HI-FI NEWS & RECORD REVIEW

August 1989

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Music

OGDON AND SORABJI
HAGEN QUARTET
KLEIBER IN VIENNA
BERNIE TAUPIN
MORE ROCK REVIEWS

Steven Isserlis

SPECIAL ISSUE
AIRTIGHT: TUBES IN THE JAPANESE TRADITION

THE HIGH END

Air Tight: Tubes in the Japanese Tradition

CHICAGO SHOW REPORT
AMPLIFIERS NAiM ARCAM MARANTZ 'BITSTREAM' SONY
CD PLAYERS TECHNICS AKAI AIWA
LOUDSPEAKERS ROGERS ACOUSTIC RESEARCH MONITOR AUDIO

World Radio History
Chandos

"AN ENGLISH COLLECTION"

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CD: CHAN 8610  LP and MC: ABRD/TD 1298

CD: CHAN 8657  LP and MC: ABRD/TD 1343

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An exquisite audiophile tube amp, firmly in the tradition of the classic Lux designs, themselves inspired by 'Golden Age' US models (photo by Tony Petch). Can AirTight turn back the clock? See page 41.

Heading this month's music section, cellist Steven Isserlis talks to Sorrel Breunig: page 83. (Photo: Roy Carnegie.)

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Everyone but Mrs Rodie is delighted with our latest batch of awards.

It's enough to make us blush. To win one What Hi-Fi? Award is a very gratifying achievement... to win two is positively heartwarming... but to win three (including the universally coveted Grand Prix Award) in one year!... we really don't know what to say. Admittedly the Arcam mantelpiece is by no means a stranger to the odd trophy or two, but never before has it groaned under such an embarrassment of riches.

First in our 1989 haul is the Best Budget Amplifier Award... for our Arcam Alpha Plus. A previous winner in 1987, the Alpha Plus moved the 1989 What Hi-Fi? judges to declare: "The Alpha Plus rightly deserves the Best Budget Amplifier tag. Though undergoing some improvements, it is now in its third year — and still selling for the original price. It is truly a budget hi-fi amplifier, setting excellent standards for design, input flexibility and, of course, sound quality."

Never ones to rest on our laurels, we've already made a few small adjustments and improvements to the Alpha since the Awards; it's now the Alpha 2... Best Budget Amp of 1990 peut-être?

Our second Award was for the Best Loudspeaker under £300: the Arcam Two Plus. Apparently "there was little disagreement among the judges that the Plus revision has pushed this worthy speaker far ahead of the competition". Cripes! "The overall picture is of a generous, warm-sounding loudspeaker with an above average bass performance... a delight to live with in the long term... very communicative... with quality where it counts". Without wishing to sound immodest, we couldn't agree more.

Last, but by no stretch of the imagination least, our Arcam Delta Black Box "won unanimous acclaim" and scooped the 1989 Grand Prix Award... the highest honour What Hi-Fi? can bestow. Linked to any CD player with a digital output, the Black Box dramatically improves its sound. Or to use What Hi-Fi?'s words: "As ever, our ultimate accolade goes to a product able to bring superior sound quality to a wider audience at an affordable price... the first UK designed and built out-board digital to analogue converter... it is able to inject grace and space into the sound of many an older generation CD player... offers stunning upgrade potential."

Naturally, everyone here at Arcam is delighted to have received such a welter of commendations. So when you're listening to your Award-winning Arcam components, spare a thought for our cleaning lady. We may have swept the board, but it's Mrs Rodie who dusts the mantelpiece.

ARCAM audiophile products from A&R Cambridge
If it were feasible to ‘New Noise’ a recent historic CD transfer — that is, to refurbish the sound making it indistinguishable from a 1980 digital orchestral recording — and to issue it under a pseudonym, then I suspect that the performance would receive a critical maundering, for the arbitrariness and self-consciousness of expressive effects applied, and the inorganic tempo changes made. The CD I have in mind is of Brahms’s Fourth Symphony in a pre-war concert performance under Toscanini (for it is he!). The point here is that the performance: no means conforms to the ‘image’. And image has become paramount in selling records. It also has a preconditioning effect on the listener.

In the early days of LP, the sleeves tended to be rather drab affairs (eg. some Decca LXTs from the 50s) or, with HMV, there was just a ‘classical’ lettering design around the dog and trumpet motif. Later on, of course, artist portraits became predominant (some performers insisting that they figure on sleeves, however ill-advised). Ancillary to that are the promotional brochures, which project and glamorize the image of players, old and new. Indeed, I can think of two new young violinists so lacking in — for want of a better word — _charisma_ that one wonders how their careers can prosper at all; talent doesn’t come into it.

This is not a puritanical swipe at the record companies: although they, perhaps, should be thinking more along the lines of looking after their protégés when it comes to public exposure. Image and selling have become twinned in political, sporting and artistic ventures.

Recently, much has been made of the ‘power shifts’ in the classical recording industry, with speculation on the long-term effects of, say, the redistribution of catalogues like the Erato, Deutsche Harmonia Mundi, or Teldec, and the move-ments of key figures Günther Brescatt, now with CBS/Sony, or Michael Emmerson, who set up a massive programme for BMG with CBS/Sony, or Michael Emmerson, who set up a massive programme for BMG with CBS/Sony, or Michael Emmerson, who set up a massive programme for BMG with CBS/Sony. And image has become paramount in selling records. It also has a preconditioning effect on the listener.

The September issue is out...
High on any list of all-time amplifier greats is the original Audio Research 150, a legendary device much sought after by music lovers around the globe. Designer William Z Johnson has returned to this exceptional product for inspiration, the result being a new line of all-triode amplifiers headed by the Classic 150. Already recognised for setting new standards in transparency and the retrieval of inner detail, the Classic 150 lifts valve technology to a higher plane. To complete the range, Johnson has introduced — to come alongside the already legendary D125 — two lower-power versions, the Classic 30 and Classic 60, for less-demanding applications.

Such amplification warrants a new level of preamplifier performance. To meet these needs, Audio Research is proud to announce the SP-9 and SP-14, the first beneficiary of the technology introduced in the SP-11 and SP-15 — the world’s reference preamplifiers.

Audio Research: the only choice for the connoisseur.

Write or phone for perceptive advice and details of nearest dealer.
Sound advice

Dear Sir, I'm surprised that you're still publishing articles denigrating CD in spite of its critical and popular success. Like many other readers of your magazine I enjoy listening to CD and therefore I resent the article about Mr Moffat. It was patronising and pompous because it implied that Mr Moffat is the only one who can put CD right and no questions about whether it's wrong in the first place. It also implies that Philips, Sony and all the other manufacturers of hardware and discs are grossly incompetent - an argument which is patently absurd.

Anybody who uses music as some sort of aural wallpaper as does Mr Moffat ("I require it probably six hours a day in the background") must be suspect. I believe that music should get your full attention whether it's live or recorded. If recorded music doesn't demand that degree of attention then there is something wrong with the system.

But I don't think Mr Moffat is making a proper criticism of CD. Like all the other critics he is saying it is "different" from analogue. Regardless of whether one system or the other is demonstrably better they argue that because it is different from the one they like, it must be worse. To put it another way, CD critics have grown up with, and very obviously like, analogue sound with all its faults and because CD sounds very different from analogue it is wrong.

None of these critics has, so far as I know, compared CD or analogue recordings with the original sound. This is probably impossible with modern 'pop' recordings because it is difficult to know what the original sound was supposed to be. (And that is no criticism of 'pop' music which is carefully put together with all sorts of recording techniques.)

Would it be possible to engage a pianist or guitarist or flautist and sit him, or her, between two loudspeakers and then listen to successive versions of the same piece of music - CD, vinyl disc and a live performance? This at least would give a more objective view of the two systems.

Come to think of it, wouldn't this be a good method of reviewing all equipment? Instead of comparing the sound of one piece of equipment with another why not compare it with the original sound?

ET Gascoigne, London W2

Anarchy rules!

Dear Sir, I would like to correct some misunderstandings that were expressed in Fiddian-Green's letter published in May.

The digital signal processing (DSP) chips produced by Sony and Philips represent a considerable amount of computing power. These digital filters do not reconstruct the analogue waveform by straight line interpolation. That would be quite simple, but would not be very good at attenuating the high frequency 'images' produced in the oversampling process.

Fiddian-Green suggests that a more sophisticated 'curve fitting' technique be employed. Unfortunately, any such second-order interpolation would introduce distortion because of its non-linearity. A better approach (the one used by Philips and Sony) is to use a finite impulse response filter, with linear coefficients. Within the constraints of the CD sampling rate this technique reproduces the input signal to an accuracy limited only by the length of the filter and its resolution.

While the general purpose 32-bit chips mentioned have not yet got the processing power to cope with digital audio filtering (perhaps twenty million 16-bit by 16-bit multiplications per second for a stereo oversampling filter), there are many specialist DSP chips that could be used to explore more advanced algorithms. However, to do this, the 'high end' manufacturers would need to employ unfamiliar design techniques - something they show little sign of doing.

The investment would not have to be enormous (there are commercial units that can be used to develop the appropriate techniques for under £2,000) and I would join A Fiddian-Green in urging some of our high-end companies to take a more adventurous (anarchic?) approach.

Julian Dunn, Cambridge

Another Marlene

Dear Sir, While agreeing with most of Robin Moss's remarks (HFN/RR May 1989) about Susannah McCorkle, Lucy Ann Polk, and, especially, Marlene Ver Planck, I suggest that the lack of reviews is not necessarily the fault only of magazines. I don't know the policy of HRR but Jazz Journal International, for instance, generally offers to review only those records which companies decide to make available.

In Marlene Ver Planck's case, although she's had 10 LPs and a CD released, she received her first-ever review in Jazz Journal only last January and then another in April, because, as far as I know, they had been supplied with the records by Audiophile, at last.

Along with an increasing number of enthusiasts I regard her as today's finest interpreter of the popular song and worthy of far greater recognition.

Lastly please note that her name, which is of Dutch origin, should include a 'c' but was printed incorrectly.

Keith Prior, Sheffield

Gaelic pushover

Dear Sir, It was nice to have a radio section in HFN/RR again. I was particularly interested in your item 'BBC pushes FM'. In this part of the country we receive Radio Scotland from the Sandale FM transmitter which is actually located in England on the other side of the River Solway. We have a local BBC station in Dumfries which inputs for two 40min sessions on weekdays. However Radio Scotland uses FM only for Gaelic broadcasts in the evenings from 18.30 until about 20.00 and reverts to medium wave for English language broadcasts.

There is a very low power MW transmitter in Dumfries.

In this area medium wave reception is bad normally, but impossible after dark. I cannot imagine there is much of an audience (any?) in the Sandale reception area of the South of Scotland North of England. For Gaelic programmes but in spite of the fact that the English broadcasts could be routed to Sandale through Dumfries nothing is done. So much for pushing FM.

Ian Hamilton, Dalbeattie, Kirkcudbrightshire

The BBC replies:

The current policy of BBC Scotland is that the portion of Radio nan Gaidheal's output that is broadcast at these times is done on a national basis. The remainder of the output is broadcast during the rest of the day only in the Highlands, although there is a constant demand from Gaelic listeners elsewhere.

Whereas medium wave reception, particularly after dark, can be difficult, those in the service area of the Sandale transmitter currently have Radio Scotland, Radio 2, Radio 5 and Radio 4 available on FM, and will, from early next year, also have Radio 1 as an FM service. Despite the fact that it is not possible to reconcile totally the requirements of all of Radio Scotland's listeners throughout the day, the BBC does provide a wide range of programmes from which FM listeners in the South West of Scotland can choose.

BBC Engineering Information

Factual errors

Dear Sir, With reference to Arthur Jacobs' review of our Cabaret Songs CD with Sarah Walker and Roger Vignoles (CDE 84167), can I please point out that it contains some factual errors. Mr Jacobs states that only one of the songs were recorded live, and that the majority of them were recorded to a live London audience. The statement in our booklet
DAX FANTASTIC!

There has never been a crossover like the Apogee DAX. Far more than just an elegant way to sculpt the perfect tonal balance, this extraordinary device imparts a transparency and naturalness to the Apogee ribbon loudspeakers that is marvellous to hear.

Designed as a dedicated active crossover for the Divas, Duetta Signature and Caliper Signature, the DAX gives you control down to 0.2db, yet achieving the right balance for your room and system is quick and easy. A beautifully crafted piece of equipment, from its separate power supply to a really sexy six-window Hewlett-Packard display, the DAX realises the full and awesome potential of the Apogees.

It is expensive, and you need to bi-amp — but the DAX is so flexible that you can mix amplifiers, match their sensitivities and employ balanced or single ended operation. And because it imparts an extra 3db sensitivity to the speakers, you can achieve wonderful results on comparatively modest amplifiers.

Apogee Acoustics took two years to develop the DAX — a tribute to the already very fine passive crossovers in their speakers. But the DAX's superiority is immediate in a quite stunning way — even with the controls set for a flat balance. And its inclusion in your system will allow you to obtain fantastic results in a small room — even from the Diva.

If you own Apogees you must hear this lovely device as soon as possible. It is without doubt one of the most exciting additions to the high end for many years. Telephone Brian Rivas for a demonstration.
that five of the songs were recorded live at the Blackheath Concert Halls in 1988 and the remaining twenty-two were recorded live at Dartington in 1982 is correct.

Issuing a CD of live performances is a risky business, particularly if there is only one performance to record, as there is no chance to re-record and correct mistakes. It is only with artists of the calibre of Sarah Walker and Roger Vignoles that such a project is feasible. One still has the problem that there is no way of trying out a recording balance before the concert, as the acoustics in an empty hall are so completely different from those in the same hall with a packed audience, as was the case in both these concerts. One can only make an intelligent guess as to the difference between the two, and hope for the best. Neither did we have any choice in the pianos used, as we had to accept the ones chosen for the concerts without consideration being given to their suitability for recording.

