonstrating true high-end quality in comparison with state-of-art LP sound.

With the buffer in place, the 2000 showed more drive at LF, while less variation in performance was noted with different cable and amplifier combinations. A design goal for the buffer was attainment of this degree of load insensitivity, but it was felt nonetheless that the buffer did marginally detract from the sense of transparency and air. Tests made with the Masterlink cable set indicated a small but worthwhile sound quality improvement at every stage of cable substitution, used both independently and in combination. For some listeners these would represent the icing on the cake.

Most entertaining and thought-provoking was the difference in sound quality noticed in using the two types of filter when using the WD1000. With virtually identical steady-state frequency responses, the two filter designs sounded distinctly different both in merit and in character, vividly demonstrating the fact that filter design can materially influence the sound quality of digital replay. I wonder if those commonly-used one-chip digital filters are properly auditioned during their design? Certainly these differences lend credence to Wadia's concept of the possibility of further upgrading by filter substitution.

For the tests, bi-wired and bi-amped systems were employed, bi-amped Apogee Duettas were used. References included the Marantz CD12, the Arcam Black Box II, and an unrepeatable 'custom' Cambridge Audio CD1. CD transports ranged from a Rotel RCD855 to an Arcam Delta supplemented by a rotor-driven, high-linearity MD65 preamp (also included the Marantz CD85). Pre-amps included MF MXV II and a Krell KS3P. The main listening tests were conducted using the WD2000 as supplied, with all its power-supplies and interfaces, and most impressively was the WD1000 sample built in late 1988. The output was linear-phase and polar-rect, while the impulse response (Fig 4) is striking due to its near perfection and the absence of the usual FIR-art in this respect, and superior to a WD1000 sample built in late 1988.

Products such as the Wadia are helping establish a new standard of digital replay which is at last beginning to rival the mature audiophile circles. It is worth noting that these new multi-bit designs show that the technology is not in its death throes as some would have us believe. The Wadia standard is far above any current low-bit exposition, although the subjective bit-stream performance achieved by a Sony digital board does deserve recognition at its low commercial cost.

The WD2000 in its supplied Digimaster form delivered a highly satisfying musical performance. Compared with established digital replay, it provided a level of sweetness, purity and definition which most observers might find out of reach, in fact beyond the capability of the digital medium. The soundstage is solid, precise and very well focused; stage width was excellent, depth very good, and very high levels of ambience and atmosphere were retrieved. Incorrect levels can be recovered from well-known CDs. Consistently informative, this processor dealt with both simple and complex material equally well, with its very fine resolution and detail maintained in a most authorita- tive and confident manner.

Lab results
I am sorry to have to report that several inconsistencies came to light with the Wadia 2000 during the lab sessions. Our first sample successfully passed the listening tests and most of the measurements, but then developed a large DC-offset at the output of both channels. Before this, it delivered the reasonable linearity data plotted in Fig 1, representing the less perfect of the two channels. The second sample, equipped with the latest output buffer (but believed to be unconnected), showed the question mark. The results illustrated in Figs 2 and 3. The L/R linearity balance here is poor, with the left channel now demonstrating positive errors of nearly 4dB at and below ~90dB modulation, due to an upward kink in the transfer function at around ~75dB, while the right channel is below par (but in the reverse direction) below ~75dB, showing complete failure at the 16th bit (these are specified as 18-bit DACs). At ~88dB the error reaches a negative value of 26dB; but by ~100dB, with dithered input, there is a mild recovery to an error of ~9.6dB.

Previous measurements on an earlier WD1000 did not show exceptional linearity, and based on the evidence so far I am unimpressed by Wadia decoders' technical performance at low signal levels, especially considering the high prices involved. The low-level sinewave at ~90dB was too noisy to allow a good trigger point for signal-capture.

The output was linear-phase and polarity-correct, while the impulse response (Fig 4) is striking due to its near perfection and the absence of the usual FIR
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(finite impulse response) ripples generated by typical high-slope digital filters. This confirms Wadia’s claim that the time integrity of each data point was a definite design priority.

Wadia have their own views on frequency response (Fig 5). While it is sensibly flat to 15kHz (≈0.7dB), the rolloff is quite rapid thereafter to −2.8dB by 20kHz. Channel balance was well within tolerance and the main pass-band response was ruler-flat up to 7kHz. High frequency response, while DC-offset at −130dB on the same analyser bandwidth. One presumes that this is more typical of a ‘good’ WD2000. Overall signal-to-noise ratios were nevertheless fine.

Conclusions

I am sure that this review has not come out quite as Wadia would have wished. Given a smooth, well-balanced replay system, my preference was for the cheaper option – an unbuffered, Fenchurch-filtered WD1000. However, it is understood that the 1000’s brightness is considered unacceptable in some quarters, and that the high levels of spurious ultrasonic signals and output matching sensitivity made absolute judgment difficult. Add Digimaster filtering to a WD1000 and the result is more natural, smoother and sweeter, but in my opinion this is achieved with a significant loss of clarity and dynamic drive.

While there can be no doubt that the all-singing all-dancing WS2000 (Digimaster, with latest buffer stage) is a fine digital-to-analogue converter, and is inherently musical into the bargain, those listeners who heard the two were invariably drawn back to the standard WD1000. The full-specification 2000 does perform more consistently with a selection of vacuum and solid-state electronics, but is a rather unwieldy design.

While the engineering and physical build quality of the Wadias is to a fully professional standard, the barely satisfactory results for low-level linearity are a cause for concern in equipment of this price, and equally disturbing are the variations in linearity from sample to sample. Certainly neither of the more expensive 2000s showed evidence of 18-bit internal precision. In this respect I feel that Wadia have more work to do.

Yet regardless of these criticisms and reservations, it remains true that Wadia have set a new audiophile standard for digital replay.

---

**WADIA WD2000**

![Fig 1. Wadia 2000 (1st sample): linearity plot below −60dB, right channel](image1)

![Fig 2. Wadia 2000 (2nd sample): linearity plot below −60dB, left channel](image2)

![Fig 3. Wadia 2000 (2nd sample): linearity plot below −60dB, right channel](image3)

![Fig 4. Wadia 2000: pulse/polarity performance](image4)

![Fig 5. Wadia 2000: frequency response](image5)

![Fig 6. Wadia 2000: intermodulation spurious from 1920kHz at −10dB, log 500Hz-10kHz](image6)

![Fig 7. Wadia 2000 (2nd sample): spurious up to 20kHz associated with 1kHz tone at −70dB, right](image7)

![Fig 8. Wadia 2000 (2nd sample): spurious up to 100kHz associated with 1kHz tone at −70dB, right](image8)

**Test results**

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<th>Parameter</th>
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</tr>
</tbody>
</table>

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When the impossible becomes reality, history is made. The Aragon 24K preamplifier............
don't take our word for it - try it for yourself.
some months ago now, I reviewed the Apogee Duetta Signatures, and found them very worthy performers – truly high end products. It ended with me unwilling to let them leave the house! As a result, they were purchased and now form the basis for a second listening station. I utilized some skilled help to review the Duettas, but the technical data had to rely on measurements made in the laboratory.

Fortune, however, smiled on the Caliper project, as a group of HFN/RR review speakers was planned for anechoic testing and despite all logistical difficulties the Calipers were included in this. For the first time in this magazine, an Apogee review will contain frequency response and other measurements made in an anechoic chamber and, given the reputation and cost of these speakers, many technically-minded readers will be interested to see how well such speakers performed under conditions found in the laboratory.

The Caliper Signature is a new speaker derived from the existing Caliper model, in the way that the Duetta Signature is a derivative of the Duetta II. Although the appearance remains unaltered, improvements to the Caliper concern frequency linearity and tonal balance, and also an increase in sensitivity. When I last reviewed the standard Calipers I found much to commend but ultimately I felt dissatisfied with the lower bass which tended to thump excessively in my room. Some colouration in the upper mid and upper treble also disturbed the performance more than I would have liked considering the price level involved. Given these findings, the comparison with Apogee's own successful larger model might seem unlikely to show the Caliper Signature in its best light. But fortunately we were able to place the speaker in a group of other models, auditioned by a practised panel of six judges under unsighted conditions. The highly positive results of this test were later backed by the consequences of the worst rear wall reflections. The Caliper Signature is less efficient than the matching Duetta and, due to its smaller size, will not play as loudly or take as much power.

Considerable care is needed in fine-tuning the speaker axes of radiation, which must take account of the listener's own height as well as that of the favourite listening position. Fairly low-backed armchairs are recommended, upholstered in a light, absorbent material. High-backed leather furniture is the worst, leading to the creation of local reflections and thus disturbing one's perception of the soundstage. Stereo focus tends to improve with listener distance, with a sizeable 22-24ft room length representing the ideal for this model in my view.

Fine tuning extends to the minor angle presented to the listener, the spacing from the side walls and the rear walls, while noting that such a dipole may be placed nearer the side walls than can an equivalent box design. The vertical axis is the most critical, however, and to this end Apogee supplies a plumb line whose bob may be used to define accurately and match the exact degree of the soundstages required for optimum sound quality and tonal balance at the listening position. One or two degrees is significant in this context, an aspect reminiscent of the first series Quad Electrostatic. Rated at 100W per channel the speaker is quoted at 3ohms. This means that the matching amplifier will have to work pretty hard for its living, and the use of one of the higher current '4ohm'-rated solid-state models is clearly advised. At a relatively modest price level, a Krell KA80 is an obvious and excellent choice, but depending on the sound quality of the non-Class A Krells these may also serve well. My Goldmund Mimesis power amplifiers proved to be unsuitable for this 3ohm loading. Depending on the cable length, the quality and resistance of the cable run is also important, in terms of both power loss and fidelity, and must be accorded serious attention. Bell wire will most definitely not suffice for a Caliper! We tried bi-wiring, and liked the result.

For the auditioning, sighted and unsighted assessment was undertaken, with a source system including Krell KMA160 monoblocks, customized Musical Fidelity MXV and a Pink Triangle PIP pre-amp, custom silver wiring, a Goldmund Studio/T4/Koetsu Red Signature, plus CD source generated by a Cambridge CD1 and a custom digital decoder.

**Design and technology**

Briefly covering the principles behind this two way model: it comprises two vertically aligned, open backed elements; the smaller is a wide-frequency-range mid/treble ribbon which is effective down to at least 500Hz and freely suspended over its full height, aside from a single directivity-control clamp of low-mass foam. This bends the ribbon forward in the vertical plane, to optimize the perceived frequency response and directivity at the listener position. The mid/treble ribbon is of classic geometry, with a massive array of magnets on each vertical side. The second radiating element, the bass unit, is a large surface area Kapton film, horizontally corrugated to minimize bending in the vertical direction, and quite flexibly suspended on all four edges.

A high temperature rating film is used for both elements. In the mid/treble three vertically aligned conductors carry the same directivity-control clamp. In the bass unit, the large surface area Kapton film, horizontally corrugated to minimize bending in the vertical direction, and quite flexibly suspended on all four edges.
The summer of '89 will undoubtedly be remembered for its glorious weather but here at Acoustic Arts we will remember it for an entirely different reason. While many of our customers have been out enjoying the sunshine we have been surrounded by decorators, carpet layers and sound engineers! The building of a new second studio became paramount in order to meet the ever increasing demand on our listening facilities. The new studio has been designed to resemble a typical domestic listening environment. Such has been the rise of technical performance of hi-fi equipment over recent years that we felt very strongly that our own facilities should rise with them. We now feel confident that Acoustic Arts are one of the country's best equipped dealers to meet the challenge of the 90's. If you haven't been to see us recently please pay us a visit and we will be delighted to show you around and demonstrate the equipment of your choice in the new studio.

The landmarks this past year must surely be the new Krell range. The KSP-7B pre-amp and KSA-80, 200 and 160 power amps set new standards in being able to combine 'state of the art' sound quality with massive power delivery. Just put one of these amplifiers into your system and we guarantee it will transform it.

The most exciting new loudspeaker development is undoubtedly the introduction of a smaller and more affordable Apogee called "Stage". We have been amazed at the sound quality from this latest model and urge anyone who listens in smaller size rooms to audition this truly stunning new model. A true 'state of the art' product.

Lower down the price range we must mention the new Magneplanar 1.4 which is a huge improvement in standards but amazingly costs no more than its predecessor at £1098. The PS Audio 4.6 with a new power supply is also a big improvement and at under a £1000 is probably the best pre-amp around at the price.

Come and hear these and many other fine new products at our new showroom. You owe it to yourself to discover why people continue to visit us from all over the country in ever increasing numbers.

Among the equipment we stock and love:

Acoustic Arts Limited,
101 St. Albans Road,
Watford, Herts.
Telephone:
Watford 245250

Fax. No. 0923 30798
Open Monday-Saturday 9.30-5.30 p.m.

Acoustic Arts

World Radio History
these current sections lying over magnetic bars bonded to a perforated steel support plate lying behind the diaphragm element. While this technique is neither as linear nor as acoustically transparent as the free ribbon type, it clearly works well over the required frequency range.

Free from dominant resonances, both driver elements present an essentially resonant 5ohm loading and the linear phase design is completed by simple first order 6dB-octave crossover executed in top quality components, including all polypropylene capacitors.

As with the Duetta Signature, a three-position switch and equaliser is provided to control treble level. Further investigation of the Duettia left me confused by this facility, since it appeared to change the frequency response as well as the mid/ treble level. For both systems I preferred the 'normal' setting.

Caliper Signature may be bi-wired and certainly benefits from this; it does not have the Duetta facility for bypassing the crossover for true active operation. As regards the generating area, the bass driver measures 93cm high and is tapered, with an average width of 31cm. An area of 2,700cm² with a width of 31cm. An area of 3cm wide aperture. Electrical connection lends, with an allowance for average polypropylene capacitors.

In the bass the Caliper did not extend quite as deep as the Duettia, and like the Caliper did tend to 'sound' at the bass extremes, the degree dependent on the room size and the speaker/listener placement. However the 'one- note' effect of the original Caliper has been successfully avoided in the Signature. Interestingly, the Caliper now sounded a little faster in the bass than the Duettia, and in general the bass quality was considered to be a major strength. Like the Signature, the Caliper had the ability to reproduce all the elements of a percussive bass note as one sound; the edge, the slam, the crack and the bang. Beryllium and drive were present in abundance, the bass sound ing 'open' all the way into the midrange.

In the bass the Caliper did not extend quite as deep as the Duettia, and like the Duettia it did tend to 'sound' at the bass extremes, the degree dependent on the room size and the speaker/listener placement. However the 'one-note' effect of the original Caliper has been successfully avoided in the Signature. Interestingly, the Caliper now sounded a little faster in the bass than the Duettia, and in general the bass quality was considered to be a major strength. Like the Signature, the Caliper had the ability to reproduce all the elements of a percussive bass note as one sound; the edge, the slam, the crack and the bang. Beryllium and drive were present in abundance, the bass sounding 'open' all the way into the midrange.

Similar in frequency balance to the bigger model, and consistent with the optimum vertical angling, the Caliper was at times marginally preferred to the Duettia on treble sweetness, not a bad thing for a model which might have to partner a less costly amplifier.

Taken overall, the Caliper Signature did make the grade on all major aspects of sound quality including those areas difficult for panel speakers, namely tonal balance and neutrality. As regards musical detail and transparency, these were exceptionally good, and were allied to the lively musical dynamics. It is hard to place a value on such aspects, and this is where this speaker's particular technology demonstrates its unique performance, first seen in the very large and costly Apogees 'Apogee'. On the unsighted testing, the top scores attained were a clear recognition of this speaker's merits — in particu-
Mission Electronics and The Music Room have always been close friends and trading partners: our goals are so alike, musical impact and purism based on the minimalist approach to acoustical engineering. The current Cyrus range of loudspeakers, from the Cyrus One amplifier at £180 and the Cyrus 781 loudspeakers at £240/pair (now available in matching grey nextel finish) includes a musical CD player for a very reasonable cost, the PCM II. Using the refinements of Mission’s dedicated loudspeaker stands and cables, the overall result is an outstanding British system extremely affordable in the domestic market.

At a small extra cost, the Cyrus Two amplifier, especially with the outboard PSX (which also enhances the PCM II) can be matched to the Cyrus 782 loudspeakers, or for a more exciting, awesome, sound, one of the floor-standing models up to the £600 model 781 loudspeakers (some of the limitations of compact disc; sorry, but that is the truth as I hear it! There is no euphonic smoothing over from the 767’s, in fact the bass is so extended clean and articulate that you’ll hear for the first time not only the bass but the foundation for the entire musical spectrum, all the way up to a maximum SPL of 114dB). Phase coherency and image are positively “spooky”!

Mission has achieved the benefits of a small loudspeaker and a large loudspeaker, in one box. In truth, it is by placing the inner box (mid-range and treble driver) within the larger enclosure, and the design is intended to substantially reduce installation variables so as to achieve the designed potential within an hour of unpacking the cartons. Some high-end loudspeakers take infinitely longer to achieve their best possible results. So really, all that is left for you is to select is the finish (including piano black or white) and the finance house (is £179 per month too much to invest in music?). The Music Room will deliver and install, and give you the best trade-in, throughout Britain. Please ring for details.

On a slight digression, British readers may not be aware of a sensational acclaim for the Mission Cyrus 781 loudspeakers from Julian Hirsch. This is the most famous and fastidious Hi-Fi reviewer in the USA where they have plenty of their own loudspeakers, and at economic domestic prices, thank you. But the diminutive 781’s which cost so much more than highly respected domestic competitors got a review that placed the Cyrus product in a class of its own for purity and excellence. So Mission’s thoroughbred status in loudspeakers is not in any doubt!

Have you heard the Roksan Xerxes with the new power supply? If the answer is no, then you have not heard the Roksan Xerxes, even if you own one. Panic not, just bring your old supply and your cheque book to your nearest friendly Roksan dealer (preferably us) and we’ll install the brand new board. The continuing strength of analog in the real Hi-Fi (industry is nowhere better illustrated than the exciting new products announced by Roksan at the latest Hi-Fi Shows: the budget tonearm, the internal cartridge amplifier and the new speaker stands — all are products of true innovation and integrity which stand the test of time. Although we are well aware of the preference and excellence of many fine transistor amplifiers, from Arcam and Audiolab to mighty Krell (and the new KSA-80b is one of this great company’s finest statements) we increasingly advocate valve designs. The renaissance of vacuum tubes is no longer a dubious anachronism — today’s circuits prove that fears of unreliability or fragility are unfounded. And affordability has radically improved in recent years. We carry a wide range of British and American respected makes from Audio by Design, Beard etc. through to Counterpoint, EAR and of course Audio Research. What can we say about the latest Mk II version of the SP-97? We think that you will like it!!

We have the usual special opportunities of second-hand and ex-demonstration equipment, for example from Audio Research we have a used D-70 in Manchester (£1,295), an ex-demo SP-7 (£995), D-125 ex-demo (£3,495). We have a pair of EAR 549’s (for only £2,995) and the ultimate: an SP-15 (almost new) at £3,750 with Classic monoblock 150’s £6,250; free Audio Research Litzlink interconnect with the combination.

What ever your needs, from budget to the ultimate, our reputation is based entirely upon our unrivalled experience and your satisfaction. Over the festive season, make sure you are listening to a system from The Music Room — the certain way to have a Merry Christmas and a Happy New Year. As for our readers, we apologise for the background static if you have found it difficult to read the text — let us know your thoughts on the problem and if you like the colour Newsletter.

Vol. 5, No. 7

NEWSLETTER

December 1989

The Music Room, 50 Bridge Street
Manchester M3 3BN, 061-835 1366

The Music Room, 221 St. Vincent Street
Glasgow G2 5QY, 041-248 7221
The best way to appreciate the Counterpoint SA-12 is to look at it relative to the high end, not by comparing it to NADs or Creeks. Although this amplifier has been around for a few years, Counterpoint has continued to refine it in the way that Quad continues to refine its products: without making a big deal out of it. So although there’s no Mk II suffix, this beast is supposed to offer better performance and greater reliability than the early samples.

I’ve heard this amp enough times to know that it’s a perfect gap-filler between the sub-£1000 and £2000-plus amps. Its competition includes a host of British amplifiers as well as imports like the Aragons, so it’s not No 1 in a field of 1. But it does have some distinguishing characteristics which could create its own niche.

For one thing, the SA-12 is a valve/solid-state hybrid, which means that those who vacillate between the two technologies can be satisfied at both levels. The SA-12 employs four 100W MOSFETS per channel in the power stages, while all voltage amplification and output stage drivers are valve circuits (two ECC88s/6DJ8s per channel). The advantages are both musical and practical, because the valves offer their sonic merits where they matter most, while the MOSFETS – easily driven by the valves – can almost emulate the classic tube sound while delivering greater current. This is important, not just because fashion dictates that current capability is the yardstick for assessing modern amplifiers. Exotic speaker designs, the continuing popularity of small speakers with low sensitivity and narrow 'warm zones' not caused by the ECC88s.

The MOSFETS are driven by a cathode follower consisting of a single ECC88 per channel connected in parallel, the output of the drive stage being capacitively-coupled. Voltage amplification is derived from two cascaded common cathode amplifiers, using half of an ECC88 triode for each stage. Local feedback is used to improve linearity, while global feedback is returned to the cathode resistor from the first stage from the cathode follower drive stage. Biasing for the first stage is a mixture of fixed and cathode biasing. The SA-12’s output stages are kept out of any kind of feedback loop because the company feels that it sounds much better; it necessitated the use of MOSFETs normally found in switching power supplies for their lower output impedance when compared to the MOSFETs typically found in audio equipment. The SA-12 sports three, non-regulated power supplies.

The SA-12 is compact by prevailing high end standards, measuring only 480x113x322mm (whd). Counterpoint has a knack of producing hardware which looks both utilitarian and elegant at the same time, all very Californian, so the SA-12’s styling should please both the aesthete and the technoid. It can be rack-mounted in a standard 19in frame, although there are two-colour LED to indicate warm-up I’ve experienced, so any demo of the SA-12 should be preceded at least two hours’ worth of action.

The SA-12 is far and away, the worst sound I’ve heard from a cold component and I thought something must be seriously wrong. I could actually hear the amp improving as the temperature rose. Even the most expensive state hybrid warm-up I’ve experienced, so any demo of the SA-12 should be preceded at least two hours’ worth of action.

The first aspect of the SA-12’s capabilities to materialize was its effortlessness with suitable speakers. The SA-12 is an ideal choice for top-quality, small monitors. The most revealing test for this characteristic is the way it amplifies delicate signals – solo instruments for example – to exceptionally high levels without losing any sparkle and without manifesting any traces of being overdriven.

The SA-12 also excelled at ‘sounding big’, not just loud. Californian manufacturers have a penchant for truly holographic images and realistic soundstages, and the SA-12 — when paired with speakers capable of resolving the sensation of space — proved to be a champion in its class. Width and height were exceptional, while stage depth bordered on the unbelievable.

The music itself betrayed the hybrid nature of the design in a curious fashion. Instead of solid-state extremities and a tube-y midband, as I’ve experienced with other hybrids, the Counterpoint offered a linear transition from solid-state to valve sound, starting at the bottom end. The midband had the clarity and detail associated with fine solid state amplifiers, but the upper midband through the extreme treble showed the lushness and romanticism of all-tube designs. It’s hard to imagine almost-dry bass coupled with ambient-rich upper frequencies, but the SA-12 has it ... and I love it.

Suppliers: Absolute Sounds, 318 Worple Road, London SW20 8QU. Tel: 01-947 5047

Counterpoint’s SA-12 is long-lived by high-end standards. Does it still have something to offer?

by Ken Kessler

Counterpoint SA-12
ENvious Musicians SNEERed AT
His TeCHniCAL MaStery.
How WOULD They hAVE REACTed TO OURS?

When Mozart wrote his first Opera at the age of twelve it was a prodigious achievement.

No less prodigious was the display of sour grapes with which fellow musicians greeted it. Mortified at being outshone by a child they spread the rumour that he was really just a talented midget.

It's probably how our rivals will feel when they hear the new Technics RS-B755 cassette deck.

The radical new design offers a degree of technical excellence seldom heard in a cassette deck before.

Take the tape transport for example.

To achieve the sort of speed stability necessary for use with today's digital equipment, we've incorporated two features. A quartz-controlled, twin motor direct-drive. And a ceramic door to hold the cassette immovably in position.

So the only time you'll hear Don Giovanni slurring is at the end of the Champagne Aria.

To reduce distortion to a minimum we've included the latest Class AA electronics.

And because two heads are better than
one you’ll find separate heads for record and playback. It’s called “three-head” technology and has the advantage that you can monitor recordings as you make them.

And one other refinement you won’t find in many decks is Dolby* HX-PRO, or “extended headroom.”

Not a sign in Figaro’s barber shop, but a clever piece of circuitry designed to reduce high frequency distortion.

And don’t worry if you’re bewildered by the variety of tapes available nowadays. Just pop in a cassette and built-in sensors decide whether it’s chrome, metal or ferrichrome.

We’ve also taken the guesswork out of recording with a unique system called APRS. First it measures the musical peaks, then tells you the optimum recording levels to set.

So no matter what heights the sopranos reach, you still won’t hear any distortion.

One other sound you won’t be hearing is the infuriating click of the tape running out mid-way through a recording. The “elapsed-time” tape counter tells you exactly how much time you’ve got left.

Mozart, who didn’t get a chance to finish his last work, would have loved it.

Technics
For Music Lovers

Technics. Willochory Road, Bracknell, Berkshire RG12 4FP. Tel: 0344 853943.
The Cambridge Audio range has been relaunched in recent months, with new styling accompanied by claims for higher standards of build quality and reliability: the established and not entirely trouble-free CD2 CD player has now been replaced by the CD3. Naturally, it's based strongly on the technical design of its predecessor — in particular making use of the Cambridge solution for the 16-times equivalent over-sampling at the digital-to-analogue conversion stage.