As far as audience reaction is concerned, the recording engineer has to put up with what gets at the time, and the only alteration he can make after the concert is to add canned laughter and applause — thus reducing the whole piece to the artistic merit of a television situation comedy — or, when the audience do not start to applaud until the end of the die-away of any particular item, some applause is added out. In both these concerts the packed audience applauded vigorously between each item or group of items, and we decided to eliminate some of the applause where possible, as otherwise we felt that the listener would find the ratio of applause to music too great.

Apart from this, we had no chance to correct verbal or musical faults, and we feel that the fact that there are so few is a great tribute to the professionalism and artistry of the two performers.

John Shuttleworth, Meridian Records, London SE9

Manic compression

Dear Sir, Trevor Butler’s ‘Radio’ page (May 1989) dealing with dynamic compression of Radio 3 programmes during commuter times has clarified something that had puzzled me for some time. On the occasions when I have switched on to Radio 3 programmes I have wondered if it was just a coincidence that so many of the recordings were so chronically compressed. Sadly, most recording companies employ a degree of compression, usually in the form of manual gain riding and BBC concerts are treated the same way, but this was much more severe. The question was, were these just bad recordings or was the BBC messing about with them? Well, now we know the truth of the matter!

The degree of compression used by the BBC for commuter time broadcasts is obviously decided by the dynamic range suited to in-car listening, which is very narrow — really too narrow for classical music listening. The result is music robbed of all vitality. I very much doubt if commercial recording companies are happy to hear their products treated this way. Instead of listeners seeking out the recording they enjoyed when they hear it on the radio, they may wish to buy a different recording of the same music, in the hope that some other recording will not be so gutless as the offering which had been broadcast. Let us hope that all the recording companies will recognise this danger and put aside their prejudices and hi-fi snobbery, and judge the sound from their speakers on its ‘music’ as distinct from its snob value, they would agree that live music broadcasts are immeasurably more musically satisfying than the contrived stuff on records and the synthetic, unmusical music on CD.

But what of the law? The law of copyright, so far as it relates to records and CD, is no less potent when copying for use in cars, which everyone knows is practised widely and no-one seems to fear talking about, than when copying from radio, which is taboo. The recording of live, or studio recordings of live broadcasts presumably presents different legal considerations. For example, do foreign broadcasters have the same protection from British recording enthusiasts as that given to the BBC? Does the possession of a radio licence entitle the holder only to ‘listen’ but not to copy? However, these complications are all entirely academic. Everyone knows that copying of records, CDs, radio and TV broadcasts is rampant and illegal, and that the remedy in law rests with the copyright owner, upon whom the law places the impractical onus of identifying each and every offender and offence and requiring him to institute civil proceedings for the recovery of damages for financial loss which would be virtually unquantifiable. So why all the fuss?

The quality of the BBC’s reproduction and broadcasting equipment far transcends anything to which the most dedicated amateur could aspire, and there is a variety of quality tuners and recorders which enable that original signal quality to be captured faithfully. By that means, I have acquired a library of music, much of which I would not have bought on records, which has given me more pleasure than I ever attained through an expensive tunable combination. The total absence of irritating surface noises is a revelation, and the freedom from the constant problems of static and dust associated with records is a bonus worth some sacrifice, though I do not believe I have taken any.

Therefore, in gratitude to the BBC, I would happily pay a special licence fee which would enable me, legally (although I do not now lose any sleep), to record broadcasts of every description.

Peter Williams, Essex

Readers’ Letters

Letters for publication should be addressed to the Editor and must contain no other material or enquiries. 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 equipment.

Peter Williams, Essex
WE ESTIMATE THAT THERE ARE OVER 500 MILLION VINYL RECORDS IN USE. NOW FIND OUT FOR THE FIRST TIME WHAT'S ON THEM.

ARO

SALISBURY, ENGLAND SP1 2LN TEL (0722) 332266
After a false start two years ago, Nikko has found a UK distributor for its extensive range of hi-fi components. Zenonlec will be handling the line and has announced a range of products for the UK market including four power amplifiers rated between 140 and 310W/channel at £299 to £999, two pre-amplifiers at £225 and £299, four integrated amplifiers between 30 and 120W/ch at £129 to £399 and an A/V integrated amplifier for £349. The company also offers AM-FM tuners ranging in price from £139 to £299, two AM/FM receivers at £239 and £299, a two-head cassette deck for £239 and a three-head model at £299 (both with HX Pro), a 16-bit, 2-times oversampling CD player with remote control for £179 and three graphic equalizers. Of particular interest is the flagship Alpha 2000 power amplifier rated at 310W/channel and deemed by one French reviewer to be the best amplifier in the world. In bridged mode, the Alpha 2000 produces 650W.

CEC's range consists entirely of CD players and turntables, including the 540CD basic CD player (£139) and the 640CD with remote control (£159). Both are full-sized and finished in black. The company offers four turntables, including the ST310 semi-automatic belt-drive deck with 1/4 in mount cartridge (£109) and the ST730 fully automatic belt-drive with 1/4 in mount cartridge (£109) and the ST930 flagship model supplied without arm but with SME cutout (£599 plus £35 for dust cover). The latter offers 78rpm playback in addition to 33 and 45 and uses a brushless FG servo motor with outboard power supply. Also available is the D4000 disco model, a direct-drive design with instant start-up, calibrated pitch control, stylus illumination and two headshells but no cartridge (£199). For further details, contact Zenonlec Ltd, 10A The Broadway, Newbury, Berkshire RG13 1BA. Tel (0635) 528636.

SONY STORMS AHEAD WITH DAT

Despite growing fears that DAT is not suitable as a professional recording format (News, July), Sony's pro division is launching new digital audio tape hardware. Its TCD-D10 is a low-cost portable DAT recorder and was shown officially for the first time in the UK at the APRS trade exhibition. Weighing 1.6kg, the design complements Sony's existing DAT line-up, and boasts functions not seen on 'consumer' versions. (The TCD-D10, then independently imported, was reviewed by Tony Faulkner in HFN RR, July 1988.)

TANNOY IMPROVES SOUND AND ADDS NEW MODEL

Responding to constructive suggestions and criticisms voiced by the consumer press and from customers, Tannoy has incorporated various refinements (gold plated terminals, finely tuned crossover, improved surround to the LF drive unit, extended horizontal bracing) into its DC1000 and DC2000 speakers with no price increase.

The company is also launching a new model – the floor-standing DC3000, available in black ash veneer at £599.90 and in rosewood for £699.90. The design includes an 8in dual concentric tweeter and 4in polypropylene-coned woofer. Weatherproofed, the DC3000 can be installed in both new and existing homes through the use of frames which are included in the purchase price. Prices on application. Sound Ideas, Unit 1, Briar Close, Wye (nr Ashford), Kent TN25 9HB. Tel (0253) 813246.

HIGH END GETS AHEAD

A high end audio industry group consisting of leading members of the American hi-fi community has organized to form the Academy of High End Audio Design (AHEAD). Its purpose is to recognize exceptional achievement in the field of sound reproduction. The steering committee, which was appointed by Harry Pearson of The Absolute Sound, includes Wendell Dillier (Magneplan), Joyce Fleming (Mod Squad), Kathy Gornik (Thiel) and Karen Sumner (Transparent Audio Marketing). Following the committee's meeting at the Sumner CES in Chicago, information about the organization is being sent to prospective members. For further details, interested parties should contact Kathy Gornik on (0101) 606-254-9427.

SONANCE FLUSH-MOUNT SPEAKERS REACH THE UK

The originators of the modern flush-mount loudspeaker, Sonance of California, can now offer their extensive line-up of full-range and sub-woofer speakers to UK consumers. Designed to provide high-quality sound without robbing the user of precious floor or shelf space, the Sonance systems are mounted in the wall or ceiling and can be decorated to match their surroundings. All Sonance speakers are offered with a choice of removable cloth or metal grilles. Sonance speakers require a wall cavity depth of only 3½in for flush-mount installation. Models available in the UK include the Sonance M30, a two-way design featuring a 1in polycarbonate tweeter and 4in polypropylene-coned woofer. Weatherproofed, the M30 can be installed in bathrooms, saunas and exterior environments. Dimensions are 9x6.5in. Recently added to the line is the SDS4 Speaker Distribution System, a compact switching network which allows the user to connect as many as four pairs of speakers to a single amplifier, guaranteeing a safe 4ohm impedance when used with four pairs of 8ohm speakers. Sonance speakers can be installed in both new and existing homes through the use of frames which are included in the purchase price. Prices on application. Sound Ideas, Unit 1, Briar Close, Wye (nr Ashford), Kent TN25 9HB. Tel (0253) 813246.
THE NATURAL CHOICE

Rogers

Manufactured by Swisstone Electronics Limited, 310 Commons East, Mitcham, Surrey CR4 1HX, Tel No. 01 640 2172. Fax No. 01 685 9496, Telex: 893980 Rogers.
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sound advice

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MUSICAL FIDELITY Launches B1 INTEGRATED

Musical Fidelity has launched an under-£200 integrated amplifier, said to continue the company's tradition of exceptional sound quality while offering good build quality, styling and finish at a popular price. Rated at a nominal 32W/channel but with a much higher peak output capability, the £199 B1 uses quasi-complementary circuitry developed by Tim de Paravicini and Musical Fidelity's managing director Antony Michaelson. Facilities include switchable moving-coil and moving-magnet inputs. The high-precision metal casework for the B1 is sourced from Germany. Musical Fidelity Ltd, 15-16 Olympic Trading Estate, Fulton Road, Wembley HA9 0TF. Tel 01-900 2866.

INFINITY NEW RS SERIES

Infinity has a new generation of its RS series loudspeakers comprising six models from the bookshelf RN1001 at £1199.90 to the floor standing RS6001 at £799.90. The designs are based on the recent development of the company's state-of-the-art IRS series. Special attention has been paid to the bass driver, polystyrene dome midrange and tweeters, the crossover and cabinet construction. To match the speed of the new 'curvilinear' injection-moulded bass driver cones new dome midrange and tweeter units have been developed. The diaphragm of these polystyrene drivers consists of a ultra-thin skin of polypropylene reinforced by a bonded coat of hollow-graphite spheres. The material gives the diaphragm damping whilst the graphite spheres provide superior stiffness. Gamepath Ltd, 25 Heathfield, Surrey Bushes, Milton Keynes MK12 6HR. Tel (0908) 517707.

Mana Acoustics' glass Sound Table (£175) will enable a far superior sound quality to be obtained, it is claimed, than other types. Adjustable spikes support the smoked glass top-plate. The glass is equipped, on its under-surface, with locating rings in order that the spikes will contact the glass within the rings. These rings also to retain the glass on the frame in case it is accidentally knocked. Mana Acoustics, 59 Jubilee Close, Pinner, Middlesex HA5 3TB. Tel 01-429 0118.
IS MUSICAL FIDELITY
THE BEST KEPT SECRET
IN BRITISH HI-FI?

The MC-2 is an exceptional and painstaking design which offers liveliness, clarity and articulation along with very fine LF resolution in the context of a slightly bright, light-weight presentation — clear Best Buy material.

The MA-50 has a sound quality rating in the very top class. Like the other A-series products there is a degree of idiosyncracy about this design, while the remarkable subjective performance demands strong Recommendation.

The A1 can now be regarded sonically as a class leader in its price group, well settled in production and benefiting from the advances also apparent in the rest of the Musical Fidelity range.

The Digilog is nothing less than remarkable...

The A370 is the best solid-state British amplifier I've ever heard.

Now it's no secret that the Musical Fidelity range offers great sound and great value for money. Hear it for yourself at a hi-fi shop near you.
Goldmund of Switzerland has introduced what the company believes to be the heaviest amplifier ever built. The Mimesis 9, which weighs 100kg, is rated at 200W/channel and was developed especially for low sensitivity speakers. The Mimesis 9 incorporates a ultra-fast circuitry (1MHz at 200W) and features mechanical construction based on the company's 'Mechanical Grounding' techniques. Chassis details include transformers and output stages mounted on the conical feet of the amplifier to avoid vibration, and a case made of steel damped by absorbing material and which is decoupled from the circuits and the three rigid feet by spurious signals, input circuitry which is flexibly attached to the stages mounted on the conical feet of the amplifier to evacuate resonances. Chassis details include transformers and output made of 6mm steel damped by absorbing material and which is.

Also, the article mentions Ken Kessler, who writes exclusively (in the UK) for Hi-Fi Review, was named Favourite HI - Fi journalist when the British Audio Goldmund of Switzerland has introduced what the company believes to be the heaviest amplifier ever built. The Mimesis 9, which weighs 100kg, is rated at 200W/channel and was developed especially for low sensitivity speakers. The Mimesis 9 incorporates a ultra-fast circuitry (1MHz at 200W) and features mechanical construction based on the company's 'Mechanical Grounding' techniques. Chassis details include transformers and output stages mounted on the conical feet of the amplifier to avoid vibration, and a case made of steel damped by absorbing material and which is decoupled from the circuits and the three rigid feet by special Teflon insulators. Protection circuitry includes safety from overloading, DC offset, overheating and short circuits. Absolute Sounds, 318 Worple Road, London SW20. Tel 01-947 5047.

**GOLDMUND'S HEAVY METAL**

Goldmund Newman has introduced what the company believes to be the heaviest amplifier ever built. The Mimesis 9, with a weight of 100kg, is rated at 200W/channel and was developed especially for low sensitivity speakers. The Mimesis 9 incorporates ultra-fast circuitry (1 MHz at 200W) and features mechanical construction based on the company’s ‘Mechanical Grounding’ techniques. Chassis details include transformers and output stages mounted on the conical feet of the amplifier to avoid vibration, and a case made of steel damped by absorbing material and which is decoupled from the circuits and the three rigid feet by special Teflon insulators. Protection circuitry includes safety from overloading, DC offset, overheating and short circuits. Absolute Sounds, 318 Worple Road, London SW20. Tel 01-947 5047.

**HOME AMBISONICS FROM TROY**

Following the recent increase in demand for Ambisonic sound decoders, Troy has announced its intention to launch a domestic unit. The company has been making in-car decoders for some time. Troy’s Paul Selby told Hi-Fi/RR that a prototype of the new domestic design is up and running at the company’s showroom and production is poised to begin. Troy Ambisonics, 7 Chobham Road, Sunningdale SL5 0PG. Tel (0900) 291150.

**KESSLER WINS FAVOURITE WRITER AWARD AT BADADAY**

Ken Kessler, who writes exclusively (in the UK) for Hi-Fi Review, was named Favourite Hi-Fi Journalist when the British Audio Dealers Association (BADA) held its first annual awards ceremony in Birmingham on 25th June. The votes in all 15 award categories had been cast by BADA shop staff. The dealers’ Favourite Hi-Fi Magazine was Hi-Fi Review, with Hi-Fi News & Record Review and Hi-Fi Choice named as runners-up, while the award for Best Manufacturer Advertising went to Linn Products and Best Dealer Advertisement (sponsored by Haymarket Publishing) to AT Labs. Next came equipment awards. Favourite Source went to the Linn LP12 (no-one fell off their chair in shock) and the Arcam Alpha took the amplifier award, with Musical Fidelity’s SC2 Favourite Loudspeaker and Quad being voted the Most Reliable Product Range. The BADA-Chargecard Best Dealer award, sponsored by Lombard Trinity Finance, was won by Audio Excellence. The Best Marketing Back-up award to Linn Products, and Quad received their second award, for the Best Service Department. Steve Reed of Cambridge Audio Systems was Best Company Representative, and the Industry Personality of The Year award, sponsored by trade magazine Private Eye/Hi-Fi, went to BADA’s own Publicity Officer, Michael Lewin. BADA Trainee of the Year was Paul O’Connor (previously with AT Labs, now at TEAC), while the final award was for the Most Professional Supplier, taken by Linn Products, with a large majority over runners-up Yamaha, Quad and Naim. After the Awards ceremony, a cheque for £1000 was presented to Mr Kessler.

Kate Kessler was named Favourite HI - Fi journalist when the British Audio Goldmund of Switzerland has introduced what the company believes to be the heaviest amplifier ever built. The Mimesis 9, which weighs 100kg, is rated at 200W/channel and was developed especially for low sensitivity speakers. The Mimesis 9 incorporates ultra-fast circuitry (1MHz at 200W) and features mechanical construction based on the company’s ‘Mechanical Grounding’ techniques. Chassis details include transformers and output stages mounted on the conical feet of the amplifier to avoid vibration, and a case made of steel damped by absorbing material and which is decoupled from the circuits and the three rigid feet by special Teflon insulators. Protection circuitry includes safety from overloading, DC offset, overheating and short circuits. Absolute Sounds, 318 Worple Road, London SW20. Tel 01-947 5047.

**TRUE CLASS A FROM KELVIN**

Southampton-based Kelvin Labs is to unveil a true Class A integrated amplifier, which offers 20W per channel with claimed exceptional load tolerance and high current delivery. Both moving-coil and moving-magnets are catered for. Price is £1500. Kelvin Laboratories Ltd, 6 Shanklin Crescent, Upper Shirley, Southampton SO1 2RB. Tel (0703) 785123.

**PARTNERS, THEMES & VARIATIONS WINNERS**

A near-record number of entries was received for the Swing Your Partners competition featured in the May issue. The correct answers were: 1) A; 2) B, E, I, J and K. A first prize of the AV-4 powered partners goes to Michael Bruce of Glasgow. Mr Maclean of London NW wins the AV-5 Party Partners while the third prize of the AV-4 Environmental Partners goes to David Dunshon of Surrey. The eleven runners-up in this Acoustic Research competition receive a pair of AV-6 Active Partners. Six prize-winners tied in our May CD Supplement competition. Sixteen Deutsche Grammophon compact discs of their choice went to Ms Williams, London SE2; 3) de Camp, SW; 4) Cole, Winchester, P Well, E4; 5) Sears, Southamton; D Walkerley, Leigh-on-Sea. Answers were 1(a) 80, (b) Etienne von Karajan, 2) (Msle) Romeo & Juliet, 3) Stravinsky, 4) Miessner, 5) (players names). Answers to Ms Williams, London 5E3; D de Walkerley, Leigh-on-Sea. Answers were 1(a) 80, (b) Etienne von Karajan, 2) (Msle) Romeo & Juliet, 3) Stravinsky, 4) Miessner, 5) (players names). Answers to Ms Williams, London 5E3; D de Walkerley, Leigh-on-Sea.

**CD PRICE CUTS RULED OUT**

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**EVENTS**

25 AUGUST-3 SEPTEMBER 1989 International Audio and Video Fair, Berlin. Contact: (030) 30 38-22-74. Technical and scientific programme now finalised and covers current technological developments. 27-29 AUGUST 1989 East Coast Electronics Expo, Jacob Javits Convention Centre, New York City, USA: Contact Larkin-Pienick-Larkin, 100 Wells Ave, PO Box 9103, Newton, MA 02159-9103 USA.

7 SEPTEMBER Arcam Roadshow at Audio Counsel, 12 Shaw Road, Oldham OL1 3LQ. Tel 061-633 2602 for tickets.

14 SEPTEMBER Nam Audio Evening at Audio Counsel, 12 Shaw Road, Oldham OL1 3LQ. Call 061-633 2602 for details.

8-17 SEPTEMBER 1989 Montreal International Music Festival, Montreal, Quebec, Canada.

20 SEPTEMBER Linn Products in Oldham at Audio Counsel. For information call 061-633 2602.

14-17 SEPTEMBER 1989 The Hi-Fi Show, sponsored by HF/ RR, Heatheron Penta Hotel. Trade only 14-15 September. 01-686 2599.

14-18 SEPTEMBER 1989 22nd Sim-Hi-Fi Ives audio fair, Milan, Italy.
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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.
professional users are likely to be the units now being sold through selected formats with fully professional pedigree, but it will make digital recording available. DAT to film, radio, TV and record producers is now being made by Dolby a year ago, perhaps to sound out reaction, was this. Although the highly compressed SR signal can never be described as ‘compatible’, the compression effect created by non-SR replay may be an advantage in cars where wide dynamic range is just what the listener does not want.

And, even as I write, news comes through the industry grapevine that Dolby is now offering the industry S-type - a domestic variation of SR.

The main difference between SR and S-type is the latter’s partial compatibility with Dolby B. Dolby will formally announce S-type any day, and expects to have the first samples of integrated circuits available by September. Cassette recorders with the new system, and pre-recorded cassettes, will be made available first in the United States, probably in 1990, and later in Japan and Europe. Whereas Dolby B reduces the level of unwanted RF noise by around 10dB (a subjective halving of noise level), S-type reduces RF noise by up to 24dB. But unlike Dolby’s previous domestic systems, and like the professional SR system, S-type has a bank of variable filters. These continually monitor the sound and adjust the signal processing circuits so that only those parts of the music spectrum which need protection against noise are processed. Stronger signals in other parts of the spectrum are left untouched.

When a tape recorded in S-type is replayed on a recorder with S-decoder, it gives the full benefit without compromise. When the tape is replayed through a cassette recorder with Dolby B-type circuitry, the reproduced sound is compressed, with the music sounding squashed in volume range. This will often be acceptable, especially for music played in a noisy room where quiet passages are otherwise lost in the background noise.

Whereas Dolby B reduces RF noise by up to 24dB. But unlike Dolby’s previous domestic systems, and like the professional SR system, S-type has a bank of variable filters. These continually monitor the sound and adjust the signal processing circuits so that only those parts of the music spectrum which need protection against noise are processed. Stronger signals in other parts of the spectrum are left untouched.

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In all the bars and the best clubs in the world it has to be Bose loudspeakers. Does your home deserve any less?

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The Acoustimass speaker system is available in black or white, and delivers up to 100 watts of the purest sound you’ve ever heard.

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Because each Gryphon product is designed to cut right through to the heart of the musical experience, to reveal every delicate strain, to lay bare all the rhythmic complexities that make music live and breathe.
To achieve this high goal, Gryphon audio designs created a range of line audio instruments incorporating select premium-grade components and only the best engineering concepts.

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- **Zero negative feedback**
  virtually eliminates Sids and Tims, for cleaner, faster transients and sweeter, purer high frequency response.

- **No ac coupling capacitors or compensating capacitors in the signal path**
  for superior bass performance and more airy open reproduction of fine detail.

**Gryphon Phonostage & Head Amp**

- Pure class A mode with huge capacitor bank for smoother, more coherent reproduction, without grain or suppression of dynamics.

**The Gryphon preamp**
The Gryphon preamp is housed in a non-magnetic chassis and incorporates fully discrete circuitry, dc coupling, 1% metal film resistors, polypropylene capacitors and pcb mounted WBT sockets.
The Gryphon preamp has no internal wiring (fewer contacts, fewer solderings and a shorter signal path). Components specially built for the preamp include the C core transformers and the Swiss made 24 position passive resistor volume controls.
The Gryphon preamp is a modular mainframe design available in a line-only version, an MM version (with the RIAA circuitry of the Gryphon phonostage) or an MC version (with RIAA circuitry and the MC stage of the Gryphon Head Amp).

"I have never been so deeply impressed before"
Sonic review, Hong Kong May 89

**The Gryphon phonostage**
This true minimalist preamplifier with no internal wiring offers a phonostage, where passive RIAA equalization does away with several gain stages and selectors, a single line-level input and a passive resistor volume control with 72 settings. A bypass switch for the volume control makes it possible to use the Gryphon phono-stage in conjunction with another preamplifiers.

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

**The Gryphon head AMP**
The Gryphon head AMP, with solid Silver internal wiring, incorporates the Gryphon design philosophy of flat megabandwidth frequency response in a low noise, high gain, active step-up device with 30 DB of gain and a signal-to-noise ratio of 80 DB unweighted.

"...The quietest, most coherent MC step-up I've used."
Hi-Fi News & Record Review, UK, March, 89

"This product marks a new high, which is currently unrivalled."
Suono Magazine, Italy, Oct. 88

"There is none of the unnatural characters that normally reminds you that you are listening to Hi-Fi..."
Stereo Sound, Japan, August, 87
It's official – the BBC is to end its continuous ball-by-ball commentary of cricket matches on Radio 3 at the end of next summer, so marking another cultural degeneracy in British broadcasting policy. The cessation of this landmark of English culture and of English life will be a bitter blow – whether or not one likes cricket.

That Test Match Special would be made to draw stumps has been rumoured for a while, but now it has been announced, the protests will begin in earnest. Within just a few hours of the revelation, Roy Hattersley MP announced that he would be lighting a proposal through Parliament. While the veteran broadcaster, Brian Johnston (in his 41st year as a BBC commentator), put his feeling on record. 'We'll have two lovely summers and by the time this all happens I may not still be around,' he said. He is urging people to write to their MPs about the change. 'It's very sad for the team and although the BBC is putting a very brave face on it.'

The move has become necessary because the BBC is having to relinquish two medium-wave allocations to make way for new national commercial channels. Radio 3 is now largely available on FM so there should be no upset audience here; indeed I would think that most of the popular-music lovers will positively enjoy the improvement in quality – assuming their ghetto-blaster are capable of it. The Third Programme, on the other hand, presents more of a problem because of the split frequencies for its programmes. While the separate cricket commentaries will lose their home frequency. The BBC has already said that it will use the existing Radio 2 MF frequencies for a new service. Radio 5 – an all sport network of its split-frequency programming: the BBC's answer to the Third Programme.

Lord Hattersley hit out at the 'fragmented, uncoordinated and incompatibility associated with this incompatibility'. He announced in September 1990. Radio 5 will encompass the cricket to the best of its capabilities; but since cricket is regarded as a minority interest, the BBC can be relied upon to broadcast very little of it while other major events are in progress, and once football starts again each August, that will be that. Miss Ewing has already stated: 'there will be occasions when major sporting events will clash, although we'll do our best to maintain ball-by-ball commentary.' I must say though that the prospect of continued uninterrupted commentaries from John 'Joyners' Arlott, Christopher Martin-Jenkins, Sir Frederick 'Trueman' Trafford, Henry 'Blowers' Blofield, 'The Alderman' Don Mosey and statistics from 'Bearders' Bill Frindall, looks rather bleak.

Although many regard the whole concept of the programme as rather pompous, it has certainly become an art form, and the service is regarded with affection by many both at home and abroad, via the World Service. As Brian Johnston admitted: 'We're just like schoolboys really, making jokes, eating a bit of cake, slightly eccentric but technically expert.' On this last point there can be little doubt, as the team is the envy of commentators worldwide. Perhaps the most attention is paid when rain or other interruption has stopped play and the commentary turns to other entertaining details like watching umpire Dickie Bird and the people in the crowd – things which make cricket the game it is. All that will be spoilt if the proposed changes go ahead.

While one of the new commercial channels may opt to cover cricket in a similar way to the BBC, the commercial concerns may use their hẹnison for broadcasting pop music – and this would be an outrage. We need more broadcast pop music like we need a random nuclear strike. The present abundance of local radio stations radiate little else day and night – even the BBC services which were supposedly 'speech-based' seem to be concentrating more and more on 'music' as the service is regarded with affection. If the shelving of Test Match Special leads to pop entrepreneurs becoming even richer it must raise some basic questions about the cultural state of the nation as perceived by the BBC and, as controllers of broadcasting, by the Government. The present abundance of local radio stations radiate little else day and night – even the BBC services which were supposedly 'speech-based' seem to be concentrating more and more on 'music' as the service is regarded with affection. If the shelving of Test Match Special leads to pop entrepreneurs becoming even richer it must raise some basic questions about the cultural state of the nation as perceived by the BBC and, as controllers of broadcasting, by the Government. But whatever happens this will be a severe test for the belief that the private sector can offer a suitable alternative to public service broadcasting.

Writing to one's MP may be the answer to prevent this act of cultural vandalism, although addressing the Minister responsible for Broadcasting at the Home Office, John 'Joyners' Arlott, the people in the crowd – things which make cricket the game it is. All that will be spoilt if the proposed changes go ahead.

The President of BREMA, Lord Chapple, has hit out at the 'fragmented, uncoordinated and incompatibility associated with the proposed new satellite television in Britain', and said that a similar approach to the new channels and services advocated by the Government's White Paper on Broadcasting could threaten developments like NICAM.