The new design accepts both CD sizes and has facility for switching off the active section of the display. Up to 20 tracks can be programmed in any order. A compact and simple remote control handset is provided, which includes index buttons but lacks the popular 10-key, or more, numeric array for quick track entry. No headphone facility is provided, while a single stereo audio output is present. This is fixed at a nominal 2V level. Mains output is via a detachable three-pin IEC socket, while two digital data outputs are provided, one optical the other phono-coaxial. The display gives one set of numeric information at a time, ie track index number or playing time. These are rather primitive by current standards.

The CD1 flagship is overtaken. But does this player keep abreast of new rivals?

by Martin Colloms

mid-range, as well as a sweet treble, qualities which set it apart from the crowd. Put another way: it sounded less 'solid state' and 'electronic' than many other designs.

With an Accuphase-based merit rating of 84%, it beat the last production CD1 (78%) and, of course, the CD2 (67%). The mid-range is its strongest feature, and other aspects of its sound quality were also rated as 'good'. These included the bass, which remained comparatively tene- ful, whilst lacking the precision of a Marantz CD85, for example. A slight loss of slam was noted in the extreme bass.

As the CD3 is competitive in terms of the established models in this group (for example the Marantz CD85 or Sony 538), all these are now under pressure from budget newcomers.

Lab report

The old CD2 gave us measurement problems especially with regard to output spurious (HFNR August '87, April '88), but the CD3 review sample seemed to be pretty well sorted out in this respect. It did disappoint in one area, namely low-level linearity. While the high frequency distortion was very good at low and mid frequencies but, like the CD2, deteriorated to a poorer than average if still satisfactory 60dB by 20kHz. Perfect phase agreement was shown between channels. At full level, distortion was satisfactory. 6-10dB poorer than state-of-the-art but generally accepted to be inaudible nonetheless.

One minor area of weakness concerned HF intermodulation. Hand in hand with improvements in treble phase and focus, intermodulation has come reductions in IM distortion — with — 100dB possible at full level with some players. The Cambridge CD3 managed an average of 76.5 and 77dB respectively; rather poorer than the industry average. The indications are that the full bit resolution was not being maintained to the highest audible frequencies. (Figs.6.7.)

The output level was considerably above average at 2.8V. 2.92dB above the norm of 2V. Source impedance was a moderate 500 ohms. The output was nearer linear phase and was also absolutely phase correct. (Fig.8) At — 90dB modulation, the recovered sine-wave was not particularly linear. (Fig.8) showing an odd-order harmonic content to the left channel and with the output level measuring — 3.5dB left and right — 12.0dB. Intermodulation correction was excellent, the protection extending to 4mm gaps, albeit with a single click as if the player 'geared up' to accommodate such a massive data loss. Mechanical noise levels were rated as average, while it performed well in respect of shock and vibration.

Conclusion

 safe, while the CD2's promise of a more musical approach to digital replay has also been kept. The CD3 clearly owes much to the CD2, and possesses a notably 'creamy'

reached a measured 1.2dB (Fig.2), and the error remained at this level down to — 120dB. Some mild loss of rear stage focus and depth may result and we shall have to see whether future production CD3s can improve on this performance. In the manner of a number of 'audiophile' players, the treble response was rolled off slightly, reading — 0.35dB by 20kHz, with a touch more treble cut present when decoding emphasised recordings, now — 0.55dB at 16kHz (Fig.3). Good channel balance and response matching was seen. Channel separation was very good at low and mid frequencies but, like the CD2, deteriorated to a poorer than average if still satisfactory 60dB by 20kHz. Perfect phase agreement was shown between channels. At full level, distortion was satisfactory. 6-10dB poorer than state-of-the-art but generally accepted to be inaudible nonetheless.

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Conclusion

I am left feeling somewhat underwhelmed by this player, believing it to deliver only what the CD2 promised two years ago. The styling, finish, and build certainly all represent an advance; yet there is a disparate and the control buttons are insufficiently positive. On the test bench there are some strong points, yet one channel showed a poorer than average linearity, while the high frequency distortion could also have been better. Finally, sound quality: aside from the particular appeal of its sweet, musical mid-range it attained a good standard — sufficient to make it a worthy contender — but it did not make a successful claim to superior performance or value. Given further improvements in consistency as it enters volume production, it may be cautiously recommended. 

10TH NEWS & RECORD REVIEW

DECEMBER 1989
CD PLAYERS

CAMBRIDGE CD3

Fig 1. Cambridge CD3: linearity below -60dB, left channel

Fig 2. CD3: Cambridge linearity below -60dB, right channel

Fig 3. Cambridge CD3: frequency response

Fig 4. Cambridge CD3: dithered 1kHz sinewave at ~90dB, waveform below, distortion spectrum above (left channel)

Fig 5. Cambridge CD3: spurious up to 70kHz associated with 1kHz tone at ~70dB

Fig 6. Cambridge CD3: spurious up to 100kHz associated with 1kHz tone at ~70dB

Fig 7. Cambridge CD3: intermodulation spurious from 19kHz/20kHz tones at ~10dB

Test results

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<tr>
<th>Test Case</th>
<th>20kHz</th>
<th>1kHz</th>
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<td>Channel phase difference</td>
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World Radio History
These three integrated amplifiers all fall into the upper entry-level of the hi-fi market. But there the similarities end, for they exemplify very different approaches to the problems of providing value for money, and as such make an interesting set to review together. Briefly, the Orell is a ‘minimalist’ design, with controls restricted to input selection and volume; the Ariston (at £199, half the price of the other two) is also minimalist, but with the luxury of a remote control; and the ADC is fully featured, with tone controls, loudness switch and twin speaker outputs – and again a remote control.

Measurement results on the three amplifiers under test are given in the tables, but the reader is referred to the notes for details of some unusual test parameters.

ORELL SA-040SE

Looking first at the Orell SA-040 Special Edition, essentially this is very similar to Orell’s standard SA-040, differences being in the power-supply and a few circuit details, and more obviously to the case. Power output is up to 60W (from 45W).

Different amplifier design approaches make for sonic differences too in this intriguing group: the ADC 2080E, Ariston, and Orell SA040 Special Edition

by Richard Black

and an extra input has been added.

First impressions are pretty good, even before plugging the amplifier in. The case is made from medium-gauge sheet-metal (which did not resonate audibly), with a thick aluminium front panel, brushed and black-anodised. The volume control knob is of solid metal and feels businesslike. Input selection is by push-buttons, high-quality scaled units with a good life expectancy. A switch on the back of the unit selects m-m or m-c input sensitivity for the phono stage. Input connections are via standard nickel-plated phono sockets and outputs are from very large binding-posts–4mm sockets at the rear and a front headphone socket.

Under the skin, the amplifier has clearly been thoughtfully designed and put together, although some aspects are not ideal. On the plus side, everything is very neat, and should servicing be required it is likely to be easy; all the circuitry is on one single-sided board, with a minimum of wiring. However, the wiring to the loudspeaker terminals is run in particularly thin conductors and is connected to the circuit board via small push-on connectors. Also, closer inspection reveals that the printed-circuit tracks carrying the high current to and from the output transistors are not as wide as perhaps they have been.

Power is supplied via a large toroidal transformer and a sizeable bank of board-mounted capacitors for low-level stages. The amplifying circuits all use discrete transistors. All resistors are metal-film, with expensive Holcos (precision components with a very low excess noise factor) used in critical places in the phono stages. High-quality plastic-film capacitors are also in evidence.

Technical performance

As a line/power amplifier the SA-040 SE acquitted itself well. Power output exceeds specification (see Table), the low wattage figure into 2 ohms simply reflecting output protection circuitry which doesn’t operate fast enough to limit the peak output current. This is also quite healthy, and appears not to affect normal music programme. However, sustained output power is limited to a lot less than the rated figure as there is no proper heatsink, an aspect I don’t care for at all. Orell maintains that normal music does not run amplifiers to anywhere near full power for more than a few seconds at a time, but much pop material is more stressful than that, and I could imagine the occasional SA-040 failing at noisy parties. But classical-music-only buyers are unlikely to notice a problem.

Bandwidth is fine, within the ultrasonic region to a sensible value, and noise is OK. CD input sensitivity is lower than other inputs – a good point – but distortion figures are higher than on many amplifiers. However, given that at low and medium frequencies the distortion is mostly 2nd and 3rd harmonic, this is not alarming. At HF the distortion climbs and becomes of higher harmonic order, suggesting switching (crossover) problems. Output impedance is fine, but distortion measured via the ‘reverse input’ test I used is high (see ‘Notes on Tests’). Channel separation is not as good as it should be, especially at HF. As with the line input, distortion is mostly low-order, but the RIAA curve does a lot to reduce harmonic components while boosting relative IM, so that THD figures below 0.1% are preferable.

The m-c input (which goes through a pre-stage rather than a gain-boosted m-m stage) suffered badly from slew-induced distortions, which really should be avoidable with low-voltage, low-gain. Overload levels are on the low side at HF.

Subjective performance

This Orell certainly comes up to par via its line inputs. These sound clean and quite detailed, with no particular colorations I could discern. While subjective bandwidth is well extended. Some slight hardening at high levels, and a feeling that the 5th degree of detail was not being retrieved in quiet passages, are the only criticisms I could make.

Listening to LPs is a slightly less happy activity. Reflecting the rather high measured distortion levels, a certain amount of what might be thought of as ‘liveliness’ or ‘punch’ is in evidence; but in the context of comparative and bypass listening this clearly comprises unwanted additions. The effects vary with programme.
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World Radio History
On orchestral material I thought the sound lively but not quite as clean as may be wished — worse via m-c than m-m. Piano transients are made to sound a little slack. I used the instrument's textures confused by the m-c input especially. However, dense synthe-pop textures are well sorted out, and cymbals sound clear.

Conclusion

The Orell SA-040 SE is likely to please classical music lovers who use CDs for preference. Pop people who like their music very loud may encounter overheating problems (to be fair, though, I did blast the Cocteau Twins for a whole LP side with the case temperature not exceeding about 40°C). The phone/LP section I find lets the amplifier down, as it is not really up to the standard of the rest of the unit. I would suggest auditioning the phone stage for as long a period as possible, with programme you know well.

ARISTON AMPLIFIER

At under £200 for a 38W channel amplifier, one expects to find a basic budget unit with few real extras, and this is essentially what the 8040 provides. The most noticeable extra is the remote control, a slim cordless affair with eight buttons to select inputs, increase or decrease volume, and mute. The second most noticeable extra is the standard of construction, which is really excellent. The case is made of heavy-gauge steel, and the unit has the reassuringly solid feel of much more expensive pro-audio stuff.

Inside the case, the build quality is no less impressive. The Ariston is built on a single, double-sided, circuit board, on which the input sockets and output terminals (imo, as I would be directly mounted. This cost-effective feature means that all the sockets are on a horizontal panel at the back of the amp, so that plugs can be inserted with the unit in place on a shelf without the user being required to perform contrortions. A nice touch — which is not really up to the standard of the rest of the unit. I find lets the amplifier down, as it seems to me that almost all the rest of the unit is extremely well sorted out, and cymbals sound clear.

The Ariston amplifier just made its rated power into 8 ohms at 1kHz, falling 1W at 5kHz. The peak current, and the output impedance were all measured on a replacement unit, the results being included in the table. Bandwidth is very extended, indeed arguably too wide at the top end. The phono input has a slight shelf lift at low frequencies, extending up to about 750Hz at HE. The effect is really not offensive.

On the other hand, it is a cost-effective way of building amplifiers, and with reasonable quality op-amps such as are used here the results are usually acceptable. Indeed, I did only say 'slightly' coarse and by the standards of £200 amplifiers the effect is really not offensive. Subjective balance and bandwidth are good, and transients are reasonable — at least not distorted in the 'clicky' way that some designs manage. I would far rather have an honest sluggish transient than an artificially enhanced one.

The phone stage sounds very similar in character to the line inputs. For example, can be coarse, but bass instruments arc well defined and clean, and transients are slightly blurred and violin tone, artificialy enhanced one. I would far rather have an honest sluggish transient than an artificially enhanced one.

On both line and phono inputs, noise is fine and distortion low, the latter rising to around 0.1% at 20kHz but predominantly only 3rd harmonic. Phono overload margins are all quite high, extending up to about 750Hz at +0.5dB, but the effect would be extremely subtle in subjective terms. On both line and phone inputs, noise is fine and distortion low, the latter rising to around 0.1% at 20kHz but predominantly only 3rd harmonic. Phono overload margins are all quite high, extending up to about 750Hz at +0.5dB, but the effect would be extremely subtle in subjective terms.

The phono stage sounds very similar in character to the line inputs. Again, transients are slightly blurred and violin tone, for example, can be coarse, but bass instruments are well defined and clean, and voices come over well. Complex textures are quite clear, an area where many budget amplifiers fall down. Long.

| Supplier: Orell Electronics, 25 Nash Road, Wembley, Middx. HA9 3SA, Tel: 01-608 5890 |

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<th>Test results</th>
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<tr>
<td>W into Rohm, both channels driven</td>
<td>6dB 6dB 7dB</td>
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<td>W into 8ohm, both channels driven</td>
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<td>Noise, residual, vol at min</td>
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<td>Line in, rated power</td>
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<td>Phone m in, 1W out</td>
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<td>Phone m in, 1W out</td>
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<tr>
<td>Total harmonic distortion</td>
<td>0.2% 0.3% 0.7%</td>
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<tr>
<td>Phono overload levels, mV</td>
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<tr>
<td>Phono overload levels, %</td>
<td>70% 80% 150%</td>
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<td>Phono overload levels, %</td>
<td>1% 1% 1%</td>
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<td>Frequency response, 1kHz</td>
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<td>S/N, line in ( I kohm term )</td>
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</tr>
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<tr>
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<tr>
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<tr>
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<td>Phono overload levels, %</td>
<td>1% 1% 1%</td>
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</table>
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test is low at 1%. The switchable intrasource filter cuts by 5dB at 3kHz and attenuates sharply below that. The tone controls do what they usually do. Little to comment on, in fact.

**Subjective performance**

It didn't take very long when auditioning this amplifier to start feeling that something was missing from recordings I know well. The full bandwidth is there, with plenty of power in reserve, but the sound cannot avoid seeming rather flat and compressed, lacking life. These comments apply to all inputs, but more so to the moving-magnet phono input and yet more again to the moving-coil. The latter sounds sluggish and muffls transients struggling to get out. Using the m-m input I felt happier, but there is still an overall feeling that something rather subtle but important is being removed. CD's are quite well flattened, but sound a little coarse – although bass is well defined.

Listening for lengthy periods becomes slightly fatiguing, though actually not as much as with some amplifiers I have heard which make a better initial impression. In fact the sound is not actually bad, it is simply not very exciting. The remote control with motorized volume activation works well and ergonomically the amplifier is a delight.

**Conclusion**

One day I would like to come across an amplifier that functions like this, tone controls and all, yet sounds, say, like the line stages of the Orell. Then I could recommend a full-function amplifier with some real enthusiasm. I can certainly recommend this one on restricted grounds – it is well put together, likely to be reliable, nice to use, etc – but I do have reservations about the sound quality. If you don't crave the 'audiophile experience' you might well like this amplifier, but if you have once been spoiled by some of the best 'purist' products I fear you may be disappointed.

---

**NOTES ON THE TESTS**

There were some departures from common practice in the methodology employed. Phono responses were measured using a high-precision ±0.025% nominal to 50kHz RIAA network. This allows the use of square-wave test signals for instant evaluation of magnitude and phase anomalies in the response, and can also be employed for bypass listening tests on phono amplifiers. Phono distortion measurements were made with the input signal applied at constant amplitude through this network. Thus while 0dB for a m-m input refers conventionally to 5mV (0.5mV for m-c) at 1kHz, the corresponding levels at 20Hz and 20kHz are approx. 0.5mV and 50mV respectively, while the +15dB input level is roughly equivalent to the highest modulations found on disc.

Noise and crosstalk measurements were taken with the inputs appropriately terminated. I actually used an old cartridge (VMS 20) and a 150µF capacitor for the m-m load! Phono noise performance is specified both as signal/noise and as a noise-figure – the latter giving a direct indication of how quiet the amplifier input is relative to a cartridge’s inherent noise. A figure of 0dB indicates a perfectly quiet input, while 3dB represents 3dB more noise than that from the cartridge above. For a m-m device the measure s/m is 78dB rising to 86.5dB for m-c.

The most unusual measurement was of output impedance, using Tim de Paravacini’s method. I sent a signal of 1A RMS back into the output speaker terminals of the amplifier, via an 8-ohm source resistance. By examining the voltage across the output terminals with this current flowing, it is easy to derive the output impedance, while phase can be measured with an oscilloscope. The test also effectively looks at the feedback error-signal of the amplifier and gives a qualitative guide to open-circuit linearity.
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Occasionally one has the opportunity to examine a manufacturer's complete new range of loudspeakers, one designed to provide a logical progression of price and performance and stamped with the hallmark of consistent design and intent. Such is the situation here, as Mordaunt Short has chosen to deliver us its whole '3' series, comprising five models ranging from budget to middle price sectors. A link with earlier designs is indicated by the model suffix, which is roughly representative of the speaker it replaces; thus the new MS 3.10 supplants the MS10, the MS 3.40 the old MS40, and so on.

Priced at £100, the MS3.10 budget miniature reflex kicks off the range, closely followed by the MS 3.20 — a slightly larger version which is also reflex-ported and costs £130. The next price break comes at £180 for the MS 3.30, which is fitted with the larger of the two new bass drivers. A step to £230 brings in the MS3.40, a larger cabinet version of the MS 3.30, while the pièce de résistance of the series is the MS3.50 at £350. This is a compact floor-standing model using transmission-line loading.

The four smaller speakers require stands, and a matching range is available from the manufacturer, with graded sizes to provide a constant height for all systems. The stand design is worthy of note, consisting of a modular backbone whose height may be chosen in units of 22.5mm according to the partnering speaker, the structure being formed by assembling separate units of high-strength mineral-loaded plastic. Styling has also received attention: many stands are rather ugly, but the MS designers have taken quite a lot of care over this one. A spiked base is common to all versions, while the fixed-size top-plate should be bolted to the speaker's underside to form a safe integral structure. However, the stands were not supplied as part of the review package so I can offer no comment on their actual acoustic performance.

In addition to the new '3' series, other Mordaunt Short models remain in current production, including the established '100' series, now in revised 'gold' form. These earlier speakers range in price from £190 to £360, and come in a real wood finish. The flagship system, the 442/2, is now available in Mark II form at £1150.

All speakers enjoyed a full test programme, including our usual multi-axis anechoic measurements, room assessment, and comparative listening tests make in conjunction with a selection of recent performers such as the Tannoy E II Eclipse and the Celestion 3. Benchmarks included Rogers IS4a and Spendor SP2/2.
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This miniature is small enough to be placed in a variety of positions, with applications including sound reinforcement throughout the home. Under ideal conditions it should be stand-mounted at a height of 50-60cm, close to but not touching the back wall, and at least 0.5m from the corners. Measuring 28.5 x 17.5 x 20cm (hwd), this 5-litre system is bass-reflex loaded at 72Hz by a fairly large diameter (47mm) port 120mm long, and thus significant bass below 60Hz is unlikely.

Both drivers are protected by Positice thermal resistors which switch rapidly to a high-resistance state if the average RMS current input exceeds certain limits. If it is overloaded the bass unit’s upper rolloff and one capacitor to block LF from the tweeter, the latter a 2.2µF low-cost polypropylene film. Internal connections are made with push-on connectors and standard stranded wire, with binding-posts provided externally, not bi-wired. The enclosure is made from plain 12mm MDF reinforced baffle. It is vinyl coated and an absolute minimum of polyester fibre absorption is used inside.

Sound quality

Understandably, a speaker as small as this has little extension to low bass frequencies, but may still give an adequate impression in the upper bass range if properly designed. The MS 3.10 can certainly be regarded as bass-shy, but there was sufficient LF to convey some of the flavour present in lower registers. This impression was aided by a treble which was both sweet and subdued. When small speakers are too bright, one can easily gain the impression in the upper bass range if the mid-range proves a contentious area in an uncompetitive sound when compared with recent references we have tested in the same price range. For example, the bass was considered to lack a full measure of tune-playing ability and appeared uneven; dynamically it could not keep pace with the subjectively ‘faster’ mid-range. Through the treble the sound was smooth enough, but it lacked distinction in terms of both clarity and sparkle. Also, the speakers did not focus particularly well in the stereo sense – an area in which many small boxes excel. Stage-width was rated as average, and although mid-range ambience was undoubtedly good, the overall level of soundstage depth was unexceptional. On overall merit this design scored rather below average at 4.5.

Lab results

The axial response at 1 metre is not promising (Fig 1a): flat from 100Hz to 3000Hz, it rises by 8dB to a sort of plateau at frequencies above 1kHz. If it is really intended for wall-mounting, such a response step need be only 2-3dB. The response is unacceptably lumpy, with the upper range prominent at 1.2kHz, 4kHz and 15kHz. However, the left- and right-hand samples showed good agreement, with typically ±0.5dB pair-matching save in the region of 4kHz, where the difference approached 1dB. Estimated with difficulty at an average sensitivity of 87dB (1W, 1m), the bass response referred to this was rather curtailed, measuring ~6dB at 4kHz. As expected, the grille has very little effect on the response.

Moving out to 2 metres and smoothing the response with 3rd-octave equivalent averaging, the bumps were rounded over but still remained, while the tipped-up overall response is plain to see (Fig 1b). In fact the output in the forward direction has resolved to an upper-mid plateau spanning 1-5kHz, elevated by 2dB in relation to the mean level in the 7.1kHz range and by some -6dB above the lower -3dB. A speaker this size, but the lateral off-axis responses are well integrated, as they should be in such a compact design.

This speaker offers a particularly easy load, never falling below 9ohms and averaging 12, with the port resonance some 5-25Hz (Fig 1c). Driven to 96dB spl (rather taxing for the size) the 2nd-harmonic distortion averaged 1%, while at frequencies above 100Hz the 3rd-harmonic was commendable at 0.5% (Fig 1c). But below 50Hz the 3rd-harmonic rises rapidly.
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Measured by multiple averaging in the
listening space, the RAR output (Fig 1f) is
characterized by a serious upper-mid
prominence at 1kHz. Relative to this
region both the treble and lower mid-
range are depressed, the latter too much
so for sufficient augmentation from
boundary-wall loading. Thus the mid re-
sonance remains thin and forward, and the
trebles slightly dull, while the bass picks up
as a subdued lump between 50 and 80Hz
— the underdamped reflex-port range.
Aside from subjective considerations of
dynamics or clarity, the room curve
describes the 3.10 sound pretty well. Just
a few decibels less in the 1kHz range
could make all the difference.

**Conclusion**

At £100, some aspects of this design are
good, the finish and build quality are fine,
could make all the difference. In any case,
budget speakers are often a trade-off of
one parameter against another, and this
blend might well agree with your taste.
On overall performance for price it is
worth considering.

**MS3.20**

Second in order of ascending price, the
3.20 is competing with models such as the
Tannoy Eclipse E11. In simple terms it is
simply a 3.10 with more cabinet height,
perhaps a minor crossover revision, and a
front moulded reflex-port. Nevertheless,
its performance was found to be rather
different from the rest of the MS range.

A two-way design, its bass-mid driver
(as in the 3.10) is a steel-framed unit of
155mm overall diameter, effectively
100mm. A simple two-element crossover
operates at 5kHz or so, where the 19mm
plastic dome-cone Audax unit takes over.
Used wisely, this tweeter is pleasant
enough, though more advanced metal-
dome drivers are becoming popular in
this price range. The — 6dB point relative to
87dB was still high at 72Hz, and the useful
in-room response did not go much below 68Hz.
The response shelf in the mid-range
remained with this model, but almost at a
believable level for near-to-wall position-
ing. In addition, the treble was seen to be
in fair balance with the mid. Pair-matching
was fine, ±0.3dB except at 2.2kHz, where
a minor 1.5dB error appeared.

The response dips as usual in the vertical plane, but the
lateral responses are decently tidy. A
straight-ahead position is probably opti-
mum for this model, rather than angled-
in towards the listener. With the room-

**Sound quality**

While my opinion the 3.20 is the most
successful of the new MS group, and this
was reflected by the panel score which
was a respectable, above-average 52% —
promising at the price. At low frequen-
cies, it offered a distinct improvement
over the 3.10, the reflex tuning sounding
more integrated and comfortable. Bass
was even and lively, with lower coloration
and better tone-playing.

While the mid-range still had a charac-
teristic forwardness, with a mild 'ow' type
coloration present, it sounded better balanced and more manageable than in
the 3.10. An odd contradiction was seen
through the mid-band, where dynamics
and musical detail were impressive,
associated with a free recovery of ambi-
ence and space, yet the sound still lacked
a natural touch of presence and openness,
with one panelist noting a 'thickening'
and mild 'cardboard' coloration.

The treble sounded a touch livelier and,
which was fine, ±0.3dB except at 2.2kHz,
where a minor 1.5dB error appeared.

The treble was seen to be
in fair balance with the mid. Pair-matching
was fine, ±0.3dB except at 2.2kHz, where
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averaged response (Fig 2f) the 1kHz prominence still presents a problem, but while the overall plot focuses on this region, it is fairly balanced on each side. The reflex resonance looks prominent on this graph, but didn't sound too bad in practice. Good mid/treble integration is apparent, even if the lower treble is still a bit on the depressed side. Offering a very easy amplifier load, the 3.20 averaged 12ohms, and both this and the 3.10 could have been realigned to 6 ohms to the advantage of voltage sensitivity.

As expected, the distortion results (Fig 2d/e) are similar to those for the 3.10, more than satisfactory at 80dB sps and acceptable for the size at 90dB. This is rather a tough test for a small enclosure.