He said his association would 'mourn the passing of the IBA' but would 'hope to see many of our friends in the garb of the new ITC'. Lord Chapple welcomed the prospect of more broadcast channels and services, but hoped they would be 'better inaugurated than the unhappy mess which now surrounds satellite broadcasting, with its plethora of different standards, encryption systems – and the need for planning-permission for dishes'. Lord Chapple suggested that the answer may be a competent European Broadcasting regime to ensure that Governments and others acted responsibly in future.

Archives released

From Ambridge to Arkville, from Elsinore to East Cheam, the cream of more than four decades of Radio has been released from the BBC Sound Archives, which is the biggest library of its kind in the world. The cheerful news comes from BBC Enterprises – the commercial wing of Auntie which has announced more titles in its taped Radio Collection series including A Tale of Two Cities, Emma, Wind in The Willows, and Brabman – The Don Declares. Eventually it is hoped that every area that has been illuminated by the magic of BBC Radio broadcasting will be captured on the talking tapes which make up the BBC Radio Collection.

The project began late last year when the first of the cassette twin packs were announced. Each gives two or more hours of high quality listening of the widest variety of material. Every taste seems to have been catered for in all areas of sound broadcasting. Comedy classics like The Goon Show, Hancock's Half Hour, Round The Horne, ITMA, and The Al Read Show are among the gems. Children have been catered for with 5 o'clock treats of days gone by including two Topoïens featuring Larry the Lamb (Derick McCullogh) and Dennis the Dachshund (Preston Lockwood). Drama fans will be delighted with Vintage Archers: two and a half hours of highlights from the longest running serial in the world which saw its ten-thousandth edition on 26th May, having first seen the light of day on New Year's Day 1951. The tape provides a potted history of the programme and captures momentous occasions in the history of Ambridge; including the night Grace Archer died in a fire at Grey Gables, Nelson's trial and acquittal for murder, Jack's alcoholism, the shock of Jennifer's illegitimate baby and the chance to hear Pru Forrest's voice on that exceedingly rare occasion when she actually spoke. Vanished voices which can be heard include the original Dan and Doris Archer, Walter Gabriel, and Jethro.

Other drama highlights from the Collection include King Lear starring Sir Alec Guinness, Othello with Paul Scofield and Macbeth starring Dennis Quilley and Han nah Gordon as well as Hamlet featuring Ronald Pickup. This venture provides us with the chance to listen to the best years of Radio and to enjoy them for keeps.
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time flies when you're having fun. If that's true, then trick cables must be an absolute barrel of laughs because—believe it or not—it's well over a decade since Sabourou Egawa in Japan and Jean Hiraga in France introduced us to the wonders of wire. The impact of specialist cables has been enormous, despite the continued presence of reactionaries who still think that it's all a big hoax. Which leads me to the current cable malaise. If any aspect of the market really is flooded to the point of absurdity, it has to be the cable sector. Why? Because it's the easiest sector to enter if you're a real cynic—confirming the reactionaries' thoughts. All you do is find an OEM cable, print your name on the insulation and make up some wonderful story.

Because reviewing is such a time-consuming and thankless task, magazines tend to concentrate on the main components. And even if cables were reviewed on a truly comprehensive basis, these reviews still wouldn't help the consumer, and for two reasons: cables are completely dependent (which means that they must be auditioned as they will be used) and they're absolute hell from a retail standpoint. The latter is connected to the former, so hear me out.

In order for a retailer to sell expensive cables, he has to demonstrate and occasionally loan them out in the same manner as whole components. It means either stocking expensive cables in innumerable combinations of lengths and connectors, or cutting up fresh cable and preparing it with the risk that the customer won't want it. He then has to put that odd, unsold length into stock, hoping that someone will come along needing, say, a 2.8m pair of silver cables terminated in seven-pin DIN connectors. In other words, he's out a couple of hundred quid because the tailor-made pair for that home demo didn't sell. As a result, many retailers are reverting to pre-packed leads in myriad lengths and combinations. Also available is a twin version and OFC multi-strand, helically wound screen. The four conductors are laid in parallel and separated by a PTFE insulator. The cables are directional and are assembled using YBLENT silver solder. A run through the literature suggests that quiet operation and resistance to interference were high priorities and, indeed, the cables are among the 'quiest' I've ever tried. Used between CD player and pre-amp, or pre-amp and power amp, the YFERE 'Quad' leads revealed themselves to be thoroughly bred easily worth the £70 for a 1m pair. Also available is a twin version and OFC leads in myriad lengths and combinations.

OK, so we've another source for worthy cables, but the real surprise in the package was a length of fibre optic 'score' cable. I'm thinking—how can there be differences between optical cables, workmanship aside? Since these were pitched to me by a known cynic rather than a starry-eyed tweak, I figured I'd give them a try. Looking exactly like the optical leads supplied with the Marantz CD-12 save for the colour of the sleeve (blue to the Marantz's black), the YFERE optical cables really did sound more open and 'sweeter'.

That was madness enough. Then I received some coaxial cable from HEN's US distributor which purported to improve on other coaxial cables that were used for digital transmission. And sure enough, again using the Marantz CD-12, I was able to obtain markedly superior performance from Master Link Premium silver/Teflon interconnects over a host of other top coaxial cables. Remember, this is while transmitting digital information, not analogue. And when the time came to compare the two—the Quantum optical versus the Master Link coaxial—the latter was so close to theformer that it suggests hope and relief for those who own CD players with coaxially digital outputs. In other words, don't bother upgrading a player just because the new model features optical output. Just try the Master Link. (And it's unlikely that aftermarket DA converters will be issued with optical-only inputs for some time.)

Again, the donor of this cable is a renowned cynic. He's as staggered as I am that a coaxial lead can operate within such proximity to optical fibres. And so opens another can of worms...

The Masterlink leads, used in analogue mode, are now serving in my system between pre-amp, DAX and power amplifiers, with Mandrake still unmatched for source-to-pre-amp duties. I have the Quantum fibre optics in between the Marantz chassis and Lieder leads connecting amps to speakers. A mish-mash? No. It's simply a combination that took me a mere two years to arrive at.

Now do you see why cables are such a pain?!
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THE WAY THE WIND BLOWS

The Chicago winds of change swept through the hi-fi section of the Consumer Electronics Show, as manufacturers unveiled next season's new model ranges by Ken Kessler

There is no better gauge of hi-fi trends than the Consumer Electronics Show. I don't mean 'What's the next tweak?' or what makes are in the ascendant/ascendant. What CES tells you is what the real world is or isn't buying. That's my wordy way of saying that — sorry, fellas — analogue is dead. How do I come to make such a final statement at the beginning of a report? Because it just dawned on me that this is the first CES which I've attended where all of the software review samples were on CD. What's more, I can only think of a couple of analogue components launched at the show — the Rod Herman-designed Onyx turntable, the formal showing of Max Townshend's latest Rock. And when you consider that the show produced something like a dozen new outboard D/A converters or 'digital' pre-amps or line-level-only pre-amps, well, you'd have to have shares in PVC to be even remotely optimistic.

Despite this and a positively evil bout of food poisoning on Day 4, I still enjoyed the 1989 Summer CES, and not just because I love Chicago: despite what anyone tells you about the drop in traffic or the lack of action on the part of the dealers, there were enough new products on show to fill a report three times the length of this one. The best news of all the trends revealed at CES was a move down-market by many of the high-end makes. In an industry where each new model seems to be dearer than the last one, it's a pleasure to report that some makers have decided to lower the tariff at the entry level end of the catalogue.

Yet another trend deserves mention, especially since this is a British magazine. UK manufacturers gave an incredible show of strength, with most makes represented and offering not just new goodies but exciting new goodies. And it was important enough to compensate for the fact that the manufacturer wasn't an 'official' exhibitor: Quad launched a new pre-amp and (sound of trumpets) the long-awaited Quad CD player. Yes, 34 and 44 owners, you can turf those ageing Mission/Philips dinosaurs because there's now a perfect match for your small, grey stack.

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Surprise of the show, as far as UK brands were concerned: the new Quad CD player and model 56 pre-amp.
The breakdown is almost complete, with yet another cluster of analogists relenting and admitting that, hey, maybe digital doesn't make you break out in boils. Here are some of the purely digital highlights of the Summer Season.

Krell Digital, whose production-version CD transport and outboard D/A converter were seen at the Paris Show, unleashed a second converter dubbed the SBP-16X, for those who can't quite manage the $10,000 SBP-64X. As the numbers suggest, this one uses 16-times oversampling, but shares with its dearer sibling the same plug-in upgradability. Price, if my ears weren't deceiving me, is well under $3000. Theta expanded the catalogue to include (with the new facias arriving only 12 hours before the show opened) a budget version of its Gold Series, a $2000 machine featuring custom clock module and digital output mechanisms... a real metal case and a price tag of $1995.

Wadia, too, introduced a downmarket version of its widely-acclaimed Digital-2000 processor, the new Digital-1000, but nothing I could find suggested that anyone in the USA is ready to match Arcam or Musical Fidelity when it comes to making truly affordable outboard decoders. However, Aragon, who showed a Mike Moffat-designed D/A converter, the D2A (neat name, eh?) with styling to match their wedge-fronted 24K pre-amp. The price isn't finalized yet, but it won't be expensive. Details include 8-times oversampling with 18-bit resolution, circuit upgrades (à la Krell) via replaceable ICs.

At the other end of the scale is the processor which had me in a dither (no 'Groan' inserts please, Steve), the Stax DAC-Xlt hybrid which — YES! — adds tubes to a D/A! The $8000 DAC-Xlt, in addition to satisfying residual valve craving (I've given up on ever seeing a valve Walkman or cassette deck), offers three coaxial and three optical inputs, polarity inversion in the digital domain, 20-bit ultralinear DACs for each channel and a whole A4 page's worth of details, but the main novelty is the — quote — 'Hybrid MOSFET+12AX7' Super cathode follower output for the sake of system isolation between next amplification devices...

Players were proliferating at an alarming rate, the main impression I received being that of new confidence from the specialists who base their designs on Philips transports. In addition to much better aesthetics — few now have the nerve to display Philips or Magnavox players with only a badge to show the changes — there seemed to be more confidence in the reliability of the basic mechanism. Kinergetics introduced a new upmarket model called the KCD-40 Gold Series, a CD-based machine featuring patented hysteresis distortion cancelling circuits, 8-times oversampling, volume and balance controls, high output voltage for superior operation when directly driving a power amplifier, four 18-bit D/A converters and enough compliments from their competitors to suggest that this one could carve out a nice chunk of the market.

Meridian has at last made available a version of its CD player without the pre-amp section, the savings equaling a couple of hundred dollars in the US, I'd guess a reduction of about £100 will be seen here. The Alpha Icon, a 16-bit, 4-times oversampling machine with two transformers, a real metal case and a price tag of only £350. Even further down the price scale is an entry-level audiophile player from Rotel, the £250 RCD-855.

In the 'High End For Poor Folks' category, California Audio Labs showed two new players for those who would but can't be Tempestuous. The Icon, complete with truly luscious faceplate, 18-bit Burr-Brown D/A converter, star eathing, five separate, regulated power supplies, CAL 24-bit digital filter, custom clock module and digital output (coaxial and optical) will sell for a piddling $695. That, my friends is mass-market money. Alongside it and looking just as fetching was seen the Tecrec Mk III, which features CAL's servo-controlled D.C. coupled output stage, all-discrete analogue section, separate 18-bit D/A converters, optically coupled analogue and digital sections, 23 separately reg-u-ulated power supplies and a host of other detail refinements, at $1295.

Probably the most radical player launched at CES was the Madrigal Proceed, the first product to bear that brand name, from the corporation which produces Mark Levinson (MLAS) amplifiers. For one thing, it's an upright model, a layout previously seen only on a few upmarket pro models from Japan. Using an 18-bit monolithic DAC from Burr-Brown, the Proceed features extra-rugged construction, rear-mounted circuit boards to shorten the paths to the connectors, right angle mounting of boards to minimize interaction between the circuits, two master power supplies and eleven 'distributed' power supplies, cast aluminium transport baseplate, aluminium structural members covered in gold-iridate to prevent corrosion and tripod mounting and a real marble slab under the transport to attain optimal stability. Advance whispers suggest that this machine could win a lot of friends in the high end and not just because of the sounds: the US price is a mere $1650, well below that of most current high-end players. This debut also signals a promising future for other Madrigal-branded components.
If that wasn't enough to rock the Anglophiles, Rega announced its entry into the production of speakers and electronics (signalling less than total confidence in the future of the LP). The speaker was seen and heard at CES, dubbed the E1A and looking not unlike a Naim IBL. A two-way, floor-standing design, it features a sloped upper baffle, mirror-imaged drivers and a price tag of under £500 in the UK. The electronics aren't ready yet, but word has it that the designs are courtesy of a former Greek employee.

Another British company set what must be a record in hi-fi circles. Cambridge, now owned by Hi-Fi Markets, showed an entirely revamped line, complete with new models and a restyle, mere months after the change of ownership. Hot products seen behind closed doors included the new P40 and P70 integrated amplifiers, the A70 stereo and A100 monoblock power amps, the C70 and C100 preamps, the sexy new CD3 CD player with '16x16' oversampling at CD2 prices, and the DAC3 outboard D/A converter. All of this was accomplished with the help of the recently appointed 'digital engineer' Mark Norton, whose handiwork will also be evident in two rumoured Cambridge products: a transport-only CD player (for early 1990), and a digital pre-amp, possibly ready for the Hi-Fi Show in September. And you thought that Music Hall's identity was prolific.

Ariston added the next unit in their system line-up, a $310 16-bit 4-times oversampling CD player matching the black Perspex of the existing amplifier, while Linn demonstrated a new speaker, the Kaber. Because speakers proliferate at CES, I find it hard to get worked up about any but the most unusual (of which there are always plenty) but the new Linn model deserves notice because it bridges the gap between the Isobarik and the 'Caber. Because speakers proliferate at CES, I find it hard to get worked up about any but the most unusual (of which there are always plenty) but the new Linn model deserves notice because it bridges the gap between the Isobarik and the 'Caber. Because speakers proliferate at CES, I find it hard to get worked up about any but the most unusual (of which there are always plenty) but the new Linn model deserves notice because it bridges the gap between the Isobarik and the 'Caber.