Conclusion
Of all the speakers in the new MS range, this model shows most clearly the designer's intention regarding mid-range clarity and dynamics, and exploits them to best advantage. It sounded the best balanced, and was certainly the least coloured and most neutral. By scoring 'average' at a price well below the industry's average, this speaker does offer good value and is recommended. But since it remains rather 'characterful', personal audition is still advisable.

MS3.30

With this model, MS moves up a gear with a change from the 135mm bass unit to a 210mm driver: a well-tuned unit featuring a new diecast frame, and fitted to all three of the larger MS speakers. In this two-way system the bass is partnered by a 210mm driver: a well tooled unit featuring a new diecast frame, and fitted to all three of the larger MS speakers. Along with the 3.20 one on the other, it was the best balanced of the group and did not draw undue attention to itself. Demonstrating above-average musical dynamics, clarity and recovery of ambience, the 3.30 nonetheless suffered significant coloration. I can attempt to describe this, but the listener must ultimately judge for himself. While some 'flat' low-coloration monitoring speakers have proved bland and undynamic, I believe that minimal colouration and a neutrality response are nonetheless pre-requisites both for a natural sound and for accurate perspectives.

The 3.30 sounded 'thickened' and 'shut-in', string-tone was syrupy and over-resonant, while spoken voice had a rounded, boxy quality, with associated related colorations: 'tube' and 'cardboard'. Upper-mid sounds could appear hardened with a 'compressive', forced quality. Despite mild wooden coloration effects the bass was fairly tight, with a satisfactory rhythmic aspect. Surprisingly recessed, the treble range was clearly of fine quality, but was so laid-back as to attract little comment. Once again, stereo focus proved to be a weak area.

Lab results
Measured on the median axis at one metre, this speaker presented an unusual response (Fig 3a). Up to 400Hz the plot is very uniform, with a sensitivity of 87.4dB/W. Above 600Hz it steps up by +4.5dB to 92dB, where an average sensitivity rating of 90dB was indicated. Above 6kHz the output steps down to the original level and is perfectly maintained to beyond 20kHz. I cannot approve this kind of plate, a 4dB table extending across what amounts to three octaves of upper-mid and lower treble, and I am sure that it must dominate the sound quality assessment. Even with 3rd-octave smoothing at 2 metres (Fig 3b) this kind of anomaly cannot be blended in satisfactorily. Based on a 500Hz average reference point, the usual ±3dB limits spanned only ±71Hz-850Hz, although another +1dB does extend the range to 8kHz. Based on 90dB subjectively weighted sensitivity (in fact MS's own specification), bass extension was poorer than average at 65Hz for ~3dB. Pair-matching was excellent: ±0,3dB.

Off-axis measured at 2 metres, the
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responses show more loss than usual in the presence range, particularly on the vertical axis (Fig 4b), and listener-speaker height was indeed noted as more critical than usual during auditioning. From the room multiple average plot (Fig 5c) it is clear that the upper-mid plateau is a major feature, centred on 1kHz and rising 5dB above the adjacent averaged bands. By comparison the presence range is depressed, with a still greater and excessive rolloff in the upper treble, even if the HI fall-away is desirable smooth. Compared with the mid-range the bass is subdued, but holds out as something of a lump at 50-80Hz, with a sharp rolloff below 50Hz into the next 3rd-octave band at 40Hz. Viewed overall, such an unbalanced overall room/energy response is bound seriously to affect sound quality.

On impedance, the 3.30 again represents a 'superficial inaccuracies', and failed. For me, the measured and heard tonal and coloration imbalances were too obvious and tended to be a matter of taste. The tweeter was very sweet - perhaps too suggestive of scant box lining material.

Significantly worse than the 3.30, this speaker sounded duller and more coloured. Even more disappointing was the progressive loss of clarity and ambience, both of which were felt to be the strong points in the 5.20, scoring a below-average 4½. It was only too easy to find fault with this model. Orchestral strings sounded forced and too 'stringy', while mid colorations included 'dulled', 'thickened', and 'veiled' effects, with clear alteration to the natural quality of voices and percussive sounds. When the mid-range is so obviously characterful I find it hard to deliver a verdict; such speakers tend to be a matter of taste.

In the bass it sounded a touch under-damped, mildly lumpy but still reasonably quick and tuneful; some 'reflex' tube colouration was evident in the upper bass, suggestive of scant box lining material. The tweeter was very sweet - perhaps too sweet and lacked life and air in the final octave. With analogue disc the overall sound effect was too rich and slow, and was only just acceptable on CD. A hint of good inner dynamic performance was evident in the mid-range, but the overall sound suggested a distinct lack of pace. Stereo focus was below par, ambience just average, and both stereo depth and stage width were unsiringp.

Conclusion

I cannot see this design as successful. I tried to follow the instructions and listen for the 'flow' of the music, ignoring 'superficial inaccuracies', and failed. For me, the measured and heard tonal and coloration imbalances were too obvious and too obstructive for the music to begin to flow. Who knows, this sound might become an acquired taste for some; but as it stands I cannot personally recommend the MS.40, though the overall rating does suggest that it is worth considering.

MS 3.40

Given our complete coverage of this range, I am confident that the 3.40 may be regarded simply as a taller version of the 3.50 - 12.5cm taller to be precise. The port has been enlarged to 7cm in diameter, but the reflex tuning point remains much the same.

Reinforced by an 'H' brace, the enclosure is built from 15mm undamped chipboard, and encloses a volume of 25 litres. A single layer of polyester wadding is placed at the back and the reflex-port measures 10mm long by 70mm in diameter. Port noises due to turbulence at high airflow levels are reduced by the moulded, radiused frontal aperture. As in the 3.50, only one crossover component is used, a polystyrene film-capacitor to the treble unit - the latter a special 25mm aluminium-alloy dome. Postice protection is included, and the recommended placement for the cabinet is 15-40cm from the wall, stand-mounted.

Sound quality

Significantly worse than the 3.50, this speaker sounded duller and more coloured. Even more disappointing was the progressive loss of clarity and ambience, both of which were felt to be the strong points in the 5.20, scoring a below-average 4½. It was only too easy to find fault with this model. Orchestral strings sounded forced and too 'stringy', while mid colorations included 'dulled', 'thickened', and 'veiled' effects, with clear alteration to the natural quality of voices and percussive sounds. When the mid-range is so obviously characterful I find it hard to deliver a verdict; such speakers tend to be a matter of taste.

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Lab results

Pair-matching was good, quite an achievement in view of the slow effective crossover rolloff rates. As seen with the others, the output is uniform on axis to 5kHz and then steps up by 4dB over the upper-mid and lower treble region (Fig 4a). In this design the treble looks a little better balanced on the axial response, but reference to the family of off-axis curves taken at 2 metres (Fig 4b) suggests that, like the others, this design is strongly mid-dominant and comparatively weak in the treble range. A typical 'subjective' sensitivity of 90dBW was indicated, with a modest LF extension to 5kHz for 0dB, the latter continuing to 5kHz under practical listening room conditions.

Even more disappointing was the progressive loss of clarity and ambience, both of which were felt to be the strong points in the 5.20, scoring a below-average 4½. It was only too easy to find fault with this model. Orchestral strings sounded forced and too 'stringy', while mid colorations included 'dulled', 'thickened', and 'veiled' effects, with clear alteration to the natural quality of voices and percussive sounds. When the mid-range is so obviously characterful I find it hard to deliver a verdict; such speakers tend to be a matter of taste.

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This is the largest of the new MS range, comprising a floor-standing model, and as no price supplement for a stand is involved the notional price gap of £120 between the 3.40 and 3.50 is reduced to £70. Based on the same driver line-up as the smaller model, the particular feature of this design is its use of transmission-line loading, which can be regarded as a variation on the port-reflex theme.

A two-way design, the 3.50 uses the new Mordaunt Short drivers, the 210mm die-cast chassis, polypropylene coned bass-mid unit (intended for crossoverless direct-coupling to the amplifier), with HIF handled by the MBE-built 25mm dome. In theory a transmission-line can provide a perfect reflectionless termination for all the unwanted energy from the back of the bass driver. But such a line must be physically very large if a good LF performance is required, and practical solutions involve a folded labyrinth or duct in a box enclosure, where the far end is left open to act as a reflex-port. Acoustic absorption down the line is critical, since harmonic or pipe-mode resonances will easily develop, which can produce audible colorations in the bass and lower mid-range. In the 3.50 the designer has chosen to maintain efficiency by using very little line absorption.

Sound quality

Being the largest and most expensive in MS's new series, the 3.50 should sound the best; but in the event it returned an overall subjective score of just 43% — well below average. Yes, it did offer more bass and greater extension than the smaller models, but at a serious cost to detail. This small transmission-line design to be underdamped, with some common character traits were observable as linking the larger models in the mid-range, but the '50 had more box and panel coloration, presumably in proportion to the greatly increased cabinet size. This coloration filled out the lower mid-range, helping to improve the total balance in a superficial manner, but this gain was achieved at the expense of clarity. The 3.50 was demonstrably the slowest and least informative of the range; dynamics were muted and the sound was muffled, exacerbated by a clearly deficient upper treble, a feeling increased by the enclosure's floor stance.

Lab results

All the evidence suggested that this transmission-line is seriously flawed by internal resonances. The axial response (Fig 5a) shows more extension than for the smaller speakers, measuring 50Hz for in-room bass and with a —6dB point at 5kHz anechoic. But what about the axial notch at 120Hz? Below the axial response trace I have shown the output from the port. The intended energy here lies in the 25–50Hz range, confirmed as the reflex resonance on the impedance curve at 33Hz (Fig 5c). The peaks above 80Hz from the port should not be there, or should be at a far lower level. Clearly the 120Hz axial dip and 210Hz 'triple' are associated with undamped resonances in the line. The 120Hz mode shows as a glitch in the impedance curve, while the uneven distortion traces (Figs 5d/e) also show suggestions of line misbehaviour. On the RAR (Fig 5f), the system's mid-dominance is overbalanced by an excess of bass, with +7dB typical from 30Hz to 80Hz, the 120Hz axial dip is deepened by the usual floor-mode reflection notch. The treble remains depressed.

Conclusion

Arguably this was the least successful of the batch. The attempt to build a low-cost transmission line speaker has apparently resulted in a thick, muddled and coloured sound, whose character is all too easily objectified in the technical evaluation. Given the correlation between the listening and lab results, these findings have strengthened my belief in the fundamental value of a well-balanced programme of speaker measurement. It remains true that some speakers which measure well are rather ordinary to listen to, but serious design flaws remain easy to pick up using competent lab assessment. I am sorry to have to accord the MS3.50 a 'not-recommended' status.
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Three-head machines, at varying prices from three of the best-known cassette deck specialists:

Aiwa, Denon and TEAC

by Chris Bryant

There's no doubt that the popularity (indeed the very existence) of the hi-fi cassette recorder is due to the use of successful noise-reduction systems. The ever-popular Dolby-B system continues to flourish, while Dolby-C is now also found on the vast majority of hi-fi cassette decks. Other systems have come and gone, but Dolby continues to hold the dominant position, and although far from perfect it must be considered good at improving hiss levels without degrading sound quality too much. Soon, Dolby-S ("Spectral") is to be launched and an improvement in sound quality too much. Soon, Dolby-S will set it back on the road to stardom. Gone is the quirky and (to some eyes) garish style of those earlier years, the styling now having fallen into the corporate line of industry sameness. If the new Aiwa has anything that no one else offers, it is not evident on the surface.

All the normal tape controls, such as fast-forward, rewind, pause, play record, are made available from the main action. Tape type selection is automatic, and types I, II and IV are covered as usual. The calibration procedure for bias and recording sensitivity is not aided by any internally generated tones, but one can of course adjust the bias by ear while listening to music, using the tape-source monitor switch for A/B comparisons. Alternatively, Aiwa suggests the use of FM interstation noise, with the record-level control set to achieve a -20dB reading and the bias then adjusted for minimum audible differences between source and tape. A noise track on a test-CD is also useful for this, but if you stick to one brand of tape this chore won't often need repeating. The calibration record level should be set so that there is a 0dB reading independent of source or monitor setting.

Dual-concentric input-level controls are provided, with the signal coming from either one or other of two pairs of input phono sockets on the rear panel — one for either one or other of two pairs of input phono sockets on the rear panel — one covering CD/DAT direct, the other being the normal line-in. Only one pair of line-input phono sockets is available, and none are gold-plated. The four-digit electronic counter is connected to a memory facility to actuate start or stop at a desired point in either recording or playback mode. A timer facility is also available on a 5-position switch and operates when the mains is switched on and will put the

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The variable output headphone socket has a gold-plated earth connection, basically a styling feature to enhance perceived value. The peak-reading meters and tape-counter are contained in a single fluorescent display, the meters ranging from —20dB to +10 in ten steps — but with readable accuracy the 0dB point. The tape-source mode is indicated by LEDs — green for tape and yellow for source — while Dolby-B is similarly denoted by green, and ‘C’ by red.

Construction is typical for a £250 unit, with the case made from fairly thin plastic with a finish made to look like satin-black. The front panel is of plastic with a finish made to look like a brushed-alloy extrusion. The cassette transport uses AMT (anti modulation tape stabiliser) consisting of a sprung plastic pad within the loading-drawer which applies pressure to hold the cassette firmly, while a dual-capstan ensures correct tape tension. The two-in-one record replay head uses PC-OCC coil wire, and the two-motor transport is made from pressed-steel and plastic, with an integral PCB to minimize wiring. The head assembly is well protected on two boards sitting at right-angles, with multiway plug connectors joining everything together. The board carrying the audio circuitry is located close to the base panel, with the other accommodating the front-panel switches and display. The circuitry is conventional, using a mixture of discrete transistors and chips, with components of standard quality. It's all very straightforward, with little clutter.

Lab report

Azimuth error was only slight andWow and Flutter very good. Replay noise is about par for the present day course; indeed, there isn’t much to complain about — better than 50dB without Dolby on decent tapes, with successive 10dB improvements for each of the Dolbys.

Evidently the most important part of any cassette tests are the frequency responses for various types of tape. At 0dB the responses on all types were much as expected, metal (type IV) providing greater extension at HF, but all fairly flat through the mid-band, with bass ‘wrestles’ well controlled. At —20dB the story is much the same, except that all tape types show the expected greater HF extension at this more representative recording level (Fig 1b). The record replay response using type II tape (chrome) is exceptional, being within +1dB from 25Hz to 16kHz. But that is without Dolby, and unfortunately the response plots with Dolby-B and Dolby-C (in type II tape) show mistracking of a degree which is out of place on a £250 machine.

Sound quality

For the listening tests the programme comprised all tape formulations and available noise-reduction systems, but particular attention was paid to metal and chrome listening without Dolby, and to a regiment of difficult commercial Dolby-B encoded prerecorded tapes. The reason for this is simply that I prefer the sound without noise reduction, with Dolby-B almost always preferred to ‘C’ but both seeming to affect dynamic integrity.

On the Aiwa, pre-recorded tapes demonstrated respectably good slam and dynamics, with a useful and tuneful bass which is quite quick and rhythmic. The mid is fairly sweet and detailed, with good separation and individual instruments and vocalists well articulated and pulled out from the background. If anything the mid is slightly forward, but not excessively so, and it always seemed to remain in control even on difficult pieces. The treble is sweet, not hard at all, and there is good width, a solid soundstage and some depth.

With self-recorded Dolby-B tapes there is good preservation of detail, but it is just a little ‘electronic’ in comparison with no Dolby. This manifests itself in slight lightening, and some thickening with added grain. The sound looses a little of its natural air and starts becoming too hard and processed, with a hint of glare. Bass dynamics were also slightly altered. Dolby-C I didn’t like, but this was probably due partly to mistracking magnified with the ‘C’ treatment. The reproduced sound was rather synthetic, with a peculiar balance and much altered dynamics.

Using type II tapes and no Dolby, the bass is just a bit flat and overblown, but it preserves quite a slamming and maintains pace and timing in some proportion right up to the mid-band. There is a quite natural quality on both male and female voice, not accentuating any one area and with bouncy bass. Mid-range focus is strong and it has good width and depth. The stage is solid, without the wandering of instruments often found on lesser decks. The treble has some gain and is just a little tizzy, but so arc most cassettes, and as the medium goes this is good. Stage width is slightly narrowed, but on a decent hi-fi system it maintains some depth.

Metal tapes (type IV) were slightly preferred, adding a touch of extra performance in all areas, but the advantage over chrome was fairly small. Ferric types (type I) were also well handled, but there was some loss of definition and clarity.

Conclusion

It’s a shame about the Dolby misalignment on this sample, because in general it had the makings of a fine product. In terms of overall balance and interest, especially on type II tapes, the Aiwa was well liked. Ergonomics were of a high standard and the deck proved to be easy and convenient in use.

Aiwa AD-F800

<table>
<thead>
<tr>
<th>Test results</th>
<th>Aiwa AD-F800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replay noise (CCIR-ARarn weightig ref 0dB)</td>
<td>Tape Type I (NR-o5/Dolby B/C) — 48/56/67dB</td>
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<tr>
<td>Tape Type IV</td>
<td>50/60/69dB</td>
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<tr>
<td>Speed error</td>
<td>0.1%</td>
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<tr>
<td>Azimuth error (Phase shift at 10kHz)</td>
<td>90°</td>
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<tr>
<td>Line Output (0dB MAX)</td>
<td>1.4V &gt; 3.0V</td>
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<tr>
<td>Total harmonic distortion + noise (1kHz)</td>
<td>4% &lt; 5%</td>
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<tr>
<td>Total harmonic distortion + noise (4kHz)</td>
<td>4% &lt; 5%</td>
</tr>
<tr>
<td>Typical price (inc VAT)</td>
<td>£249</td>
</tr>
</tbody>
</table>

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DENON DRM-800

As the fluorescent display takes up a larger proportion than most, and the small black character font about half the height in fact – this seems an obvious place to start. It contains all the visual reminders for tape type, source monitor, line or CD-direct input, noise-reduction system, and MPX filter, plus a comprehensive tape-counter which almost needs a paragraph of its own. The peaking-reading level meters have a dynamic range stretching from –40 to +10 dB, with fine resolution either side of the Dolby reference level and peak-hold for easier record-level setting. The four-digit linear digital tape-counter doesn’t auto-reset, but does show tape travel-time directly in minutes and seconds, while the display can be switched to comply with several cassette sizes C60, C90, etc. There are also the usual memory facilities.

All the front-panel switching is located beneath the display and is formed entirely from light-tough logic switches. The tape-transport controls are simple and familiar: covering play, fast-forward, rewind, stop, record-prepare, mute, and pause. Audible search can be accomplished by activating play and music-search at the same time.

Other buttons cover Dolby-B/C. (Dolby HiX pro is operational all the time), and the tape-monitor button. The foreground source-tape monitor is normally automatic, a manual override is provided. Another useful feature found here is a rec-return button, which rewinds the tape to the start point of the recording and enters recording standby mode. Output level for both line and headphone is set by an adjacent rotary pot.

The tape-transport has many sophisticated functions and uses three motors. To control tape-to-head contact accurately a dual-capstan provides a closed-loop system. Close tolerances are claimed for the flywheel and hub. All the mechanical functions are controlled by servo-operated cans. This has the advantage of fairly quiet operation and dispenses the mechanism from the tape in the event a power failure. The record and replay head unit uses high-inductivity amorphous alloy, and the coil wiring is PC-OCC copper. It’s said to be hard-wearing too. Finally, the loading drawer contains a cassette stabilizer which keeps the housing reduced vibration and modulation noise. It’s said to be hard-wearing too. Alloy, and the coil wiring is PC-OCC which restricts entry of the Sennheiser-type plug which has the fattest of bodies.

Lab report

The class of the transport shows in the good wow-and-flutter figures and in the clean flutter spectrogram (Fig 2a). Speed was slow by 0.38%, and the azimuth wasn’t perfectly aligned, but a 40° phase-shift at 1kHz isn’t too serious. The signal-to-noise ratios were respectable rather than exemplary, and all the Dolby circuits brought about the requisite improvements. The maximum line-output at 0dB is 590mV, though only 1.9V was available for 1% distortion, which is a little low. Line-input sensitivity was fairly standard and the input overload margins are more than adequate. The meters were accurately set, and channel separation at both 1kHz and 10kHz was satisfactory. Intermodulation at 0dB lead, on type IV tapes was very good, type I tapes were reasonable, but IM on type II was surprisingly high at –20dB (10%). However, total harmonic distortion figures were much as might be expected on all tape types. Despite some upper-treble roll-off on the pre-recorded frequency plot, the record-replay response tests at –20dB came out well (Fig 2b), with good treble extension on all tape formulations, a minimum of bass 'woofers', and tolerable if not perfect Dolby tracking.

Sound quality

On prerecorded cassettes the listening results suggested some accentuation of the sibilance band and a sound generally a bit on the 'lean' side. However, there was fine resolution of detail across the whole frequency range with reasonable upper-treble extension; the bass was tight and well controlled, with good speed and an ability to differentiate instruments clearly; and the stage width was strong, with some measure of depth present. With self-recorded Dolby-B-encoded tapes the results were similar to those for prerecorded material, once again just a bit squeaky, for example, on violins. Dolby-C wasn’t as good. Focus was weaker and programmes lacked the apparent stage depth of ‘B’, although the width was still decent. The upper-mid/treble glare was down slightly, although the width was still decent. The upper-mid/treble glare was down on prerecorded cassettes the listening results suggested some accentuation of the sibilance band and a sound generally a bit on the ‘lean’ side. 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DENON
DESIGN INTEGRITY
TEAC V-670

TEAC produces a very wide range of products and a large number of cassette decks. The V-670 is the cheapest of its 3-head machines and lacks some of the more exotic facilities of its upmarket brothers. But this does not mean that it's short of the facilities which make a competitive machine, but still sports several controls not found on the Denon, for example.

It is constructed mainly from black plastic injection-mouldings, including the basic case structure, front panel, buttons, and knobs. It has a small panel insert on the base and a wrap-around steel lid. In terms of styling it looks a little older than the other two, probably due to its smaller display. But in keeping with the TEAC tradition the lettering is in gold and is consistent everywhere. The feet have a slight rubber covering, but the front ones are gold trimmed.

Automatic tape-type detection is fitted and the machine can be fine-tuned for bias subjectivity, using one of the usual methods. The fluorescent display carries all the views, including the two-mode display, with peak-reading meters covering a range of -20 to +12dB, with 2dB resolution around the 0dB level where there is a change of colour from white to red. Reminders for play, pause, MPX filter, Dolby-B and C (11X-pro is non-switchable), and tape-source monitor are also included. Some players are a little odd, and this one has a conventional counter or as a timer, but while the former works normally on rewind, fast-forward, play, etc, when in the time mode the counter only works in play or record. It also always requires clearing manually when a new cassette is inserted. There is no memory facility, which I feel is something of an omission in this price territory.

Source monitor switching is automatic, but can be overridden manually. Dolby selection and filter switching are provided by manual toggle buttons, while the tape-type detector is a little odd to my mind. It will display either as a conventional counter or as a timer, but while the former works normally on rewind, fast-forward, play, etc, when in the time mode the counter only works in play or record. It also always requires clearing manually when a new cassette is inserted. There is no memory facility, which I feel is something of an omission in this price territory.

The tape-transport is simpler than on the other two decks reviewed here, having only two motors and a single capstan. The tape is not back-lit and the cassette locating springs are of the normal type. The transport is made mainly from steel pressings, though the head-assembly is on a die-cast sub-section.

Lab report

The weighted signal-to-noise ratios were all fairly respectable, with Dolby-B and C providing successive 10dB improvements irrespective of tape type. The wow and flutter figures of less than 0.11% is rather higher than on the other two, but it must be remembered that this deck only has one pinch-roller.

This also makes itself felt in the visual representation of flutter, showing a broadened central peak (Fig 3a). There was only a very small speed inaccuracy, but the azimuth error produced a 60° phase-shift between channels at 10kHz, which is moving towards the limits of acceptability in terms of a summed mono response at high frequencies.

Line-output at 0dB level was 460mV, with 3-V available before clip, so there is plenty of headroom. The line-input sensitivity for 0dB was exactly 100mV – quite sensitive enough, while the input overload margins were again exemplary. Channel separation was fair.

Intermodulation and total harmonic distortion were consistent on all tape formulations, and very acceptable. The response plots were excellent, with all tape types measuring flat through the mid-band and at both 0dB and -20dB levels. At the higher recorded level, metal types provided greater extension as expected, while at -20dB all three tape types reach out to 20kHz (Fig 3b). The response shows some head-contour effects and a rolloff, but these have all cleared by 60Hz.

Sound quality

The TEAC is a little brash and forward and doesn't re-create quite the depth and space of the other two. Mid-range tonality is perfectly acceptable, but there is just a hint of perceived wow on some pieces, which are especially pitch-sensitive. The treble is grainer than on the other two by a small margin – and the TEAC doesn't reveal subtle detail to the same extent. There is some high-level compression and it sounds thicker and less precise. Images are rounded and a mite blurred, which means that they tend to be spatially broader, with less of the 'lock-in' quality. Focus is therefore not strong, the stage seems narrower, and on difficult pieces there is some confusion. Metal tapes sound better than types I or II, but the V-670 doesn't get the best out of them. Dolby-B/B tapes are also thickened and a bit confused. Transients aren't clean enough, and there is a lack of depth and transparency. The bass lacks dynamic urge while the treble is a bit stifled, but the mid is reasonably quick. Dolby-B self-recorded tapes sound a bit restrained on the highs, and the sound lacks detail and pace. Overall I found the effect a bit bland, though because it's fairly sweet and innocuous it doesn't have any overtly annoying traits. Thus while some edge detail is missing, it's not hard or the bass is reasonable. Recordings made on Dolby-C maintain their composition and the sound remains quite neutral – in fact not much different from Dolby-B-encoded recordings, but there is the benefit of the lower hiss levels.