Mission, as if spoiled by the deliriously dense, highly inert polymer. Other British CES-goers included Audiolab showed the long-awaited FM tuner and that it's absolutely gorgeous! That Meridian introduced a new CD player and that KEF showed a wall-mount speaker with Uni-Q? How about B&W entering the wall-mount market? But CES is an international gathering and the main reason for attending (at least for the Press) is to discover the latest from the brands which don't live a short drive away. I don't know if the proliferation of exotic American goodies should cause anyone's fears about the state of the market but all for optimism. I mean, what other word describes McDonald's selling Chicken McNugget sandwiches with vocals courtesy of blues giant BB King? 'Woke up this morning and found myself too poor to eat at the Golden Arches' would make a refreshing change from Ronald McDonald. Oh yes, may be the home of the blues but that didn't set the tone this year. There were prestige launches galore, the usual run of mouthwatering, mortgage-stretching audiophile fantasies, and anyone who tells you that the show lacked sparkle just didn't look in the right places.

Musical Fidelity was prolific... covers I've seen since Gale went into the cheesegiving business. Much more conservative but just as exciting are the new mini-monitors from ATC. The first small speaker from this firm, the SM20 is primarily a studio monitor like its larger brethren. Although I expected an LS/SA-sized mini, ATC opted for a slightly larger enclosure housing a 6.5in woofer and 25mm tweeter in order to provide a modicum of bass for reasonable assessment of the programme material in mastering situations. The speakers are built like battleships and will probably part you from about a grand.

Mordaunt-Short introduced the new 3 Series, these models running from MS3.10 to MS3.50. The wee MS3.10 was seen in gloss-white form, this mini-monitor looking like M-S's answer to the Wharfedale Diamond and Goodmans Maxim. The MS3.20, 3.30 and 3.40 increase in size and flip-flop the reflex port (the even suffixes are forward firing while the odd suffixes feature rear-mounted openings), but the flagship floor-standing 3.50 is a transmission line design, which should amuse TD and Frield. The four smaller models can be supported by M-S's new 3.1S stand, a segmented, adjustable design made from a dense, highly inert polymer.

Other British CES-goers included Revolver, Monitor Audio, SME, Rogers, Celestion and just about every other important make, but if I spill too much I'll only blow the whistle on some sensational scoops best saved for The Hi-Fi Show. Do I spoil the surprises and tell you now that...
something at the entry-level stage. And there was more to come.

Beyond any doubt, the hottest new product at the show was Apogee's Stage 1, with which the company removes three obstacles preventing would-be ribbon fanatics from acquiring its products. 1) It sells for under $2000 per pair. 2) It can be driven with any good 50-watter. And 3) the speaker barely stands waist-high. Apogee exhibited in a positively vast room, the sort you'd expect to fill with a Diva or Duetta. Visitors arrived finding this dwarf speaker in the middle of the room. Expectations were what you'd assume of too small a speaker in too large an area. I pulled out the 'biggest sounding' CD in my arsenal, 'Assassin of Love' by Willy DeVille. The 'Apogeena' rose to the occasion, handling the subterranean bass with aplomb.

Not quite so real-world but just as much fun were the new 'half-price' ($25,000) Goldmund Analogues, two-enclosure versions of the high-flying Apologue launched last year. Like the $50k predecessor, the Analogue has aesthetics courtesy of Claudio Rotta-Lauria and look exactly like Apologues minus the extra enclosures. Too cheap for you? Then order a pair of Immortals (honestly) from Classical Design and Engineering. These Chinese-lacquered chest-height Dalek lookalikes consist of a huge bass enclosure housing two upward-firing 10in bass drivers and 'steerable' upper enclosures containing two 5in midrange units and one forward-firing 1in tweeter. If ever a speaker screamed 'Japanese hi-fi casualty' it's the Immortal, reminding me of every cult classic from the Klipschorn to the mega-Bozaks of yore.

Clements, now based in Canada, demonstrated a new ribbon hybrid called the Reference RT7 in a handsome floor-standing enclosure and featuring their signature dispersion lens running the length of the ribbon. Thiel released the long-awaited CNS flagship model, an absolutely beautiful floor-standing design with sloped, time-aligned front baffle (made from a marble/polymer composite) and featuring what looked like the most complex crossover ever produced. Then again, it does have to control six drivers. Price is just under $10,000. MartinLogan showed the awe-inspiring Statement with Krell, Basis and Day-Sequerra, the gigantic four-part system sounding better than ever. (Idle chatter: I met more owners of M-L Sequel IIs than any other speaker.) Nelson-Reed unveiled a subwoofer system which included a 400W controller/amplifier/crossover (usable with other makes of subwoofer) for $2700 complete. Other exciting speakers included a smaller Avalon, a mini-monitor of the truncated pyramid variety from French maker CASO called the Metronome (no prizes for original nomenclature), two handsome floor-standing systems from Syndex at $1600 and $3000 per pair, the 'unusual' Wolcott Omnisphere (at $4500) featuring a distinctive big black ball on top of a pyramidal bass

Cambridge Audio (above) took the lid off its new electronics range; Thiel finally showed its marble-fronted flagship (left); while Clements demonstrated its stunning ribbon hybrid (right), the RT7

WHAT'S UP, DOC?

Every show throws up something so bizarre that you have to ask, 'Has it all gone too far?' This time, as if to show that the Americans could out-Belt Peter, attendees were treated to ear- extenders which accomplished the wonderful task of making any wearer look like either a rabbit or Mr Spock, depending on your preference for cartoons or sci-fi.

Called Serious Listeners, the ear extender kit consists of two nicely-made leather cutouts which you fold and snap together, hooking one over each ear. They form cups which turn your pinnae into constructs not unlike the scoops used at my local coffee bean emporium and they're said to: 1) Reduce the undesirable effects of poor room acoustics; 2) Improve the focus of the stereo image; 3) Increase dynamic contrast. What the packaging does not tell you is that wearing Serious Listeners will also: 1) Make you smell like a leather fetishist; 2) Add ambient effects not unlike holding a shell to the ear; 3) Make the user look like anything but a serious listener. Selling for around $20 per pair, Serious Listeners are available from PO Box 565, Burlingame, California (where else?) 94011, USA. You can telephone the company for more information on (415) 344-1200. Tell them that Peter - Belt or Rabbit - sent 'ya.

Serious Listeners: auxiliary ear-flaps modelled here by Tom Gillet of Stereophile. He has even worn them to a Carnegie Hall concert, which raised many eyebrows!
enclosure, the updated Waveform ribbon hybrid pyramid system for $9800, two affordable new Snell models, the F/III ($9800) and J/III ($680), and another speaker from Hales, the company which dazzled so many at Las Vegas. Called the System Two Signature, the new model is a floor-standing beauty at $5700 or so.

Another launch about which I'm not certain I have clearance to write but frankly can't sit on is the fetching Modulus 'concept system' from Infinity. Check this out: the Infinity Modulus system comprises, basically, those panels which you build up in component form, starting with the two-way, stepped baffle, EMIT-equipped main speaker in its acoustically-inert, resin-finished enclosure. This rests on triangulated, spiked isolating feet which can be used with vinyl cups for table or shelf placement or on the next component in the range, the Modulus pedestal (too much like a variant of the Celestion SL700 stand to inspire cries of 'Genius!', but it's nice to see an American giant taking notice). Also available are special fixtures for wall-mounting pivoted brackets which will allow you to position them in those near-field conditions for near-field monitoring. Then there's the 200W servo-amplified 12-in-driver'd subwoofer.

Amplifiers: more tubes!

CASO's little pyramid speakers were seen and heard on either side of the company's two-box pre-amp, the $3000 Consonance, monoblocics and Magus pre-amp. Melos offered the CD-T/B pre-amp, M-120 and M-200 line-up including the tasty two-box Deluxe; US company Atma-Sphere showed an impressive all-triode, 100W/channel Class-A amplifier, the MA-1, which is as freshly styled as the earlier 'cubist' products, but selling for a whole lot less, the 911 pre-amp and dual mono-power amplifier. Ariston introduced a 100W/channel pre-power combination (and tuner) to match the new CD player, Creek introduced the new 5050 integrated amplifier, Naim restyled its entire range and unveiled the NAC 72 top-of-the-line pre-amp; and Krell went into the modular field with a separate 6-input line stage pre-amp, the K-111b tube pre-amp. Can we expect a 917, a 959 (944, would you believe) and the 911 loudspeaker. Can we expect a 917, a 959 or — God forbid — a Carrera or Speedster?

Hy's Society

SII and I spent an evening in New York in the company of the most committed audiophiles in the USA, The Audiophile Society and its head honcho Hy Kachalsky. This mob meets once a month at Hy's home in Rye, Westchester, NY to share hi-fi experiences. To witness such rampant audiophilia is to learn that, yes, there are a bunch of crazies out there — Kachalsky's a shrink, no less — but their hearts are in the right place. They even made me forget my food poisoning.
Beethoven's greatest masterpieces were composed after 1819 when he was totally deaf. His sense of isolation and a desire to rebel against his affliction resulted in classic symphonies. It is therefore a sad irony that many people who listen to these masterpieces are also deaf to their subtleties and nuances. Their compact disc players are simply not sophisticated enough to process the weaker signals from the disc. The new Technics SL-P999 is adept at processing these signals. Information that most C.D. players would turn a deaf ear to.

A conventional system uses just one DAC (or Digital Analogue Converter) to cope with both the positive and negative halves of both channels. Rather like a one-armed orchestra conductor this creates confusion and distortion.

The SL-P999 actually has four DAC's. Each channel has two. One for the positive and one for the negative half of the signal. So that even the softest pianissimo piano phrase can be heard. From musical parts to bits. The 20 Bit 8 times oversampling on our C.D. means that the information on the disc is
ON MOST COMPACT DISCS, THE SUBTLETIES OF HIS MUSIC ARE FALLING ON DEAF EARS.

Actually evaluated eight times between samples.

Ensuring that the smallest changes in the music are faithfully reproduced.

So that the high tessitura of the chorus sopranos in the Missa Solemnis are a joy to listen to.

The double basses in the fifth will take you to seventh heaven.

And the thunder of the Appassionata piano sonatas will reach your ears like lightning.

The signals from the C.D. also travel allegro style to the amplifier.

And as there are both analogue and digital outputs that means any amplifier.

At design stage, the Shuttle Search also received a great deal of input.

It enables you to look for the piece of music you want forwards or backwards at up to 76 times normal playing speed.

There is also a 43 key remote.

Which is exactly how Beethoven must have felt in those silent, lonely days writing.

Perhaps he would have taken solace in the composition of our C.D. players, which enable every note that was written to be heard.

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It didn’t enter our heads, when we conceived the Accessories Club back in 1984 that we would end up with ‘own brand’ products. After all, there’s never been a shortage of accessories to choose from; we thought our task would be simply to find the best of each type. But the deeper we got into the subject, the more we found ourselves wishing, ‘What if...?’ or ‘How about a...?’

First fruit of our collective brainstorming was, of course, HFN/RR 001 - The Fluidumper. No apologies for this one! We’d heard about the wonderful VPI Magic Bricks which American audiophiles were using to eliminate both mechanical buzzing and the sonic effects of stray eddy currents. Unfortunately, the transatlantic journey priced these wooden-clad lumps of laminated steel right out of the market, so we produced our own version. Results vary according to the amplifier’s design, but valve gear tends to benefit spectacularly.

HFN/RR 004 - Blackhead. The best bargain we’ve ever offered, a fixed-value, £59.95 version of genius Tim de Paravicini’s classic m-c system £375.00; cleaning fluid for the VPI system, per 51: £12.50.

HFN/RR 006 - Flutterbuster. We wanted (roughly speaking) to do for other AC synchronous motor turntables what the Valhalla kit did for Linnies. Not only does the Flutterbuster clean up the mains and improve stability, it also adds 33/45 rpm at the flick of a switch instead of the flick of a belt. Turn your AR Legend or similar deck into a synchronous t/t (specify type); black-ash case £79.95.

HFN/RR 010 - News Stand. The answer for those with a mix of CD players and cassette decks. Another de Paravicini masterpiece.

HFN/RR 011 Munchcrusher: 220/240V 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) £37.50; CD/cassette unit (40/25) £19.50; singles unit (200) £29.50.

HFN/RR 013 Wallnut: 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 016.5 record cleaning machine: the ultimate record cleaning system £375.00; cleaning fluid for the VPI system, per 51: £12.50.

HFN/RR self-build loudspeakers: details available for DCI & Bassett kits, please indicate.

Stax binaural CDs: The Space Sound, £15.95; Glenn Miller, £18.50; Close-ups; Kabi Laretei, piano. £6.95; Nibs (45rpm) £12.95.

Chesky jazz CDs: one £13.45; two £25.90; three £37.80.

Harrison Cassette Alignment Tape: £7.50; Stax binaural CDs: The Space Sound, £15.95; Glenn Miller, £18.50; Close-ups; Kabi Laretei, piano. £6.95; Nibs (45rpm) £12.95.