Conclusion

Though the TEAC deck is predominantly plastic, it is well made; it's a little more restrained in styling, which gives it a slightly old-fashioned air. The machine doesn't quite measure up to the others in the group, and although it is by no means bad it doesn't quite have the life and air necessary at this price level to gain a recommendation.

OVERALL CONCLUSION

All three cassette decks work well, look good, and achieve reasonable technical merit. The TEAC is beaten into third place, not because it is a poor deck but because the other two are rather good. To choose a winner between the Aiwa and the Denon is more difficult. The Denon definitely had the superior sound quality of metal tapes, but on type I and II tapes there is little to choose between the two, so it all depends on your priorities. 

TEAC V-670

<table>
<thead>
<tr>
<th>Test results</th>
<th>TEAC V-670</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repro noise (CCIR/ASK weighted, ref 0dB)</td>
<td>-46±6dB</td>
</tr>
<tr>
<td>Tape Type I (NR d'olby-B/C)</td>
<td>-46±6dB</td>
</tr>
<tr>
<td>Tape Type II</td>
<td>-36±6dB</td>
</tr>
<tr>
<td>Tape Type III</td>
<td>-41±6dB</td>
</tr>
<tr>
<td>WOW &amp; Flutter (w peak weighted DIN)</td>
<td>0.01%</td>
</tr>
<tr>
<td>Azimuth error (Phase shift at 1kHz)</td>
<td>0°</td>
</tr>
<tr>
<td>Line Output (dB/Max)</td>
<td>460mV/3.4V</td>
</tr>
<tr>
<td>Channel separation (kHz)</td>
<td>46dB±3dB</td>
</tr>
<tr>
<td>Line input sensitivity (OV/overload)</td>
<td>10mV/0.1V</td>
</tr>
<tr>
<td>IM distortion from 11/12kHz 0dB tones</td>
<td>0.2%</td>
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</tbody>
</table>

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Denon
Design Integrity
**POTPOURRI**

**MONITOR AUDIO MA952 GOLD LOUDSPEAKER**

However good the sound, there is still something absurd about a pair of tiny speakers perched on huge and hideous stands. A slim floor-standing design will look better and take up no more space.

Monitor Audio's 952 Gold is a compact and well-priced floor-standing floor-stander, measuring 80x22.8x32cm (1hwd). Each enclosure contains a pair of 165mm bass/ mid drivers, with the single dome tweeter placed between them. This means that the axis of the tweeter is rather low (less than 60cm from the floor): it is Monitor Audio's policy to keep directivity to a two-way system despite the use of three drive units. The rear panel carries four 4mm socket binding posts to allow bi-wiring.

The cabinet is strongly braced to reduce coloration: the discreet gold-finished buttons in the centre of each sidewall look distinguished, but actually conceal the ends of a metal cross-brace. In the bottom of the cabinet are inserts to accept the screws in spikes provided. The removable grille covers all but the bottom quarter of the front panel. Finish is in a choice of real wood veneers: the review pair came in red oak.

Listening was carried out mainly on Roksan analogue and Marantz compact disc sources with MF amplification, substituting the MA952s for the resident Rogers Studio 1a. The MA952 immediately showed a light, airy quality with out-of-the-box stereo staging. This was evident from the first disc I played, Gervase Peyer and Gwenneth Pryor (English clarinet music, on Chandos): clarinet and piano both lucid and spatially convincing. Their failing, ultimately, is the feeling of being too restrained and polite: although they have transparency in terms of developing a good stereo image, they do not always seem to allow the music to live and breathe freely. But for the enthusiast, this means they are not quite as exciting or satisfying as they should be at the price. On the other hand, the MA952s have many virtues. They are not at all fussy about positioning (though you do have to make sure the tweeters 'see' over the furniture), or about amplifiers. Above all, they take up little floor space and, in most rooms, are acceptable and even attractive as pieces of furniture. And this alone gives them one advantage over almost all their competitors.

**DELOS DEMONSTRATION DISCS**

Symphonic Sound State (7" 1m 56s) digital CD, Delos D/CD 45012; and Listener's Guide To The Art And Science Of Recording The Organ (70.01m), Delos D/CD 3503

John Eargle is a well-known name to anyone around the world engaged in professional sound recording. His books on techniques have been illustrated sonically. If you or your technical group seek precise test signals, you will have to use other test CDs. These CDs are excellent technically, and give some background information in the accompanying sleeve notes, with two pages in the glossary of basic microphone arrays (three terms) and definitions of tonal and mechanical organ terms.

Delos is an enterprising organisation, and was the first company to purchase one of the Soundstream digital recorders. These CDs were very favourably received by the tape clubs and gramophone societies with which I am associated, but the comment was made that they do not really demonstrate what they purport to do. It would have helped the amateur recordist if comparisons of microphone directivity patterns - omni-directional with super-cardioid, for instance - had been illustrated sonically. If you or your technical group seek precise test signals, you will have to use other test CDs.

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**SHORT REVIEWS**

**AUDIO RESEARCH SP-14**

Already covered in detail by SH (May 1989), the Audio Research SP-14 is the subject of this 'Potpourri' for a simple reason: I bought one and intend to use it as my reference until I write a best-seller.

I'd rather have the even more precise SP-15 (with, sigh, polarity inversion). But I settled on the '14 not just because it fell within my financial constraints; it also appealed to me because it's an easy transition from the SP-9. (Fortunately, I had the '9 and '14 for side-by-side comparisons.)

The SP-14 introduces to my system two main qualities which will help me to assess components with even greater ease: a new sense of transparency and a finer sense of inner detail. The former means that the SP-14 is even closer to the dream of being little more than an interruption-free conduit with controls between source and amps. The latter means that I can detect with more 'repeatability' the nuances which separate near-identical components.

What's so striking is that the gains came without any loss of musicality or suggestion of the clinical. That it's also 'fully-loaded', offers gain matching facilities and silent operation means that I can leave my system alone for a while. Moncrieff said 'sell the Mercedes'; this time, you only have to dump a Sierra. That's what I call progress.

Ken Kessler

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Spikes under your speaker stands (or on top, depending on your attitude toward coupling) are no longer regarded as hi-fi tweaking madness. Any good dealer can demonstrate their efficacy in extracting the best from speakers. Only some stands come fitted with spikes, so HFN/RR commissioned a rugged, easy-to-install set, available for both steel or wooden speaker supports, complete with the necessary fixing kit. For a tenner, you too can have pin-point imaging and rock-solid bass.

**HFN/RR 006 FLUTTERBUSTER**
Another area addressed by the audio community in the 1990s is mains purity and how it can affect turntable performance. The grunge, the spikes, the nasties generated by the CEGB all make their way through the turntable, affecting pitch, stability and overall musicality. While many turntables come with on-board mains purifiers, many synchronous motor types make do without. Add the Flutterbuster—the only skill you need is the ability to wire a mains plug—and you'll upgrade your sound into the next class. Oh, and you'll get single-switch 33/45rpm operation, too!

**HFN/RR 007 CARRYDISC**
The ever-increasing popularity of CD has been accompanied by the use of CD on the move, either in the car or via personal, portable CD players. Despite the small size of the discs, carrying them around in their fragile jewel boxes virtually defeats the 'portability' argument. On our travels to the USA, we discovered the marvellous Carrydisc, a tough nylon wallet which holds 14 CDs without their jewel boxes in velvet-lined pockets with clear windows for identification. Working like a concertina, a Carrydisc filled to capacity is only as thick as three jewel boxes. It's a great way to transport your personal 'test' CDs when you drop by a shop for a demonstration.

**HFN/RR 008 TOOLKIT**
Murphy's Law applies as much to hi-fi as any other pursuit. Its primary manifestation being the curious disappearance of tools at crucial moments. Thinking of 'worst case' situations, we have produced a handy toolkit in a Filofax-sized zip-up case which should help you through all of those minor fine-tuning tasks, cartridge fitting procedures and the rest. Cutters, pliers, a knife, tweezers, screw, nut and hex drivers and an alignment protractor all in one compact holder. Now there are no excuses.

**HFN/RR 009 HEADCASE**
Minimalism has brought with it a bunch of sacrifices which most of us have accepted, but the disappearance of headphone outlets has meant hardship for those who must on occasion enjoy their music in a private fashion. Enter the Headcase, a 40W Class-
FINGER ACIDS (pH) CAN CAUSE A CD TO SKIP & MISTRACK. CLEAN IT CORRECTLY WITH ALLSOP 3

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IT MEANS MAXIMUM MUSIC PERFORMANCE

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SICOMIN CD DAMPER
The market is flooded with damping mats and rings, but this is the best yet. Sicomin is a space-age Kevlar weave with unique anti-resonant properties. When sited on top of a CD it improves coherence, reduces smearing and gives the sound a favourable lift. Unlike many CD mats which can slip and destroy the rotational balance of your CDs, the Sicomin CD Damper is located precisely onto each disc via self-adhesive rings which you fit to each CD while its in the CD jewel box's tray. We also sell extra rings in packs of 20.

AUDIQUEST DAMPING MATERIALS
Audioquest have put that excellent damping material, Sorbothane, to some novel uses. The company's Vacuum Tube Dampers are rings of Sorbothane which you place around the valves in pre-amps. CD players, headamps and the input stages of some tube power amps for a major reduction in ringing and microphony. For DIY types, Audioquest offers self-adhesive 6x6in sheets of Sorbothane for damping metal bodied cartridges, lightweight metal platters, CD trays and any other areas in need of resonance absorption.

GOOD SOUND
Just what the doctor ordered: a no-nonsense guide to the ins and outs of hi-fi. Ms Dearborn avoids mystifying jargon, hype, hard-sell and every other journalistic ill. Providing only what is necessary to help the reader to understand what lifts serious hi-fi above the mass-market standard. Read this book and you'll understand why many insist that all amplifiers do not sound the same. Why cables make a difference, how to get the most out of your system, how to select the right system for you and a thousand other mysteries. Essential.

VPI HW16.5 RECORD CLEANING MACHINE
The ultimate Christmas present for the vinyl junkie. VPI has created a machine which will restore your records to pristine form, a device which scrubs the disc and sucks up the debris, all the while handling the LP in a way which no human being can. The price is high, but what price your record collection?

ALLSOP CLEANERS AND TAPE CARE ACCESSORIES
Allsop produces a full range of cleverly designed, easy to use cleaners and tape care products which make high-fi housekeeping a painless task. From their catalogue, we've chosen the excellent record cleaning brush, CD cleaner and cassette head de-magnetizer.

HFN/RR SELF-BUILT LOUDSPEAKERS
Although DIY seems like a dying art in hi-fi, there's still a core of music lovers who like to build their own systems. HFN/RR has produced two kits - a mini monitor and a sub-woofer system - available in a variety of stages. For details of the DC1 speaker and Bassett sub-woofer, please write to the Accessories Club.

AUDIOPHILE RECORDS
As you are aware, most so-called 'audiophile' records aren't worth the vinyl on which they're stamped. 'Nice sound, shame about the music' is a cry we hear all the time. But we've separated the wheat from the chaff and come up with a list of outstanding titles which have a greater purpose than impressing your friends. [See order form for list.]

SUPERCUT RECORDS
Dissatisfied with standard pressings of commercially available material? So are we. When we were offered a batch of limited edition Supercut pressings of well known LP's, we grabbed the lot. Cosing only 11 copies an artist standard release, we have a few copies left of works from artists such as Jackson Browne, Paul McCartney, Santana and others. [See order form for list.]

INCATECH MAINS PLUGS
Just as Tweek and Michell plus improve the contacts within the h-fi system, so will Incatech gold-plated mains plugs and sockets enhance the connection of the highest integrity. Even the fuse caps are plated - as are all contact parts within the wall sockets. We offer a set consisting of two 13 amp plugs and an unswitched, twin, flushmount wall socket; use it in conjunction with Tweek for the best results.

CASSETTE ALIGNMENT TAPE
Everyone who's serious about cassette playback and recording or who's mystified about servicing cassette decks needs this tape checking system. A carefully recorded tape, it comes with full instructions for performing a number of crucial tests; it could pay for itself just by helping you to isolate one fault.

NAGAOKA LP INNER SLEEVES
With vinyl records soon to join the double-edged razor and the high-button shoe as casualties of technological progress, there's no better time than now to start the creation of the ultimate record storage system. We've already told you about our Modulite enclosures; Nagaoka offers something to go inside the sleeves. The paper liners which come with most LPs do no favours for your software. Nagaoka liners slip inside the paper sleeves and present a smooth, non-abrasive surface against which the precious grooves rest. As a bonus, these liners also help to reduce static. As you are aware, most so-called 'audiophile' LPs are not worth the vinyl on which they're stamped. 'Nice sound, shame about the music' is a cry we hear all the time. But we've separated the wheat from the chaff and come up with a list of outstanding titles which have a greater purpose than impressing your friends. [See order form for list.]

CLUB
To order, use the form on page 103.
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THE NATURAL CHOICE
Cut vibration with Kevlon damping rings

Valve users have long known of the benefits of damping the tubes to kill resonances and microphony. I can think of at least half-a-dozen excellent, efficient and affordable types of damping rings available, all of which are based on rubbery compounds. While these work admirably, they're only trouble-free if the user has the sense to keep them off output tubes or away from tubes which run abnormally hot. Yes, there are sonic differences as well as well which will influence your purchase.

Recently introduced is a new and complex valve damper for the tube casualy who wants the best and isn't shocked by high price-tags. In addition to the sonic gains produced by the Kevlon rings, comparable to more conventional rings, their usage also dispels any concern about melted rubber in the valve bases.

The Kevlon rings are manufactured by Sicomin, experts in the use of space-age 'aramid' fibres as the material of choice for tuntable mats, isolation platforms and CD dampers. Each consists of a hard split-ring black plastic surround lined with a strip of woven, yellow-coloured Kevlar fibres. The two sections combine to produce a vice-like grip on pre-amp and input valves such as ECC83s, ECC88s, EF86s and other finger-sized tubes. They kill any ringing and microphony generated by the valve, and are said to improve shielding from electromagnetic interference. High heat resistance ensures that these will not melt. This must be the most important aspect of Kevlon installation. With the Kevlons, the likelihood of accidents is remote.

As promised the Accessories Club is able to offer the latest Stax binaural demonstration CDs. The latest titles are music-only which run abnormally hot. Yes, there are sonic differences as well as well which will influence your purchase.

** Use this form to order accessories. **

| Use this form to order accessories. |
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| HFN/RR 004 Blackhead: m-c step-up transformer; £59.95 |
| HFN/RR 005 spikes: timber □ steel □, inc fixing kit: set of 8, £10.00 |
| HFN/RR 006 Flutterbusher: 33.3/34rpm. £220/240 only. OK for most synchronous t/r (specify type); black-ash case £79.95 |
| HFN/RR 007 Carrycise: 14 CDs in a 4mm travel pack! £11.95 |
| HFN/RR 009 Headcase: headphone amplifier, 40mW Class-A unit, FM antenna, £59.95 |
| HFN/RR 010 News Stand: 19in/43mm housing, 36in high, complete with 5 shelves (3 adjustable) black finish £139.95 |
| HFN/RR 011 Mushcrusher: 22/240V mains filter, 5A rating £24.95 |
| HFN/RR 012 Software Storage System: satin black timber (Medite), stackable, supplied in kit form. LP unit (120 capacity) £25.00 |
| CD/cassette unit (40/25) £45.00 □ singles unit (200) £35.00. |
| HFN/RR 013 Wallmut: wall mounting two-level turntable support complete with two shelves; finish, black £49.95 |
| HFN/RR 014 Stylus Cleaner: ultrasonic cleaner £14.95 |
| HFN/RR 015 Test CD II:999 tracks, 75mins £11.95 |
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| Tape head de-magnetizer: electronic cassette de-magnetizer £12.95 |
| Michell Tenderfeed: aluminium cones. Small £5.45 □ Large £8.45 |
| Cobra Indoor FM antenna: indoor aerial, built-in amplifier £47.50 |
| Sicomin CD damper: best CD damper we have come across £27.50 |
| Extra rings for Sicomin: pack of 20. £2.50 |
| Audioquest vacuum tube dampers: set of 4 £11.95 |
| Audioquest damping sheet: sifbronhite, thin x thin self-adhesive £11.95 |
| Good Sound: Laura Dearborn's paperback £10.95 |
| VPI HW16.5 record cleaning machine: £37.50 |
| HFN/RR self-build loudspeakers: details available for DCI & Bassett |
| Audioophile records: Cantata Domino £6.95 □ Jazz at the Pawnshop £3.95 |
| Sabbath Salves £6.95 □ Close-ups: Kabi Larron, piano. £9.95 □ Dalies (45rpm) £11.95 |
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| Aureum gold-plated mains plug/socket: twin unswitched socket, flush mounting, complete with two IAMP plugs, £25.00 |
| Harrison Cassette Alignment Tape wow! or not wow? £18.50 |
| Last Formula 1 £11.95 □ Formula 2 £16.50 □ Formula 3 £7.50 □ Starter pack £12.50 |
| Alphason Tonearm Lifter: Yes, it really does! £13.95 |
| PAS-01: Passive Control unit kit £86.50 |
| Blacktax: £2.00 |
| CD Feet: Audioquest Sundance. Pack of 4 £24.95 |
| Michell Surelock: 3m locking speaker plugs, set of 4, £18.95 |
| Breakfast Plugs, phonos, pair, £5.95 |
| Stax binaural CDs: Space Sound, £16.95 □ Glenn Miller, £16.95 □ Warsaw Baroque Soloists, £16.95 □ Supercharge, £16.95 |
| Decca record cleaning brush: £9.45 |
| Veetcor spaced banana plugs: two twin plugs £9.45 |
| CD Jewel Cases (packs of 10) □ standard. £6.50 □ standard Sin, outer only £5.45 □ slimline Sin £6.50 □ Double Jewel Case, complete (each) £1.75 |
| Jazz at the Pawnshop £13.50 □ RCA Crystal £25.00 □ CD single adaptor, silvered (each) £4.95 |
| Sennheiser Headphones □ Starter pack £12.50 |
| Stax Kevlon damping rings: for small valves £33.50 |

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Today most of the known loudspeakers have no problems with power handling when operated under normal conditions. Yet little attention has been paid to the dynamic response of speaker drivers.

Even if the stated power handling of a driver is several hundred watts peak, the acoustic power is not increasing at the same rate as the increased input power. Many tweeters, for example, can convert only about 50 watts into their maximum SPL. When they receive higher levels, more and more of the power is converted into heat, and more distortion is produced. The tweeter is now COMPRESSING. Midranges and woofers start compressing at a later stage. The frequency response now is dependent on input power level.

The DYNAMIC RESPONSE of a standard DYNAUDIO tweeter shows no compression even at 1000 watt peak: the frequency response is exactly the same at any power level.

Shown curves are measured with TONE BURSTS, signal/break ratio is 1/100.

DYNAUDIO. Manufacturer of dynamic speakers.
The new territory by expanding its flat-pack hi-fi furniture range, where aesthetics are high on the design agenda.

AST technology and the Astarc series were prominent in Yamaha's display area, along with three new CD players: the 799 5050 and both 18-bit machines with 4-bits floating, while the model £305 at £550 is 18-bit.

A new 34-case cassette machine was also displayed, the KS-600 at £299.

Surround-sound proved to be a popular idea at this year's event. Dynavector was demonstrating its signal delay 4-channel SSA-504, which caught our eye in the Quantum show. It showed the complete range.

As usual at the Hi-Fi Show, there were more speakers than we could cover, but there really were some major announcements.

Wharfedale launched its Col- crige and promised another design in the shape of the Harbeth later in the year. Celestion showed its Acoustic Ribbon designs, launched in Berlin (review next month). Also on the Harbeth stand was its display of its new subwoofer system for the C15, the £2000, as well as unveiling a new Reference Series Model: the 105.4 (see "News").

Virtually all the major names were present, with Rogers showing the latest in its range, in the way of the 152a, 1a, and 6a, while Harbeth provided an 'ours' with its compact, H5 and HCC 153. A.

Bookshelf monitors were seen from Goodman's in keeping with the tradition of cosmetic design and technical performance, and Portfolio Marketing showed the extended Gall range of the 200 series. A brand new model from Rayleigh-based Rhythm Acoustics was on display.

The Red Box speaker from Acoustic Research uses AR technology to create a big soundstage. It is a cabinet just 320x192x140mm (HWD) with tight, clean bass and high-impact midrange a prominent feature of a specially treated, directly-driven 16mm unit. The cutting edge is provided by the liquid cooled, ultra light, ultra fast hybrid 25mm 4114 unit: the model is a development of the AR18 and comes with a 5-year guarantee. Another company with a 5-year guarantee on its products is Castle Acoustics. Formed 14 years ago by people dedicated to the task of improving music reproduction, the company had its complete range on show at Penta, together with Jecklin Float headphones. Castle had just secured sole UK and overseas distribution for the three-model Jecklin headphone range. On show was the complete range of Mordaunt Short's new designs (reviewed this month, see page 78). Also shown in its entirety was the newly introduced 900 range from Tannoy, including all previous thinking on Dual Concentric applications: the key feature is a totally new design of 6in drive with its plastic bass cone and aluminum-diaphragm suspended HF unit.

New styles were on the cards for 1992 as it unveiled the Sonata - two-way bookshelf speaker with real wood veneers on all sides. Another new generation, this time from Richard Allan, was the £378 range: a room which always seemed busy, helped by its central location, was that of Mission Electroacoustics. Among the exhibits was a new top of the range speaker, the £1999 Mission "G" in a variety of wood finishes. At 5'in tall, they're big, but can be satisfied with the output of a Cyrus One because they are part active and supplied with Cyrus Stereo Bass amplifier and crossover. Still active, but smaller are the Allan Mini 2P, part of the company's compact and versatile Mini Series.

Meanwhile, the American company JBL had on display before the Show officially launched a new range the XPL series, comprising four models. Powerful 25mm titanium dome HF drivers and compact site low-frequency units featuring massive Symmetrical Field Geometry magnetic structures are at the heart of the designs. The three larger models also feature a titanium dome midrange driver.

If aesthetics were a prime consideration, two rooms in particular would have been of interest at The Hi-Fi Show. Pearl & Oakley, which manufactures ceramic speakers, has extended its range with the announcement of the Victoria 20, a 2-way design using a 6/8 in bass unit, 5in midrange, and 1IN metal dome tweeter. The cabinet, of specially formulated antique glaze, may be finished in any grille cloth. Lindley Audio Applications was showing seven-sided speakers built in Lincolnshire called Principles. The design is a serious attempt to design a high-tech speaker that does not change its surroundings into a stage set. In a choice of twelve veeners, at £6995.

To show that transmission line designs are alive and well, TDL was proudly showing its Studio 1, a new 16.5cm bass/midrange unit crossing over to the 2.5cm metal dome tweeter around 4kHz. Hi-wiring and bi-amping is possible with this 4-way model, an attempt to place authentic transmission line performance within reach of many more buyers.

"Miniature" and "compact" were the key words as ProAc announced the new Response One and Response Two. This new range has to be said to be the culmination of 20 years' design experience and incorporate the finest components and materials. Among other transducer appearances were the well-known ES 14 from Epos, and new imports like those from Rehdecko, available through DNM Distribution, and the Kammerzelt Mercury from West Germany, at £550.

Monitor Audio's display, as usual, featured the company's exceptional range and quality of wood veneer finishes, but there were technical developments afoot too. As well as the UK launch of the floorstanding MA1800 Gold speaker, and the first showing of the metal-dome Monitor 9 — bigger brother for the 7 model launched last month — £4500 Gold Dome. Monitor also announced its next development, the Studio 10 — incorporating a newly-developed metal-core bass/midrange driver in the established metal-dome tweeters.

Six new products were announced by Bose, falling into two categories: the new Acoustimass and Direct/Reflecting technologies respectively. Prices ranged from the £2000 bookshelf Freestyle model to the £799 Limited Edition 901 Series VI Concerto. Exciting news from ATC Loudspeakers, ahead of its announce- ment that it was to undertake the distribution of Sumo products in the UK. The Hi-Fi Show saw the first airing of the new two-way system, with a projected price of £1500.

It took three years of development, but finally, this Show saw the SD Acoustics's Ribbon. Styled on the lines of the SD OHS, the new speaker is a modern hybrid ribbon design which operates with no crossover, other than mechanical separation; the bass is covered by two 8in longthrow units. Price per pair is £3190.

British designed and built Alex- ander Loudspeakers' new series saw its first public airing in the Presence Audio room, along with their complete ranges. New in the Sonance series was the open design HD 607 Ovation shown by distributor Hayden Labs. AKB showed its microphones and its full headphone range, from minia- ture lightweight to the K240 and K430 electrostatic designs.

HAPPY ENDINGS

Exhibitors reported few problems this year and (we're glad to say) there were few complaints regarding the ancillary services provided by ourselves and the hotel. The one trauma of the Show was in fact caused by its very success: on Saturday, queues outside the Absolute Sounds room (awaiting ticket applications) blocked the free passage along the corridor of other visitors crowding to get past. Some exhibitors took exception to this, and some were blocking their doors for a short time. Happily, the situation was resolved, the queues were control- led and calmed restored. All that can be said in the circumstances, we hope to see even bigger crowds next year!
this man couldn't give a XXXX for any other hi-fi dealer

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from MISSION to LINN & NAIM
Nigel Kennedy's enfant terrible image conceals a most purposeful musician, never more serious than in the recording studios. He has worked with Kate Bush and Paul McCartney, and the rock album "Let Loose." Of all the 'crossover' artists he is the crusader, anxious to make converts for classical music, to break down barriers.

Getting on again, jazz conventions like the London Wasp Factory, or listen to Gershwin's 'Summertime' on the new CD single "Summer Remembrance." This year he redid his 'Summertime' on the new CD single "Go to one of his jazz concerts, with the recording studios. He has worked with Kate Bush and Paul McCartney, and there is a rock song which they might be lost in a performance, once or twice, by looking for new aspects when playing to an audience.