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The merits of DACs, dither and compression were analysed by AES papers in Toronto . . .

by Timothy Palmer-Benson

any papers presented at the Audio Engineering Society four-day Toronto conference expressed concern about the audible distortion that digital technology can produce with some types of signal processing (DSP). The quality of 16-bit and 18-bit DACs appearing in CD players was also in question. As a consequence, a number of solutions for preventing distortion in DSP were proposed, most notably the use of dither. At the same time, it was obvious — and unpleasant. However, when a small amount of analogue white noise, (or what is called Gaussian dither) was added to a level equivalent to 1/2 a least significant bit (LSB) rms, the buzz in the piano notes disappeared — replaced by wideband noise. ‘Undithered signals are pernicious’, Lipshitz told his audience after it had ended several undithered piano excerpts from Mussorgsky’s Pictures at an Exhibition at high level. The researchers went on to point out in their second paper entitled Digital dither: Signal processing with resolution far below the least significant bit, that recording studios had better be aware of non-dithered digital fades. ‘These are equally pernicious’, Lipshitz told the conference. The two scientists explained that even if analogue dithering has been used in recording an analogue signal, digital dithering must also be used whenever there’s a level change during the processing of the signal in the digital domain. ‘Digital gain reduction (or fading) without dither is highly susceptible to signal distortion, noise modulation and non-uniform signal output gain variation’, say the researchers in their paper. For example, there could be changes in level while a piece of music is undergoing equalization while still in the digital domain. ‘Unless digital dithering is added’, says Lipshitz and Vanderkooy, ‘the beneficial effect of the original analogue dithering will be negated. Distortion will be re-introduced into the signal in any re-quantization process such as conversion from an 18-bit ADC to a 16-bit DAC.’

The Canadian researchers were quick to defend reduced signal-to-noise ratios saying that the slight amount of wideband noise introduced into a recording by digital dithering (a noise penalty of approximately 5dB) is perceived by the ear as being a benign sound. They point out that although wideband noise has about the same total power as a 90dB signal, the high ‘Q’ filtering action of the car allows it to resolve sinewaves clearly well below the noise in much the same way as a spectrum analyser can.

Vanderkooy spoke extensively about a special form of digital dithering to maintain signal quality while it is still undergoing processing. Dubbed triangular-probability density function dither, the dither toggles over more bits and helps improve DAC linearity, thus resulting in less distortion. It also eliminates the residual noise modulation which simple rectangular pdf dithering leaves behind. (Both rectangular and triangular pdf dither are small white-noise signals whose statistics are specified by the pdf.)

Also mentioned by Vanderkooy were ‘dithered noise-shaping quantizers’ that reduce the audible effect of digital dithering by introducing feedback. Noise-shaping is a method of taking the digital round-off noise energy in the audio band and moving it to higher frequencies outside the band. Noise shaping by itself in the playback domain is hardly new: it was quietly used in the early Philips players such as the CD100 in order to get 16-bit S/N ratio performance out of a 14-bit DAC. Lipshitz and Vanderkooy’s idea is to take things one step further by re-introducing dither to the noise shaping in order to eliminate all final vestiges of distortion left over from the noise shaping circuits.

Dithering to prevent distortion assumes perfect operation of ADCs and DACs. These don’t yet exist in consumer machines and to make up for converter errors, Lipshitz says one could add more dither, but this would mean unacceptable S/N ratios. More feasible alternatives included a number of improved converter systems, such as ones using built-in noise shaping filters, ones that use psycho-acoustics to fool the ear into thinking that conversion error is not there, and of
Carillon Technology of Newton, Massachusetts, unveiled an IC chip set for 20-bit A/D conversion. It’s claimed that the converter can achieve a SN ratio of 114dB and with a 1kHz dithered signal shows no visible harmonics down to —70dB. Burr Brown also showed the design of its new dual monolithic, 18-bit ADC that produces 1% THD for a 1kHz signal down at —60dB. The converter has the familiar pot for adjustment of the MSB. Company spokesman Jimmy Naylor, admitted that the converter does not have 18-bit accuracy, but is called 18-bit for reasons of ‘specmanship’. This prompted sessions chairman, David Haynes, to observe dryly that John Vanderkooy had shown how a 16-bit converter can achieve 16-bit linearity and Naylor had shown how an 18-bit converter can be degraded to 16-bit resolution!

The Philips presentation of Else Carel Dijkmans and Peter Naus almost seemed to say that for commercial purposes it’s a waste of time trying to achieve perfect linearity with 16-bit, 18 and 20-bit converters and that it is time to move on to something else. In their paper entitled ‘The next step toward ideal A/D and D/A converters’, the two suggest that interpolative conversion or bit stream converters (the average of the bit stream is the information) are a better choice because they provide inherently perfect low-level linearity without the need for high precision. Dijkmans, who delivered the paper, said that in theory there is no limit to the dynamic range of a one bit converter and there is no linearity problem either. Dijkmans revealed that there is at least one potential problem with bit stream systems; his own work, a substantial amount of noise outside the audio band because of the need to use dithered noise shaping. He says that there could be a problem with parasitic coupling. ‘When we put DC on the input of the converter and look at half the sampling frequency, distinct frequencies will be there’, explains Dijkmans. He says this doesn’t affect low frequencies because the quantization noise is shifted outside the audio band, but these distinct frequencies will fold back up into the upper part of the band.

If all this seems distressing to audiophiles consider a paper from AT & T Bell Labs in Murray Hill, New Jersey. The paper says that research has proved that even ‘golden ears’ cannot tell the difference between ‘a psycho-acoustically compressed’ digital signal based on a 4-bit system and one based on a perfectly operating 16-bit one. In a paper entitled ‘Digital Audio: Future trends in quantization, storage and compression’, James Johnston paints a picture of what some digital audio might be like in the future. According to Johnston, a smaller bit system is quite satisfactory if spectrum analysis of the ear’s critical bands is used to determine what will be recorded and what will be discarded. (This ‘masking effect’ relies on our hearing characteristics. Proponents of compression also say we don’t hear distortion if it is masked or hidden by a stronger signal.) Johnston maintains that by converting to the digital domain in such a way that the signal optimally masks the quantization distortion and noise, it is possible to achieve almost audible perfection with a greatly reduced number of bits. Such a system would have an audio bandwidth of 20kHz to 20kHz as well as dynamic range and separation equal to the compact disc. This was not the only psycho-acoustic compression system discussed. There was also a proposal by Karlheinz Brandenburg and Dieter Seitzer from Erlangen University, FRG. They showed a number of low-bit coding schemes and said that coding of high quality digital audio with bit rates down to 64k-bits is now possible.

The unit is called a ‘Magneto-optical disk digital audio recorder’ and it can record playback for up to 20 minutes using constant linear velocity (CLV) discs. After presenting a paper on the DAT machine at the Las Vegas Consumer Electronics Show, Nakamichi is showing a second system for direct copying of digital audio.

A different approach for compression, along the lines of the BBC’s well known NICAM, was shown by Stanley Quinn and Jeffrey Frederiksen from Frederiksen and Shu Labs in Arlington Heights, Illinois. The ‘SuperSound’ system is based on changing the 16-bit system into a non-linear one where level changes are applied to blocks of digital words rather than individual samples. Its proponents say that the original data is compressed by 30 per cent. SuperSound uses complicated algorithms, noise shaping and masking. Quinn says extensive listening tests have proved that people cannot hear the difference between music heard directly from a CD and music that has gone through SuperSound compression and expansion.

Then there was the special case of Nakamichi. After deliberately irritating the RIAA with its megabuck DAT machine, the SuperSound system for direct copying of digital audio.

The unit is a large computer with a single disc drive on the outside. Inside things are totally different; the drive uses an 89mm, magneto-optical (MO) disk that looks similar to the ubiquitous 5-1/4-inch floppy, except that it is about twice as thick. Its lifespan is said to be about ten years. The unit contains a laser that focuses from underneath the disc to a spot approximately 1µm in size and heats up a magnetic layer of recording film sandwiched between a protective dielectric layer. Simply put, the film changes its slight reflection characteristics in the recording or writing process and this is detected by an optical pickup unit on playback. The magnetic layer must be erased and be in a uniform state before anything can be recorded on it: a process that also takes about 20 minutes. I was left with the impression that digital audio technology is moving very rapidly to the point where almost the entire audio industry finds itself; it has become the centre of audio.
Since 1962 we have received eighteen prestigious awards for our precision pick-up arms. One of the models shown here could well transform the performance of your deck and cartridge, realising, probably for the first time, the full potential of your L.P. records. Glance through one of our instruction books, sometimes 24 pages with more than 40 illustrations, to appreciate the attention to detail. Only SME arms provide the precise adjustments essential for true cartridge performance and the build quality to minimise sound colouration. Insist on SME, the thoroughbred arm, to update your present equipment.

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John Bicht had no formal training as an industrial engineer. While this is not surprising amongst audio designers, it is still interesting because his engineering accomplishments to date have undoubtedly exceeded those of many other industrial engineers. His designs include the emergency doors of the Hong Kong commuter trains; an electric car which remained for ten years the most advanced of its kind; and exotic semiconductor assembly equipment. His formal training was a sculptor; his first love and great skill was racing (he was one of the top three racing car drivers in Northeast America for formula cars). The need to build race-cars himself was the spur that gained him detailed knowledge of engineering and high performance precision mechanical systems.

He has continued ever since, designing things he's never designed before — and that others often tell him cannot be done — asking questions, sticking his neck out, and refusing to let them fail. He cross-connects, seeing as an artist but focusing too on linear, logical design.

He built the Mission arm in response to English reviewers of that time, saying it would be nice if someone sat down and designed a really decent, competent pickup arm. So he did. He had stopped racing, had some time and money on his hands, and had started exploring audio equipment.

The Mission arm had some serious innovations; viscous damping; a very narrow headshell making for high contact mounting forces between headshell and cartridge; a Sorbothane decoupled counterweight which was its first use anywhere in any engineering application; and two sets of zero-clearance bearings.

His introduction to audio beguiled him into continuing his work by designing a turntable to suit the arm, and pursue serious fundamental research.

'I hate all the mystery surrounding the design of record players. More than any other part of our industry, pseudo-science predominates the discussion of record players. I don't know if the designers are misled, or if they are consciously trying to make for clever sales jargon. Of course, I've got to point out we had to make many less dollar-value compromises than almost everyone else (we said let's make it and see how much it costs) and the compromises end up so you can make it sound just so good, and then you have to back up, and tune it to sound musical by actually eliminating some good things, that unfortunately reveal something else not so good.

'Designing record players is a piece of cake once you decide: okay, I want the thing as still as possible. The fundamental quality of record players is stiffness, not energy transfer - as is so popular an idea nowadays — because if you make it stiff, you reduce the energy input. Of course, the problem with making things stiff is that they ring. That's the second half of the problem. You can't damp within the structure — put squishy pieces in the structure — because you've defeated the stiffness. Damping has to be done externally. Half the pieces of the Versa Model 2 chassis and platter, and a number of the pieces of the Model 1 have externally applied damping elements.

'Then the record itself is another problem. All this stiffness is a waste of time if the record flops around. Essentially what happens is that the record moves — not internal wave reflections, impedance mismatches and stuff but record flexure — it moves bigtime. And so you hear the sound of this disc of PVC sitting on whatever kind of mat; and on top of that you hear the sound of the record moving up and down, and you have to back up, and tune it to sound musical by actually eliminating some
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So you have to use vacuum, and enough to pull the record down real flat. It's the only way to get sufficient force across the recorded area. If you don't use enough force, the record is still raised on little PVC bridges sitting on a hard surface, and tapping you hear clack, not a quiet clonk.

'Of course, pulling the record down tight is a waste of time if the platter is a bell. To damp the platter, as with all the potentially noisy parts of the turntable, we use the most exotic of damping techniques — constrained layer damping. With this technique, you provide a second piece of structure (remote from the real structure) with a piece of high-polymer material glued between the real and the pseudo-structure. As the real structure moves, it tries to move the pseudo-structure (through the elastic layer between them). The elastic material, which is purpose-designed, turns the motion into heat, and you can knock 15 to 20dB off resonant peaks.

'Now connect the platter to the chassis with a bearing that is very rigid and doesn't wander around in a soup of oil or whatever. Connect the rigid chassis to the rigid arm, and then isolate all this from the outside environment.

'More obviously than all the other parts, the suspension is a low-pass filter. Actually all the parts of a record player behave like bad filters, but that's another story. Remember that a graph of the filtering section of a suspension should look like a classical resonant system. Below the resonant frequency all inputs are outputs (so as the player base moves, the chassis moves equally), at the resonant frequency inputs are exaggerated (so the amplitude of input at the base becomes greater at the chassis); and then above resonant frequency, motion at the base doesn't get through to the chassis.

'Now, any other resonances in the suspension will show up as bumps in this graph, and worse, they will tend to defeat the suspension if they are in the frequencies one is trying to filter out. For example, if the suspension is designed to filter 20dB at 30Hz but there is a resonance in this frequency of say 15dB, then the effective filtering is only 5dB — not too effective. These resonances might come from spring surge — where the weight of one coil of the spring will vibrate on the compliance of the coils above and below it — to having different resonant frequencies in the directions of motion of the chassis.

'Let me explain that a bit. Where most designers err, in my opinion, is that they consider only the vertical component of the suspension. Whether attached to a wall or a floor, the player will experience both vertical, and fore and aft disturbances, like nodding one's head — it's going forward and down. So the suspension has to function in two planes simultaneously, both vertically and fore and aft. Lateral is not important from the point of view of floor movement but you must have the vertical, the fore and aft, and the lateral modes all at the same resonant frequency, or else what will happen is that as you excite one of the modes, the other modes will in turn be excited, and you will have essentially intermodulation distortion. Due to the non-linearities of the suspension, not only will the two different frequencies show up, but also the sums and differences of all the different basic resonant frequencies of the suspension. The result can be a suspension that is not very effective to several octaves above its design frequency. So a key to good record player suspension design is realizing that these other resonances can defeat what otherwise is a good design.

'Tuning a three-point suspension, like a Linn, is in effect trying to decouple the various resonant modes of the suspension so that one mode can be excited without exciting the others. Since this is a bit of an art, we decided to design a suspension with no adjustments, and that was inherently more correct. Text book plain simple requirements that the centre of gravity can't change (easy since we don't have to suit more than our own arm, or you end up with lead weights that have to be tuned); four springs, once again straight textbook, and then as low a resonant frequency as possible — which in the case of compression coil springs (chosen for cost over complicated air suspension, and compression because extension springs behave like pendulums in the lateral direction and therefore are ungainly to deal with at the proportions necessary to have low lateral frequency) is 2.5 Hz. All quite easy — except you have to measure each spring to match them into sets, and still do some final adjustments. The whole thing actually drives us crazy — but it means the dealer and the user don't have to think about it.

'Okay, so all of that — stiffness, damping — is what we consider the primary things about turntables. Within all I've said, I must admit that while designing a good sounding player is easy, making it a good product is hard, but I'd rather not have to remember all that. It wouldn't have hap-
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See U.S. Magazine
The Absolute Sound
vol. 12, issue 49, fall 1987, p. 113/114

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Quality Precision Reliability
pered at all had it not been for Wayne Johnson who has been of enormous help shepherding this product from the very beginning and is presently in charge of manufacturing, and Tim Wontz who was the major visual designer and sample customer for both our products. Even closer to the core of it, none of this would have taken place if it hadn’t been for Fran’s (my wife’s) support over the years of all my crazy jousting at windmills and then when later becoming a real mainstay of the business in that way, we developed most of our technology back in 1979 and ’80. After leaving England, we went back to the US and did more research on why turntables and arms sound like they do, and by-the-by designed a turntable for Mission, who had bought the design for the “74” arm. The whole trick is being able to decide when you hear the effect of a change that you’ve done on a mechanism – because all of a sudden you can make your system sound nastier but you’ve actually made an improvement – you’ve just revealed the natural hidden – that’s where you have to resort to logical thinking and scientific measurement and say, “I’m positive I’ve made an improvement”. Because otherwise you get led down the garden path. I don’t think that anyone else had had that opportunity and none of this otherwise you get led down the garden path. I don’t think that anyone else had had that opportunity and none of this would exist if not for all that time – which back then appeared to have been wasted since Mission didn’t want my turntable design and I couldn’t get anyone else interested.

‘The whole rationale for the arm on the Models 2 and 1 is not one of linear tracking or the lack of friction of air bearings – it’s one of stiffness of the arm tube. In about 1982, I was developing another pickup arm design. I had designed an even better bearing assembly (which I had always thought to be the strong point of the “74”) and finally, after a few weeks spare time, I got to work on the arm tube. What a fool I felt. All that time about the bearings, and I finally realized what a disaster arm tubes are. They start to flop around in the low hundreds of hertz and there is nothing anyone can do!

‘I started looking at some quite fundamental equations and realized that you can’t ever get within the weight constraints (due to cartridge stiffness and desired arm/cartridge resonant frequencies), arm tube fundamental resonances could only be pushed deeper into the hundreds of hertz – where, of course, the car is more sensitive. It was really clear here were these equations in front of me and they said “Well if you make a tube bigger, it will be a lot stiffer”, but if you look at the change in the resonant frequency (due to the mass of the cartridge at the end of that tube) you find that it had gone up very little. I was at a loss – what could one do? Well, fundamentally the job is to move a cartridge from point A to point B across the record, with very little friction – so it just sort of wants to get from one place to another. I was a stiffness freak, so to speak, and therefore this job had to be done with great rigidity in certain planes: except for sliding towards the spindle and being able to pivot up and down.

‘I was at that time working for a company designing machines to make semiconductors. One of the most amazing things that I had been introduced to there was air bearings. Not the soggy, floating things that are commonly used on hi-fi production lines but stiff things which are used for the most exotic equipment – in place of metal or oil bath bearings – because they are more rigid, non-resonant, and have greater accuracy of motion. The rigidity issue comes as a great surprise to most people. After all, here is something supported on air and it’s stiff! First of all, remember that everything has some compliance, it doesn’t matter what it is, steel, diamond, whatever, if you push on it, it will compress or deflect. Now, rolling element bearings (like balls) have to be quite small to have low enough friction levels to pickup arms. You can use either bigger bearings with little preload or little bearings with a lot – either way, to end up with little enough friction, the bearings are still quite small. The functional part of these bearings is the contact point between the ball and the race which is really tiny, a minute point of contact. When you push on the bearing, the ball and the race deflect a little. The measurement of the stiffness is the amount of force necessary to move something a distance. I’ve done, several things happen with real air bearings. One is that you get a tremendous advantage over it is in a ball bearing, so that although the medium is softer, there is a great deal more of it. Secondly, because of the very small clearances, the air begins to act in some strange and quite helpful ways. The wonderful result is that the bearing for the Versa arm is so stiff that it requires in excess of 5 pounds of force to move it a distance of 250 millionth of an inch. That’s stiff. The icing on the cake is the bearing is non-resonant. Well designed air bearings are critically damped (a result of the thin air films) – an impossible thing to achieve with metal bearings which become resonantly large as they do.

‘The platter bearing for the Model 2 is a great deal stiffer than the arm bearing. It is a much more complex device, which ends up ten times more rigid – as it should since it had an 11 pound platter sitting on it. ‘The English way was doing things, the design and innovative way of thinking about things, had a big effect on my designing, and I don’t think it’s ever stopped.

England has more, I think, inventive designers than anywhere else in the entire world. The problem is the design is not always brought to the proper degree of finish. What would be really good is if you could combine American business with English design, have it styled in Italy and made in Japan, that’d really be the ticket. And have a Frenchman in there just twisting the design enough to really keep the pot boiling.’

THE MUSIC LOVER’S LITERARY COMPA- NION compiled by Dannie and Joan Abse. 519pp. Harcourt, £4.95. Published by Robson Books, 28 Polad Street, London W 1V 4DB. For the purposes of their wide-ranging anthology, Dannie and Joan Abse have gathered together an impressive variety of poems, stories, factual reportage, criticisms, George has come down on the one-volume – such invaluable documents as Beethoven’s Heiligenstadt Testament and (on a different level, admittedly) Elias Canetti’s wry, aphoristic analysis of ‘The Orchestral Conductor’. This is an enjoyable volume and should pave the way for any number of similar enterprises: the potential for imaginatively juxtaposed pieces dealing with music is almost endless.

Robert Cowen

THE DEATH OF RHYTHM AND BLUES by Nelson George. 225pp plus b&w photos. Hard covers. Price: £12.95. Published by Omnibus Press, 8/9 Frith Street, London W 1V 5T7. At last, a book telling black musicians where they’ve gone wrong. It would be too presumptuous and in many ways racist patronizing for any disgruntled white fan to tell the likes of today’s triple platinum black artists that they’ve gone wrong. I can only say thanks to the author for writing, ‘Compare early Aretha Franklin to Whitney Houston’. That, soul fans, says it all.

Kev Kessler

BOOKS
It is no new discovery that the finest record-playing system gives unrivalled musical satisfaction. If you own a Roksan or a Linn turntable, now is the time to consider your final upgrade motor/arm/pick-up cartridge. It is significant that the two leaders in British turntable engineering should both introduce thoroughbred no-compromise tonearms which are capable of extracting the best from their respective turntables.

The Roksan Artemiz could fill a book let alone this advert, and indeed the fortunate new owner gets a full description of the philosophy of the tonearm design and the Shiraz cartridge. Typically this too is a revolutionary product which offers quality of sound dramatically in excess of what could be expected for the price. It is not a badgeengineered product but a small milestone in Hi-Fi history. We congratulate Roksan on this definitive statement of their product, the Artemiz tonearm, underpriced at £450, and the Shiraz pick-up cartridge at £499 fulfill the Roksan pledge not to sell for the price the market would pay to equate demand and supply. Hence a waiting list.

We now admit to being much more enthusiastic CD stockists: let’s face it, the value and reliability available are far superior to the early products. But vinyl sales are holding up thanks to its true merits and resilience. The Music Room still offers the ‘greatest experience and choice’ as specialists in the world’s best turntables, arms and cartridges at all price points from the Ariston Q-Deck, through Systemdeks, Michell Synchro and Gyro-deks, SME, Audio-Technica, the Avalon and the amazing new Rock Reference at £1,800 a bargain from Townsend right up to the Goldmunds for those who wish to commit their full allegiance to the Long-playing record. The world’s best sounding tonearm (the most dynamic, detailed, open and natural sound) is the elegant and fabulous original hand-made Triplanar II. We still have one demonstrator available for only £1,200 (saving £795). Write or telephone for details of this lifetime investment. We also have for sale a Koetsu Gold Signature with guaranteed less-than-running-in hours: listed at £2,038, we will let it go for £998, the price of the plain “Red”. Do not hesitate for too long here; this is a real and unique opportunity.

AMPLIFIERS
The British have for long been acclaimed for economic but thoroughbred amplifiers and we offer what we believe must be the widest choice of the most highly acclaimed. ITL is a new company and their MA80 is an outstanding integrated amplifier which costs £169. It is a MosFET design with MC/MM inputs. ITL has been taken over by Nakamichi-B&W Ltd. So expect some stylish advertising! The strong competition includes the scarce-as-hens’ teeth Cyrus One, now manufactured in the Far East to Mission’s high specification, and the new B-at £199 from Musical Fidelity.

Under one roof, The Music Room gives you comparison of all the best from East and West! For the best value we have ARCAM, AUDIOLAB, CYRUS, QUAD, CAMBRIDGE and MUSICAL FIDELITY but we are also experienced dealers in the uncompromising reproduction of music. Here we have the best from America, notably Audio Research and Krell and we have come to the conclusion that substitutes can be false economy. We are selling on behalf of Legato the Threshold Stasis III £895. This is a classic amplifier at an attractive price.

Especially for users of Audio Research, the MIT music lines are the ultimate loudspeaker cables, but this technology of Bruce Brisson design does not come cheaply. They are not discontinued, but we must turn over our demonstrators at under half-price: £250 for the MIT and £500 for the Shotgun version; both 8-feet optimal pairs designed for the powerful amplifiers to be close to the loudspeakers. Home-appraisal is available on receipt of a ten-day post-dated cheque plus £5 to cover costs of carriage. Our home loans have increasingly been treated as library services, or worse! But when you hear what the MIT cables reveal, you will not doubt their value for money.

ACCESSORIES
Better plugs and cables remove opaque holes. The new Scottish company QUANTUM manufacture state-of-the-art at very low prices, notably the finest set of four precision gold-plated speaker plugs we’ve seen yet; at only £5.95 for a set of two red and two black, money-back if not delighted! They also make sets of four neat brass tip-offs for £12.95 and an interconnect which features the finest cable and phono-plugs ever made; the price is again, very reasonable, at £73.00 for a stereo metre pair. Finally, from the Quantum range we mention their digital optic link at £130. If you won’t believe that this, too, can give a definite and vast sonic improvement then please accept the assurance of a skeptical converted. Compared to another expensive and touted optic link, the improvement was huge. CD has taken a major jump closer to musical authenticity.

The LAST range of record cleaners and preservatives which we import from America also tends to arouse skepticism until people either read up on the technical side, or try them. The starter kits at £12.95 are now back in stock, and we apologise for the shortage! The demand for LAST is enormous now that many records reappear, all of CD reissues. LAST removes dust and grime and hardens the LP surface against elastic deformation. STYLAST coats the stylus tip and substantially reduces friction, heat generation and stylus wear; we emphasise substantially and could also add audibly.

COMPACT DISC
Musical transparency is available only from the best CD players which are carefully designed using discrete components. We have in our summer sale one Kinetronics KCD-30, a bargain at its List Price of £1,695 but our demonstrator is barely run-in and at £795 it is the best proposition a CD audiophile could consider.

Once again the pattern is America dominates the ultimate, but Britain dominates the more affordable market. This month we focus on news from ARCAM: hot on the heels of their Delta 170 CD transport and their Black Box (£249/299 with optical link) comes a Music Room Newsletter ‘scoop!’ the Arcam Alpha CD Player, at £350, we anticipate a waiting list, don’t delay!
Never, if you value your sanity, thumb through a Japanese hi-fi magazine. If you’re an inveterate hi-fi casualty, the pictures you’ll see will haunt you the way a girlie mag tortures Adrian Mole. I never take my own advice, so I pore over these exotic journals whenever they come my way (hi-fi and girlie). And for the past four years, I’ve been waiting impatiently for a stab at the electronics from Air Tight.

I admit that the charm of the name, the absolute perfection of that moniker for a brand of valve amplifiers, caught my attention as much as did the obviously exquisite manufacture. The price, too, appealed, considering that these amplifiers promised peerless construction and attention to detail you just don’t find this side west of a Jadis. At last, there’s a UK importer, so my wait is over.

Air Tight has produced what has to be the audio equivalent of a Fabergé Egg. The ATC-1 Valve Control Amplifier and ATM-1 Valve Power Amplifier contain all of the right ingredients for rampant audio delirium. Common to both units are PCB-free circuits, with everything hard-wired à la Golden Age hardware or our own Croft products. The valve bases are ceramic, with gold-plated sockets. The chassis are copper plated and the gorgeous, grey ‘almite treatment’ faceplates are machined from 8mm aluminium. All of the valves are genuine brand-name items, like Siemens and Pentalab rather than whatever-you-can-get throwaways from China. They’re the closest things to jewellery that this industry has produced, in terms of finish, appearance and attention to detail. In other words, they’ve been assembled with the kind of fanaticism you find only in Tokyo or Tehran.

The pre-amp is deceptive because it’s so petite, measuring only 430x90x325mm (whd). As with Counterpoint and other makers of slimline valve pre-amps, Air Tight mounts the five 12AX7s (ECC83s) horizontally. And as with Lux, which couldn’t resist mounting the valves on the front of its hybrid ‘Brid series integrated, Air Tight mounts three of the little beauties so that they can be seen from the left-hand side of the case. The gorgeous front panel provides source select for phono (m-m only), tape monitor, direct, attenuate (full muting), balance, volume and on/off, plus an orange tell-tale. The controls are spare set for feeding a second power amp and a pair of sockets tagged ‘EQ out’. The latter takes the phono signal from input through RIAA circuitry and straight out again, for feeding directly into the ATM-1, bypassing every unnecessary switch and stage in the pre-amp. This can be used in tandem with the standard outputs for some curious purist combinations.

The circuit itself is based on vintage concepts, just like the PCB-free construction, and consists of a three-stage low-impedance equalizer described as ‘once employed by the Marantz 7’, this is the stage fed straight to the EQ Out sockets. The single stage line amp is devoid of tone...

**Few specialist Japanese valve amplifiers ever leave Honshu; we try the long-awaited Air Tight**

by Ken Kessler

Among the smoothest, most luxurious I’ve experienced, but I must resist the salacious adjectives which come to mind.