That single is part of a promotional campaign, part of a strategy. In 1986 Kennedy played and directed Vivaldi's 'Four Seasons' with the ECO. This year he redid some of the slow movements.

'It turned out that I was playing them so differently now that I just didn't think it represented what a performance would be like today. It will probably change a similar amount in the next two years...'

What changes did you make? Tempi?

'Tempi. And trying bits of decoration of my own on the melodies – it is difficult to imagine that one would play the melody with only the notes that are written. I felt I had found some decorations that weren't getting in the way but which helped the music. So, it was basically two slow movements. I was worried about the whole piece, because it's so old. It's a bit embarrassing really: I thought I would play the whole thing better, but I think this record is my best performance of it, even after two years.

Normally, you go back to a record and find you wouldn't imagine playing it like that any more.

'I've tried to do it with every available [violin – not recording] technique but still keep it like a classical performance. Some improvisations, some tempos might be controversial. I see it as a work of strong contrasts and that is what I have tried to bring out.'

There is a balance to be struck between it being exciting, and rushed emotionally.

'I think it's not even a tempo thing. If you can play at a speed which brings out the excitement but doesn't destroy the rhythmic content... but if you lose that vitality of the beat – which you can be taking it too fast – then it loses the quality of what is written.'

And has the experience tempted you to do more Vivaldi?

'There is so much that is worth doing.'

What is your attitude to making records?

'Do you like to hold things back and really think about them, or do you say 'oh well' – perhaps I'll be doing this again in five years?'

'Yes. Most encouraging to young people. Do you know Hugh Bean's 'Elgar' Concerto recording? It has been rather undervalued. 'Wore it out, man. It's really pure, beautiful playing. No bull-shit in it. And you get that work milked to death. Hugh had a really direct view, with beautiful phrasing.'

'Did you meet him?

'Yes. Most encouraging to young people. Whist, because Heifetz was one of my favourites, he acted so surprised. A great player.'

What about the Heifetz version?

'Heifetz has never been one of my favourites. I always wish that Kreisler had done it: it would have been great in the hands of the young Kreisler, when he was so serious, hasn't it!'

But there are problems in the Brahms, where you might antagonize some listeners. And, for instance, when you last played the Elgar at the Barbican, and some encodes which were a bit jazzy, it could be said that the atmosphere created was destroyed.

'Yeah. I don't know if that is valid or not. I think Paganini encodes – people might not have had anything to say about that – would have been even more wrong. Paganini, for me, is just the exhibition of technical skill. If the Elgar was a valid musical moment for people's hearts, when they were at the gig, then at least I was giving them something to do with what I feel inside. And maybe lighten up their mood a bit.'

'If they are my friends, that's my way of... I need something like that to go home on myself, and I reckon some of the audience could use that too. The Elgar is such a heavy experience – it isn't as if your most valuable experience has to be your last. You'll take that away with you anyway. It's not as if seeing Batman makes you forget seeing Room with a View.'

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How do we convince you and your wallet to part company with more than a hundred pounds for a set of headphones?

Well, not any old headphones, you understand. These are a bit special (at this price they have to be!)

Do we tell you that the Beyer DT 990 and DT 770 are compatible with compact disc players? Yes, but who doesn't?

Or, do we mention that you can listen to anyone from Mozart to McCartney, while someone else in the room is playing the organ? (an unlikely event, we admit, but you never know what turns people on).

Perhaps we could persuade you that it will go nicely with other status symbols, like your Porsche.

Wait a minute, though, we haven’t mentioned the most important thing, yet. The sound.

If we can blind you with science for a moment, here are just a few outstanding features that should help to convince you.

The DT 990 is an open headphone with an unbelievable frequency response of 5-35,000 Hz. The unique technology used to achieve the very low mass of the diaphragm and moving coil assembly (only 20% of that found on a typical competitor's headphone), results in an exceptionally transient response and a reduction in the non-linear distortion, qualities normally found only in the best electrostatic headphone.

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forthright in his playing. Heifetz's, I think, is a good one because it doesn't fulfill that, like — sentimental stuff.

But the violin is a more sentimental instrument. 'Yeah. A bit relentless. The Violin Concerto is fantastic...'

'Some people have difficulties in coming to Elgar's music, if they are not acclimatized to it. On the surface it is romantic music. He writes with the heritage of Brahms, Strauss and Beethoven, but it is totally his own language: the way he develops themes and the way that he, it's not a typical sonata form. He was as innovative in his own way as the twelve-tone composers, who were changing everything. To do it with an older form takes even more imagination.'

'Not as crudely cyclical in form as, say, Franck's Symphony...'

'Not as obvious...'

'In the Elgar Concerto, the theme comes back, and it is somehow transformed.'

'And that really works.'

'Now Slatkin is doing great damage with those themes. Brilliant! Elgar is now programmed a lot more in America. I've been playing it a lot. I've done it in the Concerto series, which perhaps a few years ago would not have been the case...'

'Is it the longest concerto of all?'

'Yes, not only in length, but it means it is more persuasion to get an American orchestra to put it on as the main work in their concerts. In fact, the audiences really love the music. I think a concerto — for bringing a new composer over, to an audience — is the ideal vehicle. They've got one person they can identify with. The solo part. Symphonic experience is for people who know the style of it, a bit better. With a bit of virtuosity, even if they don't understand the music, straight away they recognize that there is someone up there going through hell...'

'Jacqueline du Pré made quite a headway with Elgar, more than any conductor would have done with any symphony.'

'Although so many foreign conductors have recorded the Enigma...'

'But that's another thing which has an outside theme which almost takes the place of the soloist. Some kind of interest outside the symphonic form which people can relate to. That's the way pop music is, too, nowadays. They don't sell it through the music, they sell it through identification with those playing. Pictures which can be related to the music. It seems that it's been going on in classical music too. It's starting to happen, which is good news...'

'When you signed your EMI contract in 1986 a big programme was promised. But not a lot has materialised.'

'I did quite a lot. Sibelius, Walton, Bruch, Mendelssohn, Bartok. About four, and a rock album, under a different contract...'

'I think what I will be doing next is a Gershwin album. Someone I'd really enjoy playing — on the Bartok-Ellington idea, but developing it. Gershwin could be played with a singer, or in the Heifetz versions, with a jazz band, or even in a more contemporary setting. And I would like to take different types of treatment of his music. If someone like George Martin could produce, he would bring a lot of different lights to the music as well. I'd love to do a Kreisler album at some time — he's my favourite violinist of all, that cat. Big works after the Brahms, Bartok, maybe a Mozart Concerto album...'

'What brought about your change of heart in Mozart? A couple of years ago you were avoiding him.'

'Basically, because it was always presented in such an antiseptic way that I didn't want to do it in public. The relentlessly clean vision of nice polite Mozart. I am not really an "authentic" fan, but the people looking into it from that point of view have added a few more perspectives, which might mean it is more easy to come in with some 20th-century ideas.'

'We all know the violin concertos, but they're not great listening experiences.'

'Not like when he is writing in a minor key for piano, but on the other hand there's the Sinfonia Concertante, which makes up for them in a big way.'

'It sounds as if you might have ideas about multi-tracking.'

'No way. No way! In a work of that depth you need that experience of feeding off each other, the interplay really makes the work. Imagine doing the cadenza in multi-track: it would be so debased.'

'I think that helps the expression is great. So, the authentic school has opened it up. I don't think any technique should be worshipped — it's like saying technique is more important than music communication. Obviously people have to do research, but there is a danger of getting narrower...'

'Think of any development of the technique that helps the expression is great. So, the authentic school has opened it up. I don't think any technique should be worshipped — it's like saying technique is more important than music communication. Obviously people have to do research, but there is a danger of getting narrower...'

'How do you keep abreast of what is happening?'

'With the records that are distributed now. You can find out pretty quickly what I think the length of programmes could be a great deterrent for people going to concerts. I sometimes find with recitals that they go on interminably. Like two halves of a soccer match, and it's just too long. Three sonatas plus a whole load of showpieces is stretching it too far...'

'It is instinct which makes an audience listen to a piece. Not a huge amount of knowledge. I'd prefer to get my inspiration from a score rather than books about it. There is so much written in a score. And the composers each have their own language. Soon you learn that a dot, a staccato mark in Mozart is different to that in, say, Bartok. Playing these composers is like time travel, really. When you have played three or four pieces by a composer it is easy to learn the fifth...'

'I've made up my mind that I don't want to get into that syndrome where I become a "recording artist" and I'm in the studio every other week. Because then it becomes no longer the special occasion. There's a big danger of the repertoire not having that edge of focus, of concentration — and of treating the studio like an office. It takes time preparing the repertoire in gigs. If you are doing too many... I find it difficult in a year having more than two or three high points, every gig you want to be your best...'

'And once you've got a record out, I'd like to find a way of making people aware of that, instead of just having them on the shelf — you know, in that "classical" section of the store where nobody goes...'

'You can't really solve that problem. There are so many releases...'
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Russ Andrews
One of the benefits of digital recording, we were assured at the time of the first release [Decca's 1979 New Year's Day VPO concert], was that perfect copy masters would be in use worldwide: none of the degradation inherent in analogue tape copying. But anyone who bought, say, a Japanese cut of a digital record they already owned as an American LP will have discovered that remastering engineers have their own set of rules as to what is legitimate. Of course, compact disc – the next stage in digital veracity – eliminated such discrepancies. Or did it? Even in the early days, when stock shortages meant that some titles for the UK were being pressed in Europe, Japan, and the States [Andrew Lloyd Webber's Requiem was one example], there were reports of subtle audible differences. And DDD recoupings, and even seemingly identical CDs separated in manufacturing time, can sound different. Only this month I found some ADD reissues made by both EMI and BMG were radically distinguishable even though their formats were identical. September's Stereophile carries an interesting report on JVC lab demonstrations of degradations in digital copying (pp.16–17).

In spite of all this, the industry knows that a sector of the buying public firmly believes in the superiority of all digital production. CBS recognize this in their classical reissue series 'Digital Masters'. Now PolyGram has a corresponding '3D Classics' DG label, with distinctive 'hologram' logo – 25 titles in the first release.

Philips Classics has signed up Canadian Brass, recording all brass arrangements of Beethoven 5 and Wellington's Victory. Twentieth-century composer PDQ Bach has written Homism 'the first horse opera ever for brass quintet' especially for the group which, the first titles feature the Slovak Chamber Orchestra under their founder, FW Holland, The British Piano Museum Charitable Trust. Send a SAE for details of The British Piano Museum.

At four pre-Christmas Smith Square concerts by The Sixteen (Messiah, Dec 16, 19, 21; Christmas music Dec 20), with tickets from £3–£8, a free Hyperion CD [Christmas Music from Medieval and Renaissance Europe] will be given to everyone attending.

Hawkins, impresarios of Opus recordings are making available high quality first titles feature the Slovak Chamber Orchestra; suggested retail price is £4.99.

The following day of the trust's动人, F W Holland, The Musical Museum (308 High St, Brentford, Middlesex TW8 9BD) will continue under the management of The British Piano Museum Charitable Trust. Send a SAE for further details of this collection of autocratic musical instruments.

Mark-Anthony Turnage is Radcliffe Composer in Association with the CBSO, a three-year appointment funded by the Radcliffe Trust (which dates back to 1714). At the end of November, Simon Rattle accompanies the CBSO to eight European cities, taking in Vienna, Frankfurt, and Paris. Last March they were at Wembley Studios, recording Patrick Doyle's music for Kenneth Branagh's film version of Henry V. This is available separately on CD [EMI CDC. 749 9192, 59m]. Branagh's brief was that the style should be accessible, boldly underscoring the text, and sizeable. The Branagh 'hype' has brought some critical reaction: whilst the film is obviously flawed, lacking in truly memorable images, I am curious to see it again. (Not least for the pleasure of watching Paul Scofield, who brought a compelling ingredient of maturity to the casting.) The free use of visual cliché seems echoed in the soundtrack music; derivative, (of Respighi, Bloch and R Strauss, being oddly 'oriental', or 'Biblical'), it is not obtrusive in context – the drum writing for the Battle of Agincourt did not even register with me at the time, the CD bringing quite a shock! – but in isolation its charms tend to pale. If the 'Non Nobis' instills another hearing, I cannot feel that much of the rest will, for all that Doyle's music is for Kenneth Branagh, Rattle and the composer.
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**InformaTion**

**RecOndingS: PeRformanCe**

Classical Reviews are based on the Compact Disc, unless indicated (LP). The catalogue number is followed by total playing time, and equivalent LP/MC (Musicalicyte) numbers. Monophonic recording. Indicates date of first UK release, eg. on LP — now CD, or LP reissue on L.P. unless shown; CD Equivalent MC number is given in brackets. (NB. Musicycettes are not reviewed in Hi-Fi/RR) RATINGS Recording and Performance are separately graded as a summary of each review. In Rock/Pop/Jazz the numerical rating also reflects musical content. An additional star — A* or I* — denotes outstanding quality. © Hi-Fi News & Record Review.
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JC BACH: Symphonies Concertantes — in HIFI NEWS & RECORD REVIEW DECEMBER 1989

Wmsl violins, two violas, cello and orchestra, W1 D in E I

ASV CD DCA 651 (59m 34s) also LP MC

London Fest Orch/ Pople and orchestra, Wms4 D in A for violin, G for two violins, cello and orchestra, Wms1

These are pleasing, chamber-music-styled accounts, no doubt reflecting the original performance conditions of London in the 17th/8th. The Festival Orchestra play modern instruments, of course, and there is no keyboard continuo, but the style is nicely conveyed; Ross Pople leads from the solo cello desk in the three string-solo Concertantes. The dialogues between the string soloists and the wind instruments are particularly delightful in these works, and indeed, the prominence of the wind instruments is a feature that is especially positive in these performances, which greatly benefit from the small numbers of string players.

The sound is immediate but well-spaced; with the wide illustration of the recording in the accompanying leaflet open, one can almost imagine the ensemble is before one. The wind-solo Concertante is particularly delightful for its sensitive capturing of the woodwind and horn tones.

The third, in a series called 'Concertantes' is the first to have come my way. I shall certainly now be on the lookout for other volumes.[A1:*1/**] Stephen Daw

JS BACH: Cantatas, Vol.18 — ‘Lobe den Herrn’ BWV 69a [‘Wachet betet!’ BWV 70] ‘Gott ist mein König’ BWV 71 [‘Alles nur nach Gottes Willen’ BWV 72] 4 movements added to form BWV 69 Wilhelm Wild (treb sop)/Paul Esswood (alto)/Kurt Elleriz (ten)/Rudolf van den Meer, liarre Visser (bass)/Tölz Ch/VCM Harmancourt Teldec 8.55340 (2CDs 88m 51s) also 2LP © 1977

The digital remastering of earlier volumes from the 44 Duos — Vol.3 Endellion Qt Virgin Classics VC 790 7742 (54m 5s) also MC.

There is an evident boom in the CD market as far as Bartok's quartets are concerned. This latest flotation changes the usual order and adds 11 of the 44 duos for good measure. On the evidence of this first instalment we can look forward to another series of more than usual excellence, for the combination of warmth with textural clarity, rhythmic energy with structural perception demonstrated here comes as close to that of the award-winning Emerson performances as any. There is, moreover, a touch of flexibility in the Endellion performances that the Emersons either repudiated or which eluded them, and which makes these performances just that little bit less machine-perfect, a shade more human. The 44 Duos for two violins are simple pieces based on folk origins, but are not by any means negligible. They are played here by Andrew Watkins and Ralph de Souza with just the right mixture of wiry robustness and sophistication. The sound is very positive; close and clear but natural. [A1:*]

BARTOK: String Quartets 1 & 3 & 4 Duos — Vol.3 Endellion Qt Telarc CD 80205 (54m 3s)

The three works on this disc are all inspired by the artistry of Leon Goossens, and together they make an attractive collection. Bax's Quintet dates from 1922 (the same year as his turbulent first Symphony) and finds him at his most relaxed. There are some exceptionally rich textures at times, especially in the evocative character duet between the first and second violins (indeed, Barbirolli later arranged the work as an Oboe Concerto), and the jaunty jig in the last movement sounds like an Irish folk melody, but is in fact Bax's own creation. Bliss completed his Quintet five years later, and it resembles the Bax in form, not least in the finale, which is also a jig (unlike Bax, Bliss does use an actual Irish folk-tune during the course of this movement). It is an

RECORD OF THE MONTH

HANDEL: Jephtha

Dawson/Von Otter/Chance/Robson/Viarco/Monteverdi Ch/Eng Baroque/Grand Gardiner Philips 422 351-2 (2DCs, 158m 20s) also ALP:5MC

Handel's last work of major importance, Jephtha has done relatively well on record, a reflection, perhaps, of its noble simplicity of utterance and the profundity of Handel's musical thought at a time when his sight was failing — significantly, he had to break off composition at the great chorus 'How dark, O Lord, are thy angels' — with rare insights.

But Gardiner's Nigel Robson and Lynn Dawson strike me as finer yet. The tenor, particularly, is an underrated artist, but with his dark, baritonal timbre, interprets the world-weary Gileadite commander with remarkable textual and musical authority. He must lack the liquid tones of Rolph Junck (Decca, not currently available) but that singer sounds too youthful, always a danger in Handel's heroic tenor roles. Robson sounds mature, though not vocally aged, and invests his great emotional numbers — the wonderful recitative, 'Deeper and deeper still' which Haydn so admired, and the ravishing air, 'Waft her angels' — with rare insights.

Dawson, too, catches the innocent exuberance of the condemned Iphis — gloriously free of tone and lilting in 'Tune your harp, ye faithful givers', but clear and natural. [A:11 Hugh Canning

BAX: String Quartet

Pamela Woods (ob)/Audubon Qt Telarc CD 80205 (54m 3s)

The speeds and the contrasts sometimes surprised me — speeds sometimes so fast they become hard even for the VCM soloists to play effectively — contrasts surely too wide for 'Gott ist mein König'. But so much is good, and the music is never dull in these performances as it really does tend to be in the earlier-completed Hänssler/ Heimut Rilling versions, for instance, worthy as they are in their own way. Bax's Octet takes huge risks, but no doubt so did Bach; he was not specially noted for cautious, predictability or lack of adventure.

The actual sound is more than honest, although at first I was struck by the slightly shallow (?) directness; perhaps an indication of changing tastes rather than any real deficiency — after all, the recordings were originally made in 1976-7. The two versions of Cantata 69 could easily have been included on the same disc, so that the movements could be programmed to allow comparisons without changing CDs. [A1:*]

Kenneth Dounnett

BAX: Quintet for oboe & strings/BLISS: Quadrille for oboe & strings/Britten: Phantasy Quartet

Peter Crook/Barry Words (ob)/Audubon Qt

The three works on this disc were all inspired by the artistry of Leon Goossens, and together they make an attractive collection. Bax's new Quintet dates from 1922 (the same year as his miraculous First Symphony) and finds him at his most relaxed. There are some exceptionally rich textures at times, especially in the evocative character duet between the first and second violins (indeed, Barbirolli later arranged the work as an Oboe Concerto), and the jaunty jig in the last movement sounds like an Irish folk melody, but is in fact Bax's own creation. Bliss completed his Quintet five years later, and it resembles the Bax in form, not least in the finale, which is also a jig (unlike Bax, Bliss does use an actual Irish folk-tune during the course of this movement). It is an

Hugh Canning

[93x744]
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inventive, resourceful work, full of the tangy harmonies which are typical of this composer's brand of pastoralism.

Britten wrote his **Piano Quintet** when he was still only 18 and, as its title suggests, uses the arch-design so beloved of his teacher, Frank Bridge in much of his own chamber music. It would surely have pleased Sarah Francis on a rival Chandos recording, but this is my only real reservation. The Aubudon Quintet lend her sensitive support. Excellent, intimate sound. [A:41]

**Andrew Achenbach**

**BEETHOVEN: Symphonies 4 & 5**

**Lond Class Players/Norrington**

**EMI CDC 749 6562 (64m 36s)**

Back in the 1950s, Wilhelm Furtwängler was criticised for using long grace notes in the development section of the first movement of Beethoven's Fifth Symphony (**EMI References – Mus Ed**). Times have changed, and Norrington, armed with a Beethoven-sized orchestra using period instruments, together with a formidable reputation for authentic style, will surely be above such carping. Nor would most critics dare nowadays to voice the once-popular opinion that Beethoven's metronome must have been wacky. Not since the days of Hermann Scherchen have I heard anyone try so convincingly to justify the metronome markings, and Norrington brings both eagerness and urgency. The strings sustain the very slow tempo for the introduction most convincingly yet the faster-than-conventional speed for the slow movement makes them no less expansive in phrasing. Timpani seem a little too heavy, some tutti sections notably in the big chord before the end of the slow movement, after which their quiet solo fades expressively but unconvincingly. Apart from a trace of uncharacteristic finesse, the performance with the shaping of the Scherzo, Norrington is all fire and directness – not least in the furious finale where the notorious bassoon solo is brought off with miraculous accuracy.

The first movement of the fifth Symphony finds Norrington in accord with Erich Kleiber in refusing to slacken tempo at fermatas (though he does taper the tone at ends of held chords). Architecture is given great respect and, as one might have foreseen, the long repeat of the Scherzo, omitted from so many modern editions, is reinstated. Again the tempi, struck masterfully with hard sticks, are not in focus consistently, for, whilst the bridge passage to the finale with its commensurately less fierce in viola and plays with an immaculate technique (fit). The recording is admirably clear and involving.

**Jeremy Siepmann**

**BEETHOVEN: Serenade in D, Op.8**

**Inbal Denon CO-73207 (40m 22s)**

Eliahu Inbal is due to record a whole Berlioz tet literature is so great, in bulk, quality and variety, that it easily overshadows his works for string trio. Yet this is a carefully understand-able and a pity. The delights on offer here are many and various, though unlike the quartets they represent only the young master – but what! In a life of sometimes ostensibly too busy for such luxuries, I’ve already returned several times to these performances for the sheer pleasure of it. From the E-flat Trio, Op.9 to the C minor, Op.9:5 (the master’s last essay in the form), one is reminded of time and again of Beethoven’s overpowering and often underrated propensity for joy. And as for Stravinsky’s curious assemblage of the orchestra for the opening movement, there was no melodist… well! Seldom in the history of music have song, harmony, texture and form been combined to more enchanting effect, or, with so little apparent effort (though struggle, and the sense of struggle, were soon to become a Beethovenian hallmark). And the performances are all one might expect – technically superb, highly characterised and responsive in conversation, and so naturally ‘plotted’ in large-scale structure that the whole has a sense of engaging inevitability, ruling out, for the moment, the notion that the music could or should go in any other way. Add to these virtues a brilliantly lifelike recorded sound, appropriately redolent of the chamber rather than the auditorium, and you have a winner all the way. [A*:1]

**Jeremy Siepmann**

**BERLIOZ: Harold in Italy**

**Yuri Bashmet (vla)/Frankfurt RSO/Inbal Denon CO-73207 (40m 22s)**

It must be said straightforwardly that this CD offers far more in terms of playing time. Eliahu Inbal is due to record a whole Berlioz cycle, so it would have been easy to slot two or three Overtures into the unused 55m. It should also have been easy for Denon’s production team to avoid a technical fault here, whereby the viola’s recollections of the Pilgrim theme just over 1m into (iv) are accompanied for 8s by an artificial echo. Within the constraints imposed by the Frankfurt Alte Oper’s somewhat expansive acoustic – and notwithstanding an arguably over-close viola – the recording is otherwise very fine, often near star quality, so this brief blemish is a great pity.

On a more positive note, and following the pattern set by Inbal’s Lélio and Fantastique Symphony, we are taken on a devoted and thorough tour of this marvelous work. Inbal handles his excellent orchestra with real Berliozian fire and finesse, and finds a perfect match in violinist Yuri Bashmet, who deline-
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ates every melancholic subtility of Berlioz's lonely Byronic wanderer with a gently, inward-looking intensity. The first movement is superb in its architected balance of melody and texture. Forget Piotr! March rather breaks the spell by moving with undue haste—although its ending does convey a fine sense of distant recession. The Serenade is pleasingly handled, while the Brigands' Orgy breaks the spell by moving with undue haste. Whatever else, Inbal's Berlioz certainly makes one pay attention. [A+C]*1/2

John Crooke

BRAHMS: Die schöne Magelone
Andreas Schmidt (bar)-Jorg Demus (pno)
DG 427 533-2 (55m 26s)

If you did not know that this young baritone was Dietrich Fischer-Dieskau's star pupil and protege, you wouldn't have to get far through No. 6 — to make a fairly intelligent guess. Indeed, young Schmidt's inflection and colouring of his lyric baritone—a less fluid and even one than His Master's Voice—could easily be mistaken for that great baritone's younger self. And, I'm afraid, the entire performance smacks of history desperately trying to repeat itself—at least, DG obviously hopes so. I know imitation is the sincerest form of flattery, but what is wrong with our age that is seems only to be able to produce the new Callas (Sylvia Sass), the new Berganza and Horne (Juliette Dalayrac), and now the new Fischer-Dieskau in this obviously gifted young singer?

It is a pity for Schmidt that he obviously feels such an artistic debt to his teacher—sample No. 9, 'Ruhe, süßliebchen' or the final, sentimental 'Treue Liebe dauert lange'—because he is obviously a natural Lieder singer, like his compatriot on the other side of the East West divide, Fal Bär. Schmidt shares his fresh, agile response to the poetry of his language—though Ludwig Tieck's medievalist hokum hardly inspired Brahms to a lyrical Parnassus in this cycle—but, unlike Bär, his own personality seems to be more in evidence in the F-D. That is a pity, for there is some beautiful, impassioned singing here—'Wie soll ich die Freude, die Wonne demn trägen' and 'Verweiflung' (No. 10)—and Demus keeps him on his toes with the penultimate 'Wie froh und freud mein Sinn sich hebt'. You want to nod in agreement, here, but then Schmidt returns to his F-D mode, crowning away in a quasi-falsetto.

The recording captures voice and piano in admirable balance, but I am hard pressed to rate a performance with so potent a Sengüll behind it (EMI) should resound to its great account with Richter, incidentally. [A3+*](0)

Hugh Canning

BRUCKNER: Mass 3 in F
Matthias Humpert-Mauer/Bavarian RSO/C-Davis
Philips 422 358-2 (65m 24s)

Incredibly, the only other currently available version of Bruckner's last and finest Mass is the one Eugen Jochum made with Bavarian Radio forces 20 years ago; I haven't heard the CD reissue but on LP it continues to be a superb reading, committed and profound, Sir Colin Davis, whose first Bruckner recording this seems to be, gives an eloquent, exciting account of the earliest published version, with spacious textures and broad yet well sustained tempi. In a fine solo quartet the outstanding contributions come from Marjana Lipovska and Kurt Moll; Karita Mattila is reliable, but cannot efficaciously maintain the intensity of Maria Stader's ethereal singing on the Jochum recording. With this release the balance—whether solo strings blending with solo voices, or glorious tutti, almost every strand is clearly in place. The chorus and orchestra are both splendid. A richly rewarding performance, matched in the atmospheric, dynamically wide-ranging recording. [A1]

Peter Branscombe

CHOPIN: 4 Ballades 4 Berceuse 4 Fantaisie, Op.49 4 3 Ecossaises 4 Tarantelle 4 Contredanse (1827)
Kathryn Stott (pno)
Conifer CDF 169 (62m 26s) also WC

With her fifth record for Conifer Kathryn Stott is out in the main-stream repertoire, with many of the world's greatest pianists for rivals. That she holds her own so vibrantly and characterfully, comparatively early in her recording career, is truly remarkable. Her ravaul is lavish and intense, yet always idiomatic and she has an entirely personal way of suggesting how Chopin's outward equanimity can abruptly flush with anger and high passion. Listen to the melodic significance she finds in the Third Ballade's left-hand figuration during a stormy modulation into C-sharp minor; or the way she achieves a truly epic realisation of the First Ballade's opening. The Second Ballade's cauda crackles with electricity; and in the final pages of the glorious Fourth, cumulative excitement builds remorselessly towards a conclusion where the theme's outline is brilliantly sustained amidst so much fiery intricacy, Miss Stott's F-minor Fantaisie possesses a no less distinctive profile, and her introduction to the Third Ballade is surely as poised and questing as you would expect. The layout is stimulating rather than conventional; all these revelatory performances are traditional. More striking than appropriate, this is a small price to pay.

[A1+1/2]

Bryce Morrison

ELGAR: Symphony 2 4 Serenade for Strings
LPO/Slatkin
RCA RD 60072 (68m 06s) also WC

A formidable controlling perception is at work here, leading us steadily to the inchoate terror buried deep beneath the confident surface of Elgar's second Symphony, and back again. Leonard Slatkin may take certain liberties with tempi in the first movement, that they are sometimes more radical than they seem is because he relates everything so evocatively. The spirit of Elgar's Sullivanianism is preserved, outside the pressure to drain out of the striding start, with a steadier pulse for the increasingly darker moods. Nor have I ever heard the swing back to life (Fig.45) more masterfully done. Slatkin makes quite sure that we feel the malign influence at the heart of the movement, it turns out, for the onslaught of the transitional section is as on one of Chopin's greatest masterpieces. All these revelatory performances are excitingly recorded; the programme layout is stimulating rather than conventional. The Ballades are interspersed with the other works; and though the sleeve is more striking than appropriate, this is a small price to pay. [A1+1]

Hugh Canning

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account of the First, which promises in any case to be a remarkable performance. Let's hope so. The Serenade catches the essence of this conductor's Elgar - natural movement and easy rubato in the outer panels, softest playing at slow speeds for the soul enthralled within. [A/B:1]*

David Nice

ELGAR: Enigma Variations ∙ Cockayne ∙ Frossart
LPO/Slatkin
RCA RD 60073 (63m 50s) also MC

Slatkin's Enigma is dark but never heavy, its serious point made with the most delicate of brushstrokes. In short, he prefers tempi that are often very slow indeed, but - unlike his younger compatriot Andrew Litton in his altogether less flexible Variations on Virgin Classics - he has the experience both to relate the more sombre variations convincingly to their lighter counterparts, and to bring out all the gentle miracles of the scoring at such speeds. What guides him through these potentially dangerous waters is his understanding of Elgarian introspection, and though he suggested in interview that even the producer, Andrew Keener, wasn't entirely sure of the way he saw it, I don't think his integrity is in doubt for a moment, for example, how inner strings inflect the atmosphere, lifting the theme at its heart just when it needs it (with superbly judged rubato, as ever from this conductor). The steady progress of 'Nimrod' in what is, more than ever, the soul of the work: again, slow and absolutely pianissimo at its onset, but always moving imperceptibly forwards. The symmetry of the surrounding variations becomes more apparent, with a genuine melancholy for RPA, not quite dispelled by delicate laughter, now mirrored by the cellos of BGN, and the most refined of shades for graceful ladies Ysobel, WN and Talich on Calliope, the starkness of these works require. The recording (AAD) is of the highest order, with harrassons and first oboe making you wonder afresh at the telling use Elgar makes of them. Amongst more: perhaps, about the slightly dearer confidence of EDU's last stand - Slatkin takes the hint of a more romantic HAL and youthfully sparkling performance. But the sound is rather unrelenting. If you like this kind of music best you can live with. [A/B:1]*

Peter Branscombe

HAYDN: Symphony 83 in g, The Hen ∙ 84 in E ∙ 88 in G
LMP/Glover
ASV CD DCA 677 (67m 01s) also LP/MC

A delightful programme with three masterpieces from the mid-1780s. The playing is unfailingly alert, the recording atmospheric without artificial highlighting, the musical direction full of good sense, humour, style. Only for the glorious Largo of 88 does Jane Glover choose a tempo that seems on the slow side of just right, otherwise she reveals her happy knack of pacing the music to perfection, with textures limpid yet crisp, and with beautifully pointed phrasing and unexaggerated dynamic shadings. Though this timepieces and the LMP are not first in the CD field with any of these works - their advantageous previous Haydn issue [80, 87: CD DCA 635] seems not to have been reviewed in this magazine - these characterful performances will prove rewarding to live with. [A/B:1]*

Peter Branscombe

HAYDN: Piano Sonatas 35 in A ∙ 36 in C ∙ 37 in E ∙ 39 in D ∙ 40 in D
Lyubov Timofeyeva (pno)
Olympia OCD 239 (68m 51s)

These recordings were made in 1981; they make an attractive programme, comprising two harpsichord sonatas from the mid-1780s (Nos.29 and 30), two from the Op.13 set published 'for harpsichord' - though better suited to piano - in "1784" (Nos.66 and 67), and the A-flat work (35) that probably dates from the early '70s, despite its publication date of 1785. Lyubov Timofeyeva is a splendid player who just occasionally lacks the precision and poise these deceptively simple works require. The recording (AAD) is of disappointing quality, with shallow and at times harsh piano tone, and quite a lot of hiss. The gaps between movements are too short for comfort. [C/G2]

Peter Branscombe

JANACEK: String Quartets 1 & 2 & WOLF: Italian Serenade
Hagen Qt
DG 427 669-2 (51m 29s)

Startling is perhaps the best way to describe the impression created by the Janacek performances. Aided by very bright, very close recording, the Hagens appear to have gone out of their way to emphasise the angularities in the scoring with biting su pon-ticello, savage attack, and whining tremolos. So intent do they appear at times to point out that these Quartets are contemporaries of Bartok's - and technical aspects anyway - that they occasionally overlook, or over-ride, the composer's instructions regarding tempi and/or dynamics, particularly in No.1. In comparison with the most recently released CDs, by Medici on Nimbus and Talich on Calliope, the starkness of these readings is very evident. Neither rival version dares such brutality, and both take care to smooth the edges and soften the harsher outlines of Janacek's writing - the Medici's performance is more urbane than on their EMI recording, but even that is sweetness and light compared with this. That the Hagens offer valid interpretations - apart that is, from their occasional arbitrariness - is undoubtedly true; and it is not a failing that one may be taken aback by them; but for those whose views of these quartets have been modelled by earlier recordings, including those by the Czech quartets, should be warned that they are in for a surprise. The Hagens Serenade cannot really compete in this harsh climate, but it is a bravura and youthful performance. But the sound is rather unrelenting. If you like the idea and don't mind the liberties, add a performance star. [B:1]*

Richard Black

LEIGHTON: Cello Concerto ∙ Symphony 3 'Laudes Musicae'
Rafael Wallfisch (vc) Neil Mackie (ten) XNO/Thomson
Chandos CHAN 8741 (59m 50s) also LP/PMC

It is a great pleasure, now and then, to be able to write a genuine 'rush-out-and-buy-one' review. This is one such. Since I enthused about Leighton's piano music a few issues back, I have encountered more of his music which has by and large confirmed my opinion that Leighton is a composer of considerable importance and appeal. In fact the appeal of these two works is one of their strongest features: Leighton's writing is of the direct sort that makes the unacquainted listener sit up and take notice at once. Yet there is sufficient depth to the music that repeated listening does not make the effect pall. What more might one want? The performers on this disc evidently get on well with the music. Wallfisch brings to the Concerto a considerable expressive range which complements the piece well, and he copes excellently with the extended scale of the work's musical argument. The listener is drawn along to the climaxs - the ebb and flow always feels right. Similarly, in the symphony, Mackie gives the chosen texture by Shelley, Elizabeth Barrett Browning, Browning and Leighton himself) the perfect inflection to make their relations to the music obvious, and to heighten their effect. The orchestra plays with commitment and verve, and Thomson conducts most sympathetically.

If Chandos had not brought the soloists so very far forward the recording would be highly praiseworthy, but it is the effect is a little overpowering. A small quibble, however, compared to the excellence of the musical aspect. [B:1]*

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LOEWE: Frauenliebe Op.60  Lieder settings, of Goethe, Heine and Rückert
Brigitte Fassbaender, mezzosoprano; Cord Garbaccio, baritone
DG 423 680-2 (55m 0ls)

Carl Loewe's reputation as a composer of lieder has inevitably suffered from the comparison with Schubert and Schumann. He was a year older than the former and outlived the latter by fifty years and his was obviously a much smaller talent than either. Nevertheless, he was, first and foremost, a singer, and his large output of ballads and songs includes some remarkable settings. Of primary interest here, I suspect, will be Fassbaender's singing of his Frauenliebe, his setting of Adelbert von Chamisso's 'garland of songs' (Liederkranz) composed four years before Schumann's and including the final 'Traum der eigentägigen Tage' in which the old woman addresses her grand-daughter in a valedictory - and here, unutterably moving - apotrope to the husband she has buried and the power of woman's love.

Loewe leaves the final verse to be spoken, and Fassbaender's low, dark singing voice is unforgettable. It is a beautiful song, a fitting climax to a cycle which, if not on the imaginative level of Schuman's, at least displays vocal splendour, alacrity and her imaginative, a finer reading, though, than Fassbaender's whose individual mezzo is laden with emotion and capable of an extraordinary range. She is outstanding, too, in the tragedy of the imprisoned Gretchen in the Scene from Faust ('Ach, neige, Du Schmerzenreiche'), one of the finest songs recorded here, and in Heine's Die Lotosblume, a quite different 'interpretation' of the poem from Schumann's popular setting.

DG's recording (Berlin's Studio Lankwitz) exposes the odd sign of vocal wear and tear - one has to search for it. She is outstanding, too, in the tragedy of the imprisoned Gretchen in the Scene from Faust ('Ach, neige, Du Schmerzenreiche'), one of the finest songs recorded here, and in Heine's Die Lotosblume, a quite different 'interpretation' of the poem from Schumann's popular setting.

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was obviously come from another world, less earthly, more sophisticated and nuanced than their servants. Schwarzkepp’s second recorded Countess is not as freely vocalized as I had remembered, but her vivacity in ensemble and her aristocratic ‘Dove sono improbabili’ is wondrous. Wacecumber’s Count leans feebly, he is audibly a bounder, stvue and seductive.

Nowadays, I suppose, it is Giulini’s conducting which invites controversy, for it is characteristically big and flowing, while the more restrained, more profoundly, derive from the studios of Bavarian Radio. He is the conductor, above all on record, I think, who captures the pulse of Puccianean ebbs and flows, while encouraging his Munich Radio band to revel in Puccini’s overtly emotional, but richly orchestrated score (he wrote it, remember, not for an Italian opera house, but New York’s Metropolitan). The glorious orchestral sunburst, as the golden rays of light hit the fountain in the Convent courtyard, is magically evocative here — so much more beautiful than in the glitzy Mazel (CBS) set. Patane extracts the maximum emotional pull from Angelica’s painful encounter with her terrible aunt, The Princess, from the tragic outpouring of grief at the news of her baby’s death, and the final apotheosis which portrays her depth. Scotto in her detailed pointing of the declamation is beautifully sung, even throughout her later years. With lively contributions from Gino Quilico and the great trio ‘À la faveur de cette nuit’, Lynne Dawson’s limpid singing of Belinda’s songs is the brightest feature of this new issue — Angelica Varone makes the most of the male title part, but no-one buys a Dido for its Aeneas. At the moment, the most dramatic ‘authentic’ version is Christie’s, with a predominantly French cast (Gilmour Laurens a rich-voiced Dido) but there is still room for a new recording from Gardiner, perhaps, or a second one from Andrew Parrott. The recording (Henry Wood Hall) is well up to Christie’s impeccable standards and some may enjoy the clear, full textures of the English Concert strings, the bell-like clarity of its oboes. But Rogers Sorceress, I imagine, will be hard to live with — [AJ.1]*

HUGH CANNING

On the surface, this looks a promising ‘authentic’ version of Purcell’s operatic masterpiece, and then you’ll have the absence of a second mezzo for the crucial role of Dido’s antagonist, the Sorceress. Like William Christie, on his wonderful, if occasionally weird recording (Harmonia Mundi), Pinnock has been given a second part with a ‘Goliath’ tenor. Unlike Christie, though, Pinnock does not have the extraordinarily androgynous Dominique Visse — a true French ‘autour de l’antre’ — and it may be that he’s thought the voice Purcell imagined in the role — but Nigel Rogers, whose grey, bleating tone, conveys the terror we associate with a visit to a chartered accountant. He doubles, too, in both comic and serious roles with equal success.

This is the major blot on an otherwise safe and sound — though scarcely exciting — issue, and it further confirms my view that Pinnock’s success is founded on an ‘authenticity-without-tears’ approach to Baroque music, whereby one is hardly aware of period instrument timbres, certainly not of vocal style. Pinnock’s cast could easily have recorded their roles for Raymond Lepard’s elephante version on Philips — ‘Tristan in a pent-pot’, he called it, as if that were a recommendation of stylistic aptness — without any perceivable alteration of their vocal method. Would that they had. It goes without saying, that Anne-Sophie von Otter’s Dido is beautifully sung, even throughout her later years — her voice range and appropriately expressive in ‘Ah! Belinda’ and ‘When I am lad’; but she rarely plumbs the emotional depths of a Janet Baker (reissue of the old Oisseau-lyre version, please, Decca!), a Josephine Veysey (Philips) or Tatiana Troyanos (Archiv and Erato, nla.).

Lynne Davison’s limpid singing of Belinda’s songs is the brightest feature of this new issue — Angelica Varone makes the most of the male title part, but no-one buys a Dido for its Aeneas. At the moment, the most dramatic ‘authentic’ version is Christie’s, with a predominantly French cast (Gilmour Laurens a rich-voiced Dido) but there is still room for a new recording from Gardiner, perhaps, or a second one from Andrew Parrott. The recording (Henry Wood Hall) is well up to Christie’s impeccable standards and some may enjoy the clear, full textures of the English Concert strings, the bell-like clarity of its oboes. But Rogers Sorceress, I imagine, will be hard to live with — [AJ.1]*

HUGH CANNING

Gluck’s Iphigenie en Tauride where the external natural forces mirror the psychological turbulence of the characters.

Gardiner is superb here; what I think he misses is the essential Rossinian brio of the Count’s refrain music — but that is a fairly common failing among modern conductors. By the side of the brilliantly disciplined, but po-faced Abbado in the parallel numbers from Il ritratto (DG), Gardiner is a paragon of side-splitting humour.

I admire, too, Gardiner’s insistence on voices which do justice to Rossini’s virtuoso writing and comic spirit, rather than relaying on the fashionable names — Baltus, Raimondi and Co — whose laboured efforts have ruined too many recent recordings.

The young Korean soprano, Sumi Jo, whose delectable singing of Aeneas’s ‘J’ois proche a la tressee’ is a radiant vocal highlight of the set, will undoubtedly soon be joining those names, so Gardiner was well advised to capture her fresh ingenuite before the industry gets its hands on her — she is the Oscar on Karajan’s operatic swansong, Un ballo in maschera, and exploits the bright, lustrous tone and easy, fluid technique which shines from these discs.

Gardiner Montague sings virtually flawless French as the page Isolier and overflows with charm and vocal allure, glorious in the duet with Oty, ‘J’en dea de haut parage’ and the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit’. John Aler is sensible casting for Ory, and though he cannot match Gui’s Juan Oncina or the great trio ‘A la favere de cette nuit'.
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Today, Schubert's music is widely performed and enjoyed. The pianist who also happens to be DG's artistic consultant also bears down on Blochwitz's fresh and agile individuality of Wunderlich's tone. Nothing wrong in that, I hear this great artist's admirers retorting, except that he sounds well-learned rather than instinctive, and in the central areas of the song repertoire. Vocally, it is good work, but it sounds as if the pianist's accompanying part is a little lacking in expressive force within its origins. If the playing occasionally lacks the energy, drive, and is not always as surefooted as its counterparts, it is as if playing accurately is the limit of their aspirations.

Undoubtedly, overall the performance makes an impact which would probably be very striking were one not spoiled by some of the other versions available (and sold at the same price). I certainly would not dismiss the recording, but given the competition in disc space (eg any by Mravinsky!), a cautious recommendation is in order.

I must admit to a bias in reviewing this issue; I have long held Soviet orchestras in a special regard with respect to Shostakovich's music (and others'). That said, Solti and the CSO do quite an impressive job of concentrating their energies. If the playing occasionally lacks the energy, drive, and is not always as surefooted as its counterparts, it is as if playing accurately is the limit of their aspirations.

The only movement that I do not feel is so successful is the third, which is not quite in tune for my liking. The orchestra certainly play it accurately (though some very questionable brass intonation apart) and with good dynamics, but it sounds too careful; it is as if playing accurately is the limit of their aspirations.

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Choice of highlights is whimsical rather than essential. Swan Lake excerpts ignore The Theme and most of the lakeside diversion, only to plunge us into the final drama, with little narrative preparation, halfway through development of the Entr'Acte folksong. Even so, what this disc does give us of the lesser-known music, including a highly dramatic treatment of the oriental princess's music and John Brown's dashing violin solo in the Dansse Russe, makes me curious to hear Ermler's thoughts in the context of the complete set. I'm not sure I would hold out as much hope for his Nutcracker. Attractively designed presentation includes a strange little piece of logic in a foreword from Jeremy Isaacs, complete with photographs. [A/B:2/3] Nutcracker, [1/3]. Swan Lake. David Nice

VIVALDI: The Four Seasons
Nigel Kennedy (vln/dlr); ECO
EMI CDC 749 5572 (40m 4''s) also 1LP/1MC

As the number of CD versions of Vivaldi's Four Seasons passes fifty, the buyer will look for something special in order to be attracted to yet one more interpretation. Nigel Kennedy's new recording offers a modest 40 minutes' music and largely a direct, clear performance. He often takes fast movements very fast indeed, but allies exact and accurate playing to rhythms of tremendous bite and bounce. There are moments of solisolic expansion, but these never interrupt the clear musical flow. Eighteenth-century practice is reflected in decoratory slow melodies at their re-appearance. Colours are subtly varied: the harpsichord balance is specific and even when muted the keyboard is beautifully detailed – indeed the continuo playing and its recording makes one as exemplary. 'Spring' and 'Summer' pass in this vivid fresh manner, and in the rapid first movement of 'Autumn' Kennedy's rather personal freedom with tempo seems natural (this is probably the violin/director role), and he makes none of the alterations to dynamics found in Harmoncourt's controversial reading.

Choice of this bright new version will not, however, be based on the spick and span main body of the performance but rather on the listener's reaction to the Adagio Molto of 'Autumn' with Kennedy's striking and 'sirène-like introduction played on or above the violin bridge, followed by near-atonal improvisations over the harpsichord arpeggios with much use of harmonics. Not so much 'delights of sweetest sleep' as the after-effects of a bad trip. The interpolated lead into the finale commences with a micro-tonal slide upwards to a brief improvised cadenza – highly reminiscent of Haydn's 'turning-up' joke in his Symphony 60. No objections however to the cadenza which Kennedy then adds before the slow movement of 'Winter', nor to its suitably fast tempo over very firm pizzicato bass (twice that of Stokowski but still slower than Harmoncourt). Occasionally the orchestral violins 'glare' to the point of discomfort, but the diverse recording dates – a combination of sessions in 1986 and 1989 – are effectively disguised, and the balancing, though close, is convincingly

WAGNER: Tannhäuser
Domingo/Studer/Balteo/Schmidt/Sahninen/Philharmonia/Sinfonietta
DG 427 625-2 (50m, 196m 14s) also 3LP/3MC

There aren't many justifications, as it turns out, for the long wait taking his Tannhäuser out of its successful Bayreuth run and into the studio (and an all-star cast), but it does allow him to indulge to the full his obvious delight in the intoxicating alternations of the 1861 Paris version. According to Wagner, a rerecking of the Venusburg music was essential to provide a solid foundation for the tragedy; the problem, and of course the fascination, is that the dark world Tannhäuser must shun has all the supple sensuousness of Tristan, whilst its same daylight opposite has none of the nervousness of the Mastersingers' Nuremberg. To settle this, there's a little literalism that did at Bayreuth, for Venus's exchanges in the foursquare Dresden version may make it easier for us to adjust to life above ground,
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but we lose thereby the most extraordinary music in the opera. At least Sawallisch (Philips) accomplishes the Barcarolle. Haitink (though not Solti) stays soberly with Wagner's original thoughts.

The contrast is heightened by relative strengths and weaknesses in theorchestral and vocal performance. It is quite a short season, but what minimal poetry can be found between the lines more persuasively than Dame Peggy Ashcroft. Beyond the limitations of his Shakespeare verse-speaking, Jerome Irons has far more vocal colour at his disposal than I had suspected. His regional accents may be (deliberately?) dubious, but he is certainly rhythm-sharp, and the rich bass reserves for the 'Man from a Far Country' serve their hypostatic purpose. With the voices close miked like radio presenters, some of the instrumental detail (also immediate) can be lost — cello and bass clarinet, for example, as the ghost of Mister Belkaster stalks around at 'Four in the Morning' — but the parodies are scrumpingly clear, and you can tell when something isn't there that ought to be (fortissimo flute for one bar of 'En Famille', to be precise). Stevinson's Renard makes a brilliant companion-piece, driven brazenly by Chailly in the contrasting resonance of Kingsway Hall; one would hardly set the date at 1910, from this performance. But why no transcription above all when Philip Glass's Langridge springs the words so enticingly? [A/B/1]

David Nice

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Oven: Clarinet Trio, Op.11 James Campbell (cl)/Donald Trench (fn) Chandos Chan 8665 (55m 5s)

An enjoyable disc, marred by occasional intonational problems and an approach to rhythm which sometimes carries straight-forwardness to a fault. That said, there's great vitality and flair, and the choice of repertory is particularly keen.

Hugh Causing

WOLF: Selected Leider/Mahler: Songs from Des Knaben Wunderhorn & Lieder aus der Jugendzeit

Anne Sofie von Otter (mez sop)/Ralf Gothoni (fn)

DG 423 666-2 (58m 5s)

Not perhaps the Witticest Mahler ever recorded — von Otter yields to Schwarzkopf and Ludwig as a singing stand-up comedian in the context between Cuckoo and Nightingale (Lob des hohen Verstands) — but this young Australian mezzo makes a deep impression with her recorded debut. Above all, she shows astonishing maturity — and courage — in her tackling of some of the most demanding Wolf songs. Rarely have I heard such passioned, intelligent and beautiful singing of 'Kennt Du Das Land?' — Wolf's answer to Schubert's Gretchen or The Young Nun — so superbly complemented by the playing of Ralf Gothoni, a great but sorely neglected singers' pianist, nor such an unfussily pointed, yet characterful, recreation of 'Die Spöde' (The ungrateful girl). The influence here seems to be Fassbaender rather than Schwarzkopf, whose highly nuanced colouring of text tends to interrupt the lyrical progress of Wolf's more reflective moods — the three Mignon-Lieder of 1888, Wolf's annus mirabilis of song production and performance in 1979 — where Courtier Death and crane-tall Jane have real power to disconcert ['Came the Great Popinjay'/'Ahabade'].

Facade 2, of course, has already been available in a long-deleted OUP issue, where Eleanor Irons singers her way around the lines more persuasively than Dame Peggy Ashcroft. Beyond the limitations of his Shakespeare verse-speaking, Jerome Irons has far more vocal colour at his disposal than I had suspected. His regional accents may be (deliberately?) dubious, but he is certainly rhythm-sharp, and the rich bass reserves for the 'Man from a Far Country' serve their hypostatic purpose. With the voices close miked like radio presenters, some of the instrumental detail (also immediate) can be lost — cello and bass clarinet, for example, as the ghost of Mister Belkaster stalks around at 'Four in the Morning' — but the parodies are scrumpingly clear, and you can tell when something isn't there that ought to be (fortissimo flute for one bar of 'En Famille', to be precise). Stevinson's Renard makes a brilliant companion-piece, driven brazenly by Chailly in the contrasting resonance of Kingsway Hall; one would hardly set the date at 1910, from this performance. But why no transcription above all when Philip Glass's Langridge springs the words so enticingly? [A/B/1]

David Nice

RALTON: Facade 2/STRAVINSKY: Renard

Peggy Ashcroft, Jeremy Irons (narr/Langridge/Jenkins/Hammond/Stroud/Lloyd: London Simphonietta/Chailly)

Decca 421 717-2 (65m 5s)

No Facades are to be found in the catalogues at the moment — no Renards either, for that matter — and so, while the suites maintain the concert hall impression of clever pastiches, the recording hails from the same venue as Blochwitz's Schubert, the Friedrich Ebert Hall in Hamburg, DG's home-town, and the balance between voice and piano is naturally accomplished. [A3/1*]

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...ance, on the whole, is beautifully inflected, particularly by James Campbell, but there are strange and sometimes rather mannered inconsistencies of rhythm (not least in rest) which occasionally get in the way of overall coherence. The Beethoven isn’t, perhaps, a masterpiece, but it’s enormously enjoyable nevertheless, and the performers emerge largely in credit, though elegance isn’t a word which springs at once to mind, especially where the pianist is concerned. Robinson’s playing is musically adventurous. Energized and recorded with an even greater dose of usual of the much-remarked Chandos resonance. [B/C] 3

Jeremy Siepmann

MUSIC FOR CLARINET & PIANO (Vol.2)
BLISS: Pastoral/COOKE: Sonata/HOWELLS: Sonata/REIZENSTEIN: Arabesques
Thea King (cl)/Clifford Benson (pno)
Hyperion CDA 66044 (49m 15s)

In two movements of virtually equal length – Con moto and Allegro – Howells’s Sonata is the longest and surely also the best of these works. It dates from 1919 according to Grove, or 1951 according to the booklet accompanying this CD, and it demonstrates how, in its stately, measured pace, it is his music which impulse always vocal and hence obviously well suited to the clarinet. It also shows that Howells was alive to structural questions; his sense of emotional architecture, though with much variety of pace and emphasis. These qualities are well reflected in this sensitive, exquisitely nuanced performance, while the two artists serve Cooke and Bliss equally well and do what they can for Reizenstein.

Cooke was of course a Hindemith pupil, and we find in him a comparable emotional resonance linked to unfailing operatic force. His four-movement Sonata of 1962 is fluently written, like most of his instrumental music, and is logical and imaginative at once. Cooke’s has always been a distinctive, quietly individual voice. I cannot warm to Reizenstein’s dry little Arabesques – a single movement despite its title – but the thoughtful Pastoral of Bliss is written with equally sustained, unfailing melodic phrases. It is not especially pastoral, but it is successful, eloquent and well presented. The performances are first-rate, and the performers emerge largely in credit, though elegance isn’t a word which springs at once to mind, especially where the pianist is concerned. Robinson’s playing is musically adventurous. Energized and recorded with an even greater dose of usual of the much-remarked Chandos resonance. [B/C] 3

Jeremy Siepmann

FRENCH IMPRESSIONS
DEBUSSY: Danse sacrée et Danse profane – Sonata for flute, viola and harp/RAVEL: Introduction and Allegro for harp, string quartet, flute and clarinet/ROUSSEL: Serenade for flute, string trio and harp
Prometheus Ens
ASV CD DCA 664 (53m 44s) also LP/MC

These four delightful French works place the harp in various chamber ensembles, except that the Danseuses are usually heard with full orchestral strings, the title page of Debussy’s score reading ‘harp and 16 orchestral cœurs’. While there is a gain in intimacy – the Prometheus Ensemble musters nine players – good orchestral performances, such as in this, are less decisive than the solo harp. The judgement is probably achieved: a greater feeling of mystery. Debussy’s Sonata is a late and cursive piece, its sad elegance comes to us as if from a great distance. The composer himself wrote that it was ‘terribly melancholy – should one laugh or cry? Perhaps both at once’.

The Prometheus interpretation shows considerable insight, although, in the first two movements at least, it is less decisive than expressive. The latter, however, is by far the most impressive of the three. The recital is scheduled for the autumn. It will be pulled up short by this recital. His Petrushka is a marvel of hair-pin virtuoso characterization and precision. In ‘Chez Petrouchka’ he is happy in hyper-activity as in clownish, bitter-sweet contemplation and in (i) and (ii) his reflexes and textual awareness are razor-sharp. More subtle than the Hurewitz, less exotically satirical than Cherkassky (Nimbus), more personably engaging than Pollini’s (DG), Rostropovich may well represent the best of all worlds. Possibly the most subtle (the dedicatee) played Petrushka with comparable wit and style – unaccountably his performance was never released by RCA.

Rostropovich’s Prokofiev, too, is sufficiently vital and liberating to make one regret his incomplete Romeo and Juliet. And although Ravel’s La Valse fits admirably into his imaginative programme it is making its second appearance on disc! Lortie’s Gluck, while much less stylized and bizarre than Tzonin Barto’s (EMI), is, however, more self-conscious than spontaneous. Nonetheless the final pages are of stunning beauty, and in (ii) and (iii) his reflexes and textual awareness are razor-sharp. The Beethoven isn’t, perhaps, a masterpiece, but it’s enormously enjoyable nevertheless, and the performers emerge largely in credit, though elegance isn’t a word which springs at once to mind, especially where the pianist is concerned. Robinson’s playing is musically adventurous. Energized and recorded with an even greater dose of usual of the much-remarked Chandos resonance. [B/C] 3

Jeremy Siepmann

PRIMA VOCE
Great Singers 1909-1938
Nimbus NI 7801 (75m 12s)

Divas 1906-1935
Nimbus NI 7802 (77m 02s)

Enrico Caruso
Nimbus NI 7803 (75m 42s) recordings from 1904-20

Giovanni Matinelli
Nimbus NI 7804 (76m 32s) recordings from 1915-28

Rosa Ponselle
Nimbus NI 7805 (76m 42s) recordings from 1923-39

Digital Ambisonic recordings made from 78rpm discs replayed acoustically

Readers who saw TB’s October news story about this series may have been intrigued by the juxtaposition of original recordings and a large horn gramophone. The latter is one of EM Ginn’s famous ‘Expert’ instruments, employing continually re-sharpened thorn stylus here to avoid deterioration of quality across sides, with subsequent abutment of successive passages accomplished in the digital domain. Stylus wear apart, I have always been very impressed by how well a friend’s ‘Expert’ reproduces early vocal discs. Its inbuilt mechanical-voice filtering and stress-free tracking are remarkable, and my only serious reservations have concerned its limited loudness and the rather clunky ambient character of otherwise frequently astonishing pre-electric voice recordings. The ambient aspect has been dealt with here by placing the ‘Expert’ in an acoustically lively room as if it were itself the singer, and recording its output via an Ambisonic microphone. And of course the loudness question disappears once one has an audio signal to amplify.

Nimbus make no claim that this is the only viable approach to transcribing 78s. They simply ask that we judge the results by ear – and those results are certainly impressive. The natural flavour of the original records is preserved, and the music sounds as if it were the early pioneers who were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a surround acoustic to provide a fine sense of performing presence, and I only wish that the resulting vocal images had been properly centred. They have an irritating leftish bias, but perhaps future issues in the series will avoid this. As for the music, these collections strongly support the view that a substantial number of operatic singers from the early decades were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a surround acoustic to provide a fine sense of performing presence, and I only wish that the resulting vocal images had been properly centred. They have an irritating leftish bias, but perhaps future issues in the series will avoid this. As for the music, these collections strongly support the view that a substantial number of operatic singers from the early decades were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a surround acoustic to provide a fine sense of performing presence, and I only wish that the resulting vocal images had been properly centred. They have an irritating leftish bias, but perhaps future issues in the series will avoid this. As for the music, these collections strongly support the view that a substantial number of operatic singers from the early decades were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a surround acoustic to provide a fine sense of performing presence, and I only wish that the resulting vocal images had been properly centred. They have an irritating leftish bias, but perhaps future issues in the series will avoid this. As for the music, these collections strongly support the view that a substantial number of operatic singers from the early decades were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a surround acoustic to provide a fine sense of performing presence, and I only wish that the resulting vocal images had been properly centred. They have an irritating leftish bias, but perhaps future issues in the series will avoid this. As for the music, these collections strongly support the view that a substantial number of operatic singers from the early decades were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a surround acoustic to provide a fine sense of performing presence, and I only wish that the resulting vocal images had been properly centred. They have an irritating leftish bias, but perhaps future issues in the series will avoid this. As for the music, these collections strongly support the view that a substantial number of operatic singers from the early decades were fabulous. If you are sceptical, try the Great Singers disc, a sort of sampler encompassing most of the more famous names from the century’s early decades, with a ###

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Elgar: Falstaff [Enigma Variations] VPO/Chicago SO/Solti. Decca 425 155-2 (64m 10s) © 1976, '80 Falstaff, brassy, swaggering, yet tender as sleazy melodies (separately accessible, by the way: the CD has 21 entry points), is the most inspired of Solti's Elgar recordings. I do, however, find the Chicago Enigma Variations open-voiced, clean-cut articulation — comparatively lacking in warmth or any spontaneity. Even variations like '1385' have a certain stiffness of line (that goes for neighbouring 'RBT' too) with the expression seemingly drilled into the players. So, alas. [A/A+]*1 [A-3].

Dukas: Symphony in C — Ariane et Barbe-bleue — Act 3 Prélude — La Péri — L'Apprenti sorcier ORTF/Martinson "Paris Opera Orchestra/Philharmonia Markethurst EMI CD 763 1602 (78m 3s) recordings from 1972, '57, '52 * Markethurst brings a composer's car to the apprentice sorcerer; the sound is astonishingly vivid at the beginning (no wonder Walter Legge was so indifferent to the advent of stereo), although there's a marked change in quality at 4m 58s. But the real value of this mid-priced CD is that it fills gaps: the Bluebeard Prelude, and Dukas's third movement symphony, improbably dubbed 'the French concerto'. Martinson the idiomatic 'Boult' of interpreters in the '75 Penguin Guide. Franck (manner) or Saint-Saëns (colour) are more relevant, although the opening of the Andante certainly parallels the great Elgar slow movements. An attractive proposition, partially, for those who adore the romantic period, with the reservation that the symphony's Allegro spiritu (iii) is a weak and empty finale, lapsing disappointingly into an intermission of Franchenian langour. [A/C1].

Mahler: Symphony 9 BPO/Barbieri. EMI CD 763 1152 (78m 25s) © 1964 Although it does not say so here, this recording came about by request of the orchestra, and they enjoy the results working with Barbieri. At the time there were simply no Mahler symphonies recorded by the Philharmonic. The resulting 1964 Jesus-Church-Anderson recording is a rather impressive (some unnaturally 'fizzy' violin tone excepted), with a solid extended bass. Perhaps for some (i) will seem too ruminative, whereas (ii) is the quality of live performance here — one 'com monore notwithstanding the pessimistic character of the work. Recorded first, incidentally, Barbieri's urgently impatient finale lies between the extremes of Walter (1959) Bernstein (1985). 18m 07s 22m 5s 29m 4s. Some shakily playing qualifies the rating. [B/G1]*2

Mozart: Piano Quartet in g, K478/ SCHUBERT: 'Trotz' Quintet Arthur Schnabel (pno)/Pro Arte Qt/Claude Hobday (vln) EMI CD 765 0512 (64m 03s) © 1972, '76 Two of these fine Mozart recordings — at mid-price, too. Could there be a better bargain? Both productions have come up well on CD, despite the recent RHI screening of Alexander Nevyssky's public performance on tape. The Mozart receives better performance from the Pro Arte, and the Andante has an intimacy and ransom nowhere matched in later recordings — not even Caruso's. [H/8]

Prokofiev: Alexander Nevyssky/RACHMANINOV: The Bells Reynolds/Armstrong/ Tear/Shirley-Quirk/ISO & Ch/Previn EMI CD 763 1142 (77m 5s) © 1972, '76 Two of Prokofiev's finest recordings — at mid-price, too. Could there be a better bargain? Both productions have come up well on CD, despite the recent RHI screening of Alexander Nevyssky's public performance on tape. The Mozart receives better performance from the Pro Arte, and the Andante has an intimacy and ransom nowhere matched in later recordings — not even Caruso's. [H/8]

Fritz Reiner: Bartok — Concerto for Orchestra [Music for strings, percussion & celesta Chicago SO/Reiner RCA GD 60175 (65m 0s) Recorded 1955, '58 MAHLER: Das Lied von der Erde Maureen Forrester (con)/Richard Lewis (ten)/Chicago SO/Reiner RCA GD 60176 (67m 30s) recorded 1957, '59 JOHANN STRAUSS (II): Künstlerleben Wiener Blut & Schatz Walzer Rosen aus dem Soden D'Amour's prelude, and Dukas's 'Minstrels' — idiomatic (the texts are also given in full in the booklet). Kijé is alternatively available as an Orchestral suite, and the saxophone quartet as a quintet. Published by Peters, London, England. 

Cortot's playing. I would love to know what Chopin 6- minor Ballade epitomizes all that Cortot strives for, the effect of the recital. The sound is astonishingly vivid at the beginning (no wonder Walter Legge was so indifferent to the advent of stereo), although there's a marked change in quality at 4m 38s. But the real value of this mid-priced CD is that it fills gaps: the Bluebeard prelude, and Dukas's third movement symphony, improbably dubbed 'the French concerto'. Martinson the idiomatic 'Boult' of interpreters in the '75 Penguin Guide. Franck (manner) or Saint-Saëns (colour) are more relevant, although the opening of the Andante certainly parallels the great Elgar slow movements. An attractive proposition, partially, for those who adore the romantic period, with the reservation that the symphony's Allegro spiritu (iii) is a weak and empty finale, lapsing disappointingly into an intermission of Franchenian langour. [A/C1].
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DECEMBER 1989
**ART OF NOISE:**

\textit{BELOW THE WASTE}

China 83904-1

I have a soft spot for Art of Noise. I like the manner in which they take pure MOR sounds and then turn them into decidedly oddball affairs, as is the case here with ‘Carwalk’, which could easily be something plucked from a Frances Lai score, except that AON perceive it as being part grungy rock. Here, on what is probably the trio’s least self-indulgent album to date, they have their own electronic fun with rock, jazz, funk and string-laden wares, this time tossing in huge chunks of Soweto pop, courtesy of Mahotella Queens. Sometimes the results pan out as jagged-edge rhythm tracks waiting for something to really happen up front. But, on the whole, it’s fun to have AON around, if only for their endorsement of the Emphass Speakers that decorate the album’s cover! [A:*1/2]

Fred Dellar

**THE BEACH BOYS:**

\textit{STILL CRUSIN’}

Capitol CDP 7 92639 (55m 46s) CD

A hodge-podge affair containing three completely new songs, three other newies that have recently adorned soundtrack albums, the collaboration with the Fat Boys on The Surfers’ ‘Wipe Out’ that gave them a chart single not so long back, plus a trio of oldies – ‘I Get Around’, ‘Wouldn’t It Be Nice’ and ‘California Girls’ – which were up for re-selection because all three have appeared on film soundtracks. The opening ‘Still Crusin’, from Lethal Weapon 2, is pretty much what you’d expect – warm harmonies and the usual wave-lap melody, ‘Somewhere In Japan’ is an interesting, more guitar-oriented cut, part-masterminded by Papa John Phillips, ‘In My Car’ represents a return to the better side of cruisin’, fat-sounding and easy-on-the-ear, while ‘Alan Jardine’s Island Girl’ acts as a musical tour of the Caribbean but doesn’t have the sunny-side-up appeal of ‘Kokomo’, the group’s last US No. 1. Add ‘Make It Big’, an uplifting anthem and you have just over half-an-hour’s worth of music. Poor value in present-day terms. [A:1/2]

Fred Dellar

**ALAN BRANSCOMBE:**

\textit{SWINGING ON THE SOUND STAGE VOLS 1 & 2}

Esquire 5332/5342

This material, recorded in 1968, is a timely reminder of Branscombe’s multiple talents. On these two LPs Branscombe concentrates on saxophone, vibraphone and piano, sounding fluent and highly inventive on each. Hear him play excellent piano on ‘Blues For Alan’, vibraphone on a ‘Rose Room’ and alto on ‘Dolphin Street’. A considerable variety of other musicians appear with him in these recordings made on the sound stage at Shepperton Studios, and like him they offer a very agreeable brand of conservative modern jazz. The trumpeter Kenny Wheeler is his usual lyrical self, as on ‘For Pete’s Sake’, Duncan Lamont plays interesting tenor saxophone in ‘On The Alamoo’ and Eddie Blair, another trumpeter, has some striking ideas in ‘Close Your Eyes’, although his solo is capped by two exceptional alto choruses from Branscombe.

Max Harrison

**KATE BUSH:**

\textit{THE SENSUAL WORLD}

EMI Records CDP 7930 7 82

At a private playback which Kate Bush held earlier this summer, the audience of friends and colleagues was stunned into silence by the end of the first tape. Among those present was Nigel Kennedy, who plays on the album, and the Trio Bulgarka, there to hear what Kate had done with their vocals. Kate looked genuinely surprised at the strength of everyone’s reaction, but she does have an uncanny ability to move the soul. Sensual World may not have the obvious singles and instant appeal of The Hounds Of Love but it washes over you like a great wave. Some tracks, like ‘Rocket’s Tail’ include some surprisingly heavy guitar from Dave Gilmour – the man who introduced her to EMI. Other tracks are haunted by Davey Spillane’s wailing Uillean pipes. The mixture of old and new works perfectly. The songs are less clearly structured than those on the last album. At times they seem to meander aimlessly, as with the eerie title track, but Kate Bush is a remarkable woman and this is a remarkable album. [A:1*]

Neville Farmer

**CAN:**

\textit{RITE TIME}

Mercury 838 883-2 (41m 5s) CD

The new Can LP has been kicking around for some time: recorded in late ’86, it should at least have the merit of being well-powdered. And the record does indeed find Can in mellow mood, easing into its stride with the lengthy ‘On The Beautiful Side Of A Romance’ complete with conventionally soulful vocals from Malcolm Mooney. The instrumentation is provided by a quartet who are also old hands – Schmidt, Liebzeit, Karoli and Guzkay (master of the dictaphone). As usual with this band, things are slightly off-centre – straight songs illuminated by leaks or flashes of odd sound, but the results are eminently listenable. Try Below This Level (Patient’s Song) or ‘Hoolah Hoolah’. [A:1]

Pete Clark

**BASE METAL?**

\textit{GIRLSCHOOL: CHEERS YOU LOT}

Razor Metal/MCD 127 (78m 45s) CD

This Girlschool compilation provides plenty of ammunition for people who argue that there are no merits in metal – it’s primal metal at its most overrated. The Cheers You Lot CD features 13 more tracks than the album so, if you must, buy the album. Production is decidedly budget, and this shower even got away with slowing songs down for any taxing guitar solos or challenging chords. ‘Screaming Blue Murder’, ‘Yeah Right’ even ‘Please Don’t Touch’ with Motorhead, they’re all there, all the Girlschool greats. Or was that grates, because their lyrics and songtitles – ‘The Uninvited Guest’ – The ghost of a mist was on the field ...’ One thing that cannot be replaced, is the presence of Fish, his near-tyrannical dominance of Marillion’s stage, recordings and general affairs Hogarth doesn’t quite seem able to imitate what was instinctive and unintentional in Fish.


**THE CANNIBALS**

\textit{SEASONS END}

RCA PD 90387 (53m 33s) CD

UFO: \textit{SPACE}

‘Gate Records/Line Music GACD 9.007040 (67m 47s)

This Cannibals is probably the best heavy rock buy this month. Real soul-searching vocals and spine-tingling guitars with wistful echoes. One unwelcome development in the Starship sound is the reliance on sterile synthesizers, so talent and character don’t shine. Great title track though. [A:2]

If Starship are too soph, try something to the sort of CD you’d play at a hippy party where you can’t hang up your coat for the bulk of anons on the pegs. Space Metal is bound to be somebody’s idea of classic UFO, but it ain’t mine. I’ll wait for a reissue of Obsession on CD, and in the meantime make do with the old-fashioned &h guitar sound in Space Metal’s better tracks. Shale It About, ‘Star Storm’, and ‘Silver Bird’ will do nicely.

Karen Doublseed
TRACY CHAPMAN: CROSSROADS
Elektra Records 960 888-1

Ken Kesler hates this woman and everything she does. I, on the other hand, think she's an enormous talent. She writes simple, angry songs which are sometimes misdirected but make her point whether you agree or not. Her commitment is the reason she attracts such a strongly polarized reaction for and against. Crossroads is quite different from the first, classic album. The arrangements are fuller, though Chapman and Kershenbaum's production is still clean and open and Kevin W Smith's engineering is immaculate. The songs still have a depressing, angry feeling and occasionally point to social problems, such as the underground homeless of New York. She couldn't give a damn about appearing hackneyed — 'Freedom Now' is for Nelson Mandela. I do have my doubts that this contains a song as strong as 'Fast Car' but it is a conventional record which you should buy if you loved the first one, and actively avoid if you didn't. [A:*1]

Neville Farmer

DAVE CLIFF: THE RIGHT TIME
Miles Music MM074

Cliff is one of the best contemporary jazz guitarists, and he happens to be English. Among those with him are the alto saxophonist Geoff Simpkins, whose approach, based on Lee Konitz, accords well with Cliff's, although his solo on 'Four Minors Only' could sound bluer than that implies. Other solos, fluently impressive too, come from John Pearce at the piano, notably on 'Bird Blues' and ' abandoned'. Cliff's technique is one tha

THE DAMNED: FINAL DAMNATION
Essential
Castle Communications ESCCD 008 (5.5m 4s) CD

So this is it, The Damned's final reunion concert at the Town & Country Club, June 1988. Still all things must pass and at least there is this CD to remind us of a great British institution. The Damned were not the greatest band in the world but they knew how to put on a good show and wrote a few good tunes. Captain Sensible probably made more money as a solo artist, but he was nothing without his compadres Vanian, Scabies, James, Merrick and Jugg. This album can hardly do justice to what was a very sad band but it is nicely recorded, earthy and fun. [B:1] Neville Farmer

BOB DYLAN: OH MERCY
CBS 4585001

Time was when cover merchants avidly descended on every new Dylan album, raking through the tracks in order to provide themselves with singles-fodder of the profitable and artistically acceptable kind. Could be, if Dylan maintains the form shown on Oh Mercy, that these vendors could once more be knockin' on his door, wise to the fact that the D in Dylan equates with that of Dollar. The main case in point here is 'Of The Time', an acid-sweet love song, on which Dylan maintains that, though a romance has been shattered, I can keep my feet on the ground. Follow the path I can read the signs/Stay right with it when the road unwinds' but, resignedly adds at the end of every seemingly resolute statement that this is only true 'most of the time'. It's a beauty of a song, delivered in a dark, brooding voice that sounds as if it was fashioned by Edgar Allan Poe. Alone, this track would make the album worthwhile. But Dylan and producer Daniel Lanois — who's astutely utilized the Neville brothers rhythm section on most of the cuts here — have not been content to let things rest there. The opening 'Political World' and 'Everything Is Broken', a classic Dylan list-song, are both wonderfully energetic and the very essence of rock, while 'Ring Dem Bells', though hardly cover fare, is a fine example of Dylan gospel, with a keyboard backing that could have been dubbed straight off something Mahalia left around at CBS. Maybe it's a shock reaction after the disappointment of Dylan And The Dead but I feel like trundling out a star for this. [A:*1] Fred Dellar

GALAXIE 500: ON FIRE
Broken Trade ROUGH 146
LA GUNS: COCKED AND LOADED
Vertigo 838 592-2 (5m 51s) (C)

Ahem! There appear to be two ways of approaching the business of making music with the basic guitar-bass-drums vocal line-up — broadly speaking, that is. Both these groups are American (although Guns have a UK vocalist) and both use the format above. There all similarities end. Galaxy 500 side through the speakers, encircling the unwary listener with snaking lines of guitar, restrained percussion and a confessional-style vocal. Before you know it, you're feeling all the way up like a pervert, completely in thrall to some slyly dominant material: 'Blue Thunder', 'Strange, Trees'. [B:1] LA Guns wouldn't know subtle if it came at them with a twelve-foot chainsaw — but they're none the worse for that. Operating in the world of commercial possibilities opened up by the more famous Roses, they crank out variations on familiar rock themes without ever resorting to the white elephant of heavy metal. In someone's trousers, a brain cell stirs and up pops a tune called 'Sneaky Come, Easy Go'. Love it. [B:1] Pete Clark

AGNES BUCH GUNNAS AND JAN BARBEREK: ROSENSFOLE
ECM 1402

This is an oddball album. Barberek is well known to jazz fans for his distinctive saxophone playing, culled from the likes of Gato Barbieri and John Coltrane. Because he's Norwegian, people keep saying how Nordic his music is... all that space... that coolness. This album of medieval songs from Norway is certainly a down-home extravaganza — or perhaps 'saga' Gunnas handles these long songs in what appears to be a conventional manner, but Barberek's contribution uses plenty of non-Norwegian influences to flesh out the starkness. His saxophone is hardly heard, and instead there's a tapestry of keyboard drones and strings, with plenty of percussion which sounds vaguely North Indian, but without the variation. Although there's an initial attractiveness to the sounds, the music tends to stay still for too long. [A:*2]

Ken Hyder

NANCY GRIFFITH: STORMS
MCA MCG 6066

Nancy Griffith is at last shrugging off that Texas folkieby queen tag and shaping up to become the Joni Mitchell of the '90s. The tender love letters are still there, the most commercial hit here being 'You Made This Love A Teardrop'. The difference is that you long for a lyric sheet: in this department, 'Drive In Movies And Dashboard Lights', a tale of a car's point of view, is a prime example of the late '60s, takes the kewpie doll, edging out 'Listen To The Radio', a road song with a difference. But the track which will probably stir hearts, and hopes...
fully, consciences, is ‘It’s A Hard Life Wherever You Go’, which links the singing of youthful Belfast minds with racist attitudes in Chicago. Aided on its course by the likes of Jerry Donahue, Phil Everly, Bernie Leadon, Albert Lee plus producer Glynn Jones and mastering man supreme Doug Sax, Stomu’s album that makes you cry and even think deeply. [A:1] Fred Dellar

HIPSWAY: SCRATCH THE SURFACE
Mercury 838 249-2 (54m 11s) CD

Hipsway, a band that sometimes seems to be more ex-members than the Dangerous Sports Club, are worthy of consideration because they possess the means to stand out. Since the glory days of Honey Thief it’s been a bit quiet but here they return with a record of decent enough quality. Operating either on the fast or slow side of mid-tempo, the three-piece have taken some care over their groove — careful layers of guitar and keyboards, underpinned by perky drums and bass — but their ace card, as usual, lies in their ability to knock out hummable melodies: ‘Your Love’, ‘Emerald’, the title track. [B:2] Pete Clark

ELTONJOHN: SLEEPING WITH THE PAST
Rocket Records 838 839-1

Back with lyricist Bernie Taupin, Elton shows new confidence after a couple of years of personal turmoil. The ten songs were all recorded at great Rocket Records 838 839-1

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Jesus Jones are one of those bands whose misfortune it has been to be single out for special mention by the music press. Sniffing interest, the record company pile on the support and then, when the press attention strays, the public are looking at what looks like a hype. In the case of Jesus Jones, it’s all a bit unfair. Their music is a hybrid — of rock, house/hip-hop, funny noises — but the best songs on Liquidizer hang together quite nicely. Highlights include the early single ‘Ingo Freako’, subsequent single ‘Never Enough’, ‘What’s Going On’ and ‘Song 15’. As debuts go, by no means negligible. [B:2] Pete Clark

JESUSJONES: LIQUIDIZER
Food/EMI CDP 793238 (39m 35s) CD

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The gazette of some world music enthusiasts continues to get past the obvious rock like musics from around the globe. This album focuses on a tiny island of around 80000 people. Martinique always meant a High Hopes Boygar movie to me, a kind of Caribbean Casablanca, but here the mix of former African slaves, French Colonialists and surrounding Caribbean influences however adds up to an infectious carnival music. It has a loping percussion above all else, and the vocals are declamatory outbursts of good-natured exhortation. Added to the mixture are saxophones and brass, along with an accordion, bass, flute and guitar. Rarely will you get the chance to enjoy such exuberantly cheery music. [A:1] Ken Hyder

MARK ET TUMPAP: ZOUK CHOUV
GlobeStyle ORB 035

Paul Simon’s Graceland album showed that it was possible to take the raw, vibrant energy of South African urban music and polish it up with sophisticated studio treatments, without losing the magic. On this disc, the South Africans are doing it themselves. The production of this release — recorded in Belgium — is smoother and crisper than the usual home-produced records but the quality of the music is uneven. The closer the songs are to the township roots, the stronger they are, but when the music leans more towards Western rock last year. They have three tracks on the album are taken from the compilation of ‘End Of The Run’. [A:1] Ken Kessler

BELINDA CARLISLE: EPISODES
Virgin V2559

Debbie has now become Belinda, but in every other respect is back to the great days of Blondie. The crucial returns which lift this set far above her two previous (and disappointing) solo LPs are those of Chris Stein and producer Mike Chapman. Stein has finally conquered the debilitating illness which threatened his career, and adds songwriting and instrumental punch to the songs, while Chapman’s production sends the material flying from the speakers. Plenty of standouts from the opening ‘I Want That Man’ (written for Harry by, gasp!, the Thompson Twins) to the epic closer ‘End Of The Run’. [A:1] Ken Kessler

BLONDIE OR BLUSTER?

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SIPHO MAHLASE: CHANT OF THE夜晚
Virgin (CD) CDV2582 (39m 22s)

Paul Simon’s Graceland album showed that it was possible to take the raw, vibrant energy of South African urban music and polish it up with sophisticated studio treatments, without losing the magic. On this disc, the South Africans are doing it themselves. The production of this release — recorded in Belgium — is smoother and crisper than the usual home-produced records but the quality of the music is uneven. The closer the songs are to the township roots, the stronger they are, but when the music leans more towards Western rock last year. They have three tracks on the album are taken from the compilation of ‘End Of The Run’. [A:1] Ken Kessler

JERRY LEWIS: THE SUN YEARS
Charly CD SUN BOX 1 (8 CDs)

The eight CDs cover the Sun years from November 1956 to August 1963. This is, quite simply, one of the most densely-packed studies of a monumental artist yet released, a crash course in rock ‘n’ roll, rockabilly, country & western, country blues and a few other genres. (Lewis is versatile by all accounts.) The sound is uniformly excellent, with some surprisingly good true stereo tracks, I can recommend it unreservedly. [H/A: B:1] But I must tell you about another Lewis 8-CD box set from Bear Family/Rollercoaster, a sampler of another 17 tracks. What no-one has pointed out is that the Bear Family set costs approximately £80-£90 to Charly’s £60 and that the latter contains 20 or so takes which differ from those on the former. What it means is that the Lewis fanatic must buy both because the 210 tracks on the Classic Jerry Lewis do not include all of the 225 on the Charly set. [Ken Kessler]
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THE RIVER DETECTIVES: SATURDAY NIGHT, SUNDAY MORNING
WEA WX295

A Scottish duo with a collective heart set somewhere in America's mid-west. Though they come at you with the aid of good old AC/DC (the current, not the band!), basically they're a two-guitar acoustic outfit and probably sound just as good during power cuts. Their vocal harmonies are another plus and, thanks to the road they've chosen, the clues to their influences can be found in records by CSNY, The Byrds, Simon and Garfunkel, The Everlys and even Buddy Holly, whom you expect to proffer a hiccups or a twain 'Chains' which, by the way, is a River Ducks' original and not the Goffin and King oldie. In fact, Sam Cory and Dan O'Neill contribute their own songs on all but one track here – the exception being a version of Springsteen's 'Factory' performed in acapella mode – and extremely cawthropy they are too. Add the bonus of Barry Andrews' keyboard work and the next result is a debut album that should have you searching for a follow-up. 

Nae bother. [A1] PRED DELLLAR

RED LORRY YELLOW LORRY: BLOW
Situation Two Records sitru 25 CD (+1m 39s) CD

The Lorries are not half as hard as the initial morbid riff suggests. Reed's vocals are bloody miserable but his songs and lyrics are superb, his voice holds back his chance of wider appeal. Amidst the credits is a guest keyboardist, Steve Hogarth, currently lead fish replacement in Marillion and one of a number of fine musos to appear on BLOW. I know there are few who think this is a shame, the lorries have the same writing class as REM and deserve better recognition for their work.

[ B1/2]

THE ROLLING STONES: STEEL WHEELS
Rolling Stones/CBS 465752-1

Critics have been scening each other apart over this one, some screaming that it's the best Stones album since the last best Stones album, others almost vomiting as they protest at the very thought of the band continuing survival. In truth, there's nothing very surprising about Steel Wheels. And if certain complaints are in order, then it's hard to imagine anyone going to work up about it. As always, the Stones do what the Stones have always done best. Whenever they harness those guitar riffs and gaze upwards at their portrait of Chuck Berry – as they do on such cuts as 'Sad Sad Sad' and 'Rock And A Hard Place' – then it's hard to carp overmuch. The single, 'Mixed Emotions' is hardly classic Jagger but is headhard enough, while 'Terrifying' does offer some different aspect, the hand dropping into an unlikely but effective jazz-flavoured vein. Set against this are a brace of tracks that are ruined beyond redemption by inept Richards vocals and the song 'Blinded By Love' is the kind of song that Marty Robbins did in his sleep and Jagger does in his nightmares. And so it goes, the good, the bad and the is-it-time-to-go-home-yet being meted out in equal measure. Steel Wheels is no classic but will perhaps eventually contribute a few telling tracks to some forthcoming compilation detailing the band's later years.

[A1/2] PRED DELLLAR

SQUEEZE: FRANK
A&M CDA 5278 (45m 27s) CD

Squeeze have settled down to produce what could be considered as the musical equivalents of the '50s and '60s oldie. In fact, Sam Cory and Dan O'Neill contribute their own songs on all but one track here – the exception being a version of Springsteen's 'Factory' performed in acapella mode – and extremely cawthropy they are too. Add the bonus of Barry Andrews' keyboard work and the next result is a debut album that should have you searching for a follow-up. Nae bother. [A1] PRED DELLLAR

THE SUGARCUBES: HERE TODAY, TOMORROW NEXT WEEK!
Atlantic Indian TPLP 15 One Little Indian TPLP 15CD (51m 48s) CD

It has come to my attention recently that Iceland's Sugar-cubes have a somewhat divisive effect on the populace: something along the lines of love them or hate them. For some, it's a question of Bjork's voice is it an instrument of beauty or of auto-depilation? For others, it's the somewhat devil-may-care nature of the group - are they simply magisterial or major simpletons? The answers to all this and more are on the group's second LP, except that there's no need because all previous prejudices will be confirmed. Key areas of conflict include the manic duet 'Eat The Man' and the unnecessary diatribe 'Shoot' and the item 'Pump' which seems to have something to do with sex. No accounting for taste. Is there any beauty in it? [B2] PETER CLARK

TEARS FOR FEARS: THE SEEDS OF LOVE
Fontana 838750-2 (49m 38s) CD

The arrangements are ever-evolving, never settling at one point where you can pin them down. Strings wrap around, guitars nip in and out with 'Shivers' revealing startlingly and at times of varying delights, keyboards . . . well, let's just say that there's lots happening and most of it is decidedly tasty. The songs? Of course there are a number of fine tracks already available from classics already confirmed. Keyjudgess will be confirmed. Key areas of conflict include the manic duet 'Eat The Man' and the unnecessary diatribe 'Shoot' and the item 'Pump' which seems to have something to do with sex. No accounting for taste. Is there any beauty in it? [B2] PETER CLARK

CASSANDRA WILSON: BLUE SKIES
JMT 834 419-2 (51m 05s) CD

Cassandra Wilson is a singer hitherto associated with the sharp end of the modern mainstream of jazz espoused by a younger generation of American musicians. But these days, paying your dues still means having to know, and be able to play what went before too. So this is the standards release, with ten well-worn oldies like 'I've Grown Accustomed To His Face', 'Polka Dots and Moonbeams', 'Shall We Dance' and 'Sweet Lorraine'. The trio in support – Mulgrew Miller, piano, Lonnie Plaxico, bass, and Terri Lynne Carrington, drums – does the job well. Although she's not the close, Wilson reminds me of my favourite jazz singer, Sarah Vaughan. Of course there are dozens of classic albums of standards already available from classic jazz vocalists. But if you are a freak for this genre, you might want to catch hold of this well-recorded digital release. [A2] KEN HYDER
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HERB ALPERT: MY ABSTRACT HEART
ARM 397 CD-1

The world's best-preserved trumpeter with another funky LP to show that he moves with the times more gracefully than did, say, Al Hirt. Alpert still sounds like he's playing 'Whipped Cream' - curse of a distinctive sound, but superstar guests and clever re-mix make you forget the Tijuana Brass. [A:1/2]

BALAAM & THE ANGEL: DAYS OF MADNESS
Virgin CDV 2598 (+4m 40s) CD

We kid you not: A hard-rocking band which offers nods to metal, Goth, thrash and other punk genres with authority, yet all the while sounding musical, sensitive and professional. With stuff this powerful for the asking, who needs Napalm Death? [A:1]

ELEVENTH DREAM DAY: ELEVENTH DREAM DAY
Fan Club New Rose FC 056 Mini LP debut of a band which mixes indie label anarcho-sloppiness with more than a few traces of West Coast jangly guitar-ness. Not too much mix, when you consider that neither genre is known for the weight of its sound. [A:1]

ERASURE: WILD!
Mute CD STUMM 75 ((8m 22s) CD

The imaginative, melodic side of dance music, proof that you can be original and still fill the floors. The lyrics are too deep for the genre, but no worse than the authors of 'To Love Somebody' and to serve as a showcase for what may have been the surprise hit of Can-nes '89, a low-budget thirty-something answer to Who's Afraid Of Virginia Woolf? Of course, Cliff Martinez, whose pedigree includes sessions with Beefheart, the Dickies and the Red Hot Chili Peppers, now tells you why it's so eclectic. [A:1]

LUCKY LOPEX EVANS: CHINAMAN'S DOOR
Borderline 001 (Available from Brightleng Record World, Jullibee Hall, Gardner Street, Brighten ) Former Howlin' Wolf sideman back in action with beautifully recorded, live-sounding electric blues. Nifty mix of a tight sound with the juiced soppiness once associated with Hound Dog Taylor. Check out Evans' cover of Big King's 'How Blue Can You Get'. [A:*A:2]

DICK GAUGHAN: HANDFUL OF EARTH
Topic TSCD 419 (+4m 52s) CD

One of the roots culture's heroes, back with his 11th solo LP. Steeped in history, mainly political, which makes him something of a throwback. One for devotees of coffeehouse-style acoustic guitar. [A:1]

THE GOLDEN PALOMINOS: A DEAD HORSE
Celluloid war: VEL 6138 Fusion LP from the band that isn't a band. This house confed- eration serves mainly as an outlet for its key members while they offer stellar studio work and to serve as a showcase for new-ish talent. Generically, this runs the gamut from Steeley Dan studio wizardry to indie anarchy, but with such polish throughout that the musicianship is reason enough to listen. [A:*A:1]

IAN DAVID: I MUST JUST LEAVE A KISS
ZoneSpec DVD(CD) 1 (+4m 12s) CD

Because David has made it well known that he's completely self-generated, produced and financed there's a tendency to go easy on it; guilt, love for the underdog, call it what you will. Sorry, it's hard to sympathise with anyone under age 40 who wants to be the Al Martoni of the Post-Synth Era. [A:3]

NINA HAGEN: NINA HAGEN
Mercury 838 505-1 CD

Nina ascends to the throne of Loopyest German Chanteuse. This eponymous release is listenable and even includes a well-interpreted cover of Joplin's 'Move Over'. Palatable, yes, but conventional - never. [A:1]

THE INDIAN GIVERS: LOVE IS A LIE
Virgin CDV 2593 (48m 48s) CD

Shane's debut LP from an Edin-burgh trio that's too clever to be a mere pop act and too melodic to be written of as an indie operation. Imagine what Blue Nile or the Silencers would be like if the sun shined in their parts of Scotland and you're half- way there. [A:*A:1]

THE MACC LADS: FROM BEER TO ETERNITY
Hectic House HHLP 12 (58 Sunderland Street, Macclesfield) Nifty mix of a tight sound and to serve as a showcase for what may have been the surprise hit of Cann-nes '89, a low-budget thirty-something answer to Who's Afraid Of Virginia Woolf? Of course, Cliff Martinez, whose pedigree includes sessions with Beefheart, the Dickies and the Red Hot Chili Peppers, now tells you why it's so eclectic. [A:1]

PHILADELPHIA JERRY RICKS: EMPTY BOTTLE 94/15
Radison SLPH 7702 (From Roskan Engineering) Ricks demonstrates excellent taste by importing this. Natural- cowd and the sentiments quite answer to Who's Afraid Of Virginia Woolf? Of course, Cliff Martinez, whose pedigree includes sessions with Beefheart, the Dickies and the Red Hot Chili Peppers, now tells you why it's so eclectic. [A:1]

SILENT RUNNING: DEEP
Atlantic 782 006-1 CD

This fine Irish band are once again, an example of state-of-the- art wall-of-sound music which should endear them to American fans. Wonderful melodies, plenty of gloss but, man, a surpri- singly 'live' feel. [A:*A:1]

VARIUS: GREATEST GOSPEL HITS
VOLUME 1
Malaco/Charly MAL6004
Pilgrim Jubiles and others. If you can't beat religion, think of this as lofty soul music. [A:1]

VARIUS: SAMPLER SANS REPROCHE
Sample records New Rose SSR 98CD (5m 56s) CD

Loosely translated the title means 'perfection sampling'. Nearly an hour's worth of crea- tive theft for E$99. Synth-tastic dance music, samey to the point of total ennui, however inven- tive the magpies may be. [A:2/3]
Richard Todd. Less 'brown rice' than Fotheringay or Trees, easily digested by those born after 1941. [A:1/2]

FAMILY: IT'S ONLY A MOVIE/FEARLESS
Castle Communications
TF002 CD

This last decade Family epics in one package, pretty much completing the return of the entire catalogue. Stunning rock in a quirky vein from an unique band. Worth it just for 'Sweet Desire'. [A:1]; [A:1/2]

WILBERT HARRISON: WILBERT HARRISON
Ace CHD 275

The 'Let's Work Together' man's 1971 LP, a genuine churn of bar-room funk. Neville's Brothers like reworkings of gems such as 'Blueberry Hill', 'My Babe' and a dandy 'Honest I Do'. [A/A*:1]

MILLIE JACKSON: MILLIE JACKSON
Southbound/Ace SEW 009
Southbound-Ace CDSE 009

Her debut LP, before she learned to cuss'n'rap. Contains the immortal up tempo chart entry, 'My Man, A Sweet Man'. Fine, early 1970s soul, contrast it with her latest. [A1/2]

JEFFERSON AIRPLANE: CROWN OF CREATION
Mobile Fidelity UDCD 523 (38m 18s) CD
Gold plating for one of the Airplane's finer moments, with the eerie 'Lather' and a timeless interpretation of Crosby's 'Triad' as stand-outs. Sound quality is surprising, considering the source of the material. [A/A*:4]

THE KINKS: THE ULTIMATE COLLECTION
Castle Communications
CTVCD 001 (73m 46s) CD
A boastful name, but this is actually one of the better Kinks collections. Despite only six stereo versions, even others exist (eg 'lola'), this 25-track set will satisfy all but the Kultists. [A/B:1]*

LEO KOTTKE: GREENHOUSE
BGO BGOLP 50
Reissue of the 1972 masterpiece which presaged Adrian Legg, Michael Hedges and other 'contemporary instrumental' axe-wizards. Kotke, a 70s fave on US campuses, is making a comeback; this should attract all but the Kultists. [A/B:1]*

BILLY J KRAMER WITH THE DAKOTAS: LISTEN... BGO BGOLP 56

The band's long deleted 1963 LP, a genuine churn of early 1970s soul; contrast it with the Pacemakers but more garagey. Forget the Beatles, they've never sounded better. [A/B:1]

LITTLE BROTHER MONTGOMERY: CHICAGO: THE LIVING LEGENDS
Ace CH 263

A real treasure, this, from River-side's run of blues works in 1961. Sub-titled 'Piano, Vocal and Blue Blues', the LP contains six original compositions, with only six stereo versions, even others exist (eg 'lola'). This 25-track set will satisfy all but the Kultists. [A/B:1]*

AARON NEVILLE: SHOW ME THE WAY
Charly CD CHARLY 1217

Charly CD CHARLY 162 (54m 45s) CD
Another gap in the Neville canon closed, this time with a run of gloriously soulful tracks from 1960-61. Essential purchase if you can't get enough of the later 'Tell It Like It Is'. [B:1] (CD has extra tracks.)

THE SAINTS: ETERNALLY YOURS
Fan Club FC 035CD (40m 55s) CD

THE SAINTS: PREHISTORIC SOUNDS
Fan Club FC 036CD (58m 27s) CD

Here's a nice gesture to remind us that a band emerged kicking and screaming from Down under during the UK Punk hey-day before INXS, Midnight Oil et al. Hard as nails is this grandaddy of the genre, less sloppy than its contemporaries and always performed on the edge. These are spliced with out takes. [A/B: 1/1]* for both.

THE SEARCHERS: EP COLLECTION
See For Miles SEED 275
See For Miles SEED CD 275 (70m 44s) CD
Phenomenal compilation of hits and more culled from the band's nine, impossible-to-find EPs (22 tracks on vinyl, 30 on silver), from 1963-66. The added treat is that See For Miles has unearthed stereo mixes of the smashes - and they've never sounded better. The second-best-ever Liverpool band. [A/A*:1/1]*

CHRIS SPEDDING: GUITAR GRAFFITI
Fan Club FC 054 CD
CHRIS SPEDDING: I'M NOT LIKE EVERYBODY ELSE
Fan Club FC 055 CD
Completing the re-issue programme which restores Spedding's superlative RAK-label retro-rock to the shops. Exquisite blend of time-warped attitudes with New Wave credibility. Best of all it includes real tunes. [A:1] per.

THE SWINGING BLUE JEANS: BLUE JEANS A SWINGIN'
BGO BGOLP 55
Another in BGO's series of Sixties Liverpool band reissues. Way below the Searchers and the Pacemakers but more talented than the Fourmost. Thin, nasal sound (the band, not the pressing), but very catchy. [A:2]

IRMA THOMAS: RULER OF HEARTS
Charly CD CHARLY 226
Charly CD CHARLY 195 (68m 21s) CD
Superb tracks on the Minut label (1960-62). High fun content, with more energy than their Northern counterparts. The CD also contains recent live tracks to show she still cooks like a demon. [A/B:1/1]*

VARIUS: KINGS OF THE BLUES
Ace CH 278

Ace CDC 276 (60m 58s) CD
The best blues in years: rare unreleased BB King, T-Bone Walker, Elmore James and other giants. 16 on vinyl, 22 on CD - every one's a winner. [A/H:1]*

THE YARDBIRDS: THE FIRST RECORDINGS
Decal/Charly CD CHARLY 186 (31m 47s) CD
Not just another compilation but their earliest known recordings. Six live tracks, three studio previously only available in a pricey box set. Excellent UK R&B from the Sixties, for Clapton completists as well. [A/B:1]
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Jones' musicianship — it's claimed that he was 'too ordinary'. Though Jagger respected Jones, while it lasted, was ever eventful. Also, by the time he was seventeen, he'd already worked with Alexis Korner and US jazz, moving on to love the blues of Elmore James (hence Jones' Elmo Hope pseudonym) and eventually forming Blues By Five, an R&B outfit that at that time was the devils musical disciples. And it was Brian Jones who gave them their name. Born 1942, by 1969 he was dead. End of story.

Well, maybe. Except that in those 26 years on earth Brian Jones became a legend. And legends aren't allowed to die. So let's begin again. This time we'll do all the textbook stuff about Brian hailing from Cheltenham, causing a riot at the Arms pub. They formed a band and called it The Rolling Stones — the devils musical disciples. And it was Brian Jones who gave them their name. Born 1942, by 1969 he was dead. End of story.

Narcissistic and hedonistic, Brian Jones died twenty years ago, the Rolling Stone Alexis Korner once dubbed 'the most evil of the lot'

claims that the twosome disagreed at an early stage. Mick Jagger favouring contemporary R&B sounds while Jones still looked towards earther, more traditional bluesware for the group's salvation. Whether this is true is open to discussion, for both Jagger and Jones listened to every new record from the likes of Bo Diddley and Chuck Berry, the Stones sparking off their chart career with Chuck Berry's 'Come On' in July, 1963, following it with Lennon and McCartney's 'I Wanna Be Your Man'. 'Not Fade Away' once a Buddy Holly hit, provided their first Top 10 single, while Bobby Womack's 'It's All Over Now' delivered the first number one. But it was the arrival of 'Little Red Rooster', the band's second chart-topper, that lends most credence to Scaduto's statement. A Willie Dixon blues (albeit one that had been turned into a US hit by Sam Cooke), it heavily featured Brian's slide-playing and was always touted by him as being the best thing the Stones ever recorded. The emergence of the Stones was hot. Have Gibson, will travel. Begin-ning with the release of the band's first album, 'The Rolling Stones', issued in spring, 1964, they were flyposted as being by 'Mick Jagger, Brian Jones and The Rolling Stones' — but it was Brian Jones who gave them their name. Born 1942, by 1969 he was dead. End of story.

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Between the constant touring, the heavy recording schedules and the bouts of brooding, Jones fell apart and became increasingly paranoid. He'd been the first in the band to smoke dope, the one who'd introduced them to acid. Increasing pressures led him to charge towards the abyss instead of maintaining a steady stride. A liaison with German model/actress Anita Pallenberg, tempestuous and amoral, speeded up the process even further. In June, he was still making telling contributions to the Stones' latest album, but his finger tips and string sounds, plus those of flutes and recorders to the band's Between The Buttons album. But everything about Brian Jones was controversial. For every-one who maintains that he was a multi-instrumental genius there's a Nick Kent who claims that the twosome disagreed at an early stage. Mick Jagger favouring contemporary R&B sounds while Jones still looked towards earther, more traditional bluesware for the group's salvation. Whether this is true is open to discussion, for both Jagger and Jones listened to every new record from the likes of Bo Diddley and Chuck Berry, the Stones sparking off their chart career with Chuck Berry's 'Come On' in July, 1963, following it with Lennon and McCartney's 'I Wanna Be Your Man'. 'Not Fade Away' once a Buddy Holly hit, provided their first Top 10 single, while Bobby Womack's 'It's All Over Now' delivered the first number one. But it was the arrival of 'Little Red Rooster', the band's second chart-topper, that lends most credence to Scaduto's statement. A Willie Dixon blues (albeit one that had been turned into a US hit by Sam Cooke), it heavily featured Brian's slide-playing and was always touted by him as being the best thing the Stones ever recorded. The emergence of the Stones was hot. Have Gibson, will travel. Begin-ning with the release of the band's first album, 'The Rolling Stones', issued in spring, 1964, they were flyposted as being by 'Mick Jagger, Brian Jones and The Rolling Stones' — but it was Brian Jones who gave them their name. Born 1942, by 1969 he was dead. End of story.

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