At the back, all is gold-plated, with inputs and outputs corresponding to the front controls, but with two extras. In addition to the main outputs there’s a...
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controls or filter circuits and features low-impedance cathode follower output. The power supply employs a solid-state ripple filter circuit for suppressing mains hum and noises. Despite the size of the enclosure, which would suggest the use of a compact toroidal transformer, Air Tight opted for an EI core type because it provides 'sharper attack of sounds'. The cores are wrapped in silicon steel plate and copper plate to ensure perfect shielding. The power supply, phono and line stages are totally independent and the latter two are fully shielded. The chassis was made deliberately heavy to help minimise vibration and component interaction. All tubes are pre-aged and fitted to the aforementioned gold-plated sockets in ceramic bases.

The ATM-1 power amplifier is based on Mullard research and employs four 6CAX7 output valves from Siemens for a rated output of 60W/channel. For protection to the output tubes, Air Tight uses 5AR4 in parallel at the rectifying stage instead of a diode, to better cope with large current. (I don't have my RCA or Bahai guides handy, but I think they're equivalents to the GZ34 in my cherished Dynaco ...) The power supply, deemed by many current amp builders as harder to find than good tubes, are the highly-rated Tamuras, used in the Japanese broadcasting industry.

Air Tight operate the amplifiers for 100 hours before they're 'retuned' and dispatched. Aside from a valve cracked in transit, these proved trouble-free and ghostly silent tube products I've used in recent memory. It also explains why Air Tight insisted on air-transport, these pieces have proved the most handy, but I think they're equivalents to my iffy stock of mystery-brand tubes.

The other mismatch was the Celestion SL700 loudspeakers, with a variety of wires including Master Link, Mandrake, Lieder, Sony LC-60C and Monster M1. And I'm certain all three of my sound stages are totally independent and the latter two are fully shielded. The chassis was made deliberately heavy to help minimise vibration and component interaction. All tubes are pre-aged and fitted to the aforementioned gold-plated sockets in ceramic bases. And the power supply, phono and line stages are totally independent and the latter two are fully shielded. The chassis was made deliberately heavy to help minimise vibration and component interaction. All tubes are pre-aged and fitted to the aforementioned gold-plated sockets in ceramic bases.

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S
ay 'Oracle' and most people will take it that you are referring to the Oracle Delphi. Although the much-revised Delphi is still essentially the Canadian company's original design, and as such dates back to the end of the 1970s, there are other models in the range. Oracle's flagship is the Premiere, listed at £2750 and so somewhat rare, while the least expensive model in the line is the Alexandria, which we chose to partner with the SME 309. As it happens, we had just got the 309 installed when we learned that SME would in future be supplying arms to Oracle; according to Oracle's UK importer Gamepath Ltd, these 'OEM' arms be not be identical to any existing SME arm but will combine elements of the 300 series, Series IV and V designs.

The Alexandria has been around for more than five years, but like the other models is now in Mk III form. There has been significant evolution since the earliest version, which was offered primarily as a package with the Oracle Prelude arm, the most obvious outward change being the move from metal top-plate with wood trim to solid acrylic-finish plinth.

Like other Oracle designs, the Alexandria is a belt-driven subchassis turntable in which the subchassis is suspended from the main bearing, to provide mounting points for the springs. The subchassis extension which supports the tonearm ends in a cast-iron inverted-cone cup which contains a pillar, surrounded and attached to the top of which is the conical suspension spring. While the plinth is supported by the three underside cups, each arm of the subchassis is supported on the skirt of a spring by means of a polyethylene adaptor ring and a decoupling ring of 'tacky' rubber. As supplied, the three springs are of different strengths to compensate for the greater load on the one nearest the tonearm, but each spring can be adjusted by screwing it in or out of the polyethylene ring around its base, thus reducing or increasing its effective number of turns. This adjustment technique is rather more fiddly than it sounds (you would normally expect your dealer to set the turntable up for you) but is clearly much less cumbersome than the old Oracle practice of supplying a whole range of interchangeable springs.

Earlier Alexandrias had a cast metal platter with a rubber 'wave-trap' damping ring at the periphery; in the Mk III this has been replaced by a one-piece platter (with integral drive-belt hub underneath) in a very 'dead' material. The usual Oracle 'tacky' rubber mat has been replaced a rather thick felt one, made from two grades of felt laminated together. The well-established Oracle record-clamp system is used; a small washer around the spindle raises the centre of the record from the mat, so that when the screw-on clamp brings pressure further out (around the edge of the label), the playing surface of the disc is forced flat against the mat. I must say that with some very thin discs, this did not seem as effective as expected, perhaps because the clamping was no longer assisted by the adhesion of a 'tacky' rubber mat. The motor is the usual Oracle 12V DC type, fed by a small outboard power supply. Switch-on is by touching the neat '33' or '45' buttons, while the middle '0' button switches off. Start-up was always quick and smooth.

Visually, the SME V proved to be the perfect partner for the Delphi, and the SME 309 looks just as much at home on the Alexandria. The judicious mixture of black and silver parts seems just right here. This new SME arm (which will receive a full review in a future issue) is related to the Series IV and V but with the convenience of a detachable headshell. It lacks the ultimate luxury of the Series V; counterweight setting and locking is by hex-key adjusters rather than by the incredible thumbwheel and lever of the Series V, and the option of spring-applied tracking force is omitted.

Sound quality
Tried with a number of cartridges (primarily Ortofon MC3000, Denon and Audio Technica moving-coils) in the SME arm, the Oracle certainly maintained the brand's reputation for neutrality and freedom from all the usual 'turntable colourations'. Any initial prejudices against the combination of felt mat and clamping were dispelled by listening; the bass seemed solid and tuneful, while the mid-range had the clarity and depth you should expect at this price. Although there may be some sonic penalty to be paid for the 309's detachable headshell, the effect must be pretty slight, since the sound still has the transparency and ambience-recovery which speaks of low-level detail resolution.

If the Alexandria, at £950 without arm, still seems expensive in terms of its material content, the price penalty is not exceptional among imports, and home-grown models are not getting any cheaper. Sonically, this 'entry-level' Oracle does deliver the goods: Perhaps the Alexandria does not 'boogie' the way a Roksan does but it certainly plays music. It may not be a Delphi, but it is recognizably, even triumphantly, an Oracle.
The Dynamic Duo

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Although a number of companies, like Audio Research and Krell, produce active outboard crossovers of a 'universal' nature, the design team at Apogee accepted the premise that the best crossover is dedicated to the speaker with which it will be used. In addition to offering attenuation of up to 6dB in 1dB steps for the woofer and the mid/tweeter, the DAX (Dedicated Active Crossover) allows the user to adjust the balance between woofer and mid/tweeter in 0.25dB steps and to adjust the 'rake angle', a sort of 'hinge' in the tonal balance which tips the midrange above 1kHz in 0.5dB steps at around 5kHz. The DAX also provides facilities to match the crossover to the amplifiers for input impedance loading, gain characteristics (for using different amplifiers top and bottom) and for using single-ended or balanced operation. Because of the way the various DAX controls interact, the unit can vary the group delay, important when sculpturing the gain vs phase relationship — so one aspect of DAX-equipped Apogees is near-perfect phase response.

By addressing both the requirements of only three specific loudspeakers (you order your DAX preset for Caliper Signature, Duetta Signature or Diva) and allowing for matching to any amplifier, the DAX provides what the designers refer to as a 'perfect control' for bi-amplifying these speakers. In the case of the Duetta, the DAX takes over from the passive box with its four toggles for boost or attenuation at four frequencies, but the switch for the tweeter on the passive box remains operable. This is because the DAX is a two-way crossover while the Duetta is a three-way system. The DAX sees the tweeter and midrange as one section.

The Diva's passive box therefore takes on a different role and no less than three-and-a-half pages of the owner's manual deal with converting it for use between the DAX and the Diva. You don't have to worry about this because your dealer will undertake the conversion. Still, if you enjoy spending a couple of hours inside a nest of wires, be my guest. With the Duetta, instructions are also supplied for user conversion, but the Caliper must be modified by the dealer.

The DAX itself is one of the most attractive pieces of high-tech hardware I've ever seen. Left-to-right, the groups of knobs include woofer attenuation, woofer-mid/tweeter balance, mid/tweeter attenuation and rake, with separate knobs for each channel. With this bank of controls and the display confirmation, it's possible to set up the system for sonically asymmetric rooms using test tone generators and spectrum analyzers.

Apogee presumes that its customers know what they want to hear, so instructions for setting the controls amount to little more than doing it by ear. I did manage to find out the order in which Apogee's Jason Bloom approaches the problem each time he sets up a DAX and his advice means less to-ing and fro-ing. Future DAX owners, take note:

1) Adjust the mid/tweeter attenuator, which is an other way of asking yourself, 'Do I need to cut the upper frequencies?'
2) Adjust the balance between the woofer and the mid/tweeter. This manoeuvre attenuates either portion in 0.25dB steps. You won't believe it until you hear it, but this operation is audible enough to change the character of the system from forward-sounding to muted.
3) Adjust rake angle: By tipping the response up or down in 0.25dB steps, it's possible to compensate for brightness or dullness without any loss of information. I've a feeling that owners of Quad electronics will find this not a little familiar.
4) Adjust woofer attenuation. This is especially useful for those who would have Apogees in small rooms. (No, there's no woofer boost because it's unlikely that anyone would ever need it. And if they do, they can always go back to steps 2 and 3). But here's where it gets bizarre. Word had reached me that the DAX, even with everything at '0', improved the performance of the Divas beyond the gains that you'd expect from mere bi-amping. That struck me as odd until I accepted that the DAX — two amplifiers instead of one notwithstanding — is a vastly more sophisticated crossover than the passive box supplied as standard. But the reason it bothered me is because I preferred the DAX at '0' on four of five recordings.

Listen: When I set up the DAX, I was also playing host to somebody who has no reasons for wishing success on this product. I won't embarrass him by revealing his name; all I'll say is that he's from the competition. Anyway, we put on some serious music — Billy Cotton's Wakey Wakey Show, and George Melly on C5 Records — and he just looked at me, uttering a British expletive which rhymes with 'buckshee' and grinning from ear to ear. We fiddled with the knobs, cranked up the volume, dug out some naff mono CDs of ultra-thin-sounding British pop from the 1960s. We rocked. And we heard the Kinks 'Waterloo Sunset' like it's never been heard before.

The most blatant manifestation of the DAX is the way it allows the Diva to present deep bass notes. I admit that, on occasion, the Diva can sound a bit overwhelming, with bass which thunders and roars. DAX'd, the Diva's extension remains constant but the bottom octaves acquire a sensation of greater control. Equally chilling are the gains in soundstage creation, image placement and specificity. The Diva, sans DAX, is simply one of the best imagemakers I've used; the DAX opens the sound and removes and last vestiges of texture to the silences between instruments and players. What the controls do is allow you to dial in the most realistic stage depth in a manner not unlike that of the control unit for the Infinity IRS Betas. And the more you learn about the controls and their capabilities, the more they take on the nature of a focusing ring on a camera lens.

But here's where I find myself at cross purposes with the whole concept of active crossovers. Until the DAX arrived, I thought of trick crossovers as a way of optimising the speaker, something to set once and leave alone. I found myself using the DAX to compensate for the recordings rather than the hardware or the room. I don't want to give the impression that the DAX works like a dream-world equalizer or even like the rather splendid Cello Palette. The adjustments to the sound are too subtle and too precise to suggest any gross tampering. What it becomes, then, for an Apogee owner is the ultimate surgical instrument.

In the year I've been using the Divas, I've tried them with single amplifiers (in bi-wired mode) running to over £10,000 per pair. The DAX offers such a transformation with even the affordable Aragos and Infinity IRS Betas that two Aragos plus DAX at a grand total of £8,100 is preferable to any other non-DAX combo 1 can name. As it stands, the DAX is nothing less than the most exciting development yet for Apogee owners, a device so clever that I wish other manufacturers would offer similar units for their bi-ampable speakers. £1,5k for a black box? Yes. And it's worth every single penny. +

Apogee's latest is a dedicated active crossover for the Caliper, Duetta and Diva. Is it the ultimate Apogee upgrade?

by Ken Kessler

Supplier: Absolute Sounds, 318 Worples Road, London SW20. 01-947 5047.
The Conrad Johnson range of products are newly distributed in the UK by Audiofreaks, and following something of a head-on clash with Audio Research in the early days of UK availability, Audiofreaks director Branco Bozic is now taking a phlegmatic view and letting CJ components speak for themselves. This long-awaited CD player comes finished in classic CJ champagne gold, with a black enamel case. In fact, the first Conrad Johnson design was the Sonographe, which established a good reputation for musicality. It was based on a reworked Philips CD player chassis — a version of the CD350 — but this new model contains a much higher original design content, including the all-metal case.

This well-trimmed player has the potential for rack mounting, and carries an array of push-buttons for all the usual facilities, including 'open-close', pause, play, stop and on/off. The latter deserves a mention since it controls only the CD section while leaving the pre-amp permanently energised (less than 5 watts are consumed in this 'standby' mode). Further buttons cover forward and reverse audible music-search, track-skip ('next' and 'previous') and 'prog' for programming up to 20 tracks. The small display will show times or track numbers, one or the other selected via the time button. These facilities are also present on the simple remote handset, which has one additional feature; a repeat button, controlling the whole disc or a programmed section.

The pre-amp controls include tape-monitor/aux-2 selection, CD or aux-1 selection, and volume. Thus this line pre-amp has three effective inputs: CD-internal, aux-1, and tape-aux-2. Sensitivity is sufficient for even the lowest-output tuners.

Sound quality
Installed as part of the Krell Apogee Duetta Signature system, reference players included the Marantz CD12 and CD85, these themselves referenced to the Accuphase DP80/DC81.

When first switched on, the results were not particularly impressive. Over a period of minutes, it was clear that the sound was improving in clarity and sweetness; accordingly it was put aside for several hours to warm up properly. Then, when conditioned, some hint of the Sonographe sound was present, but the DF1 showed improved definition, with more speed and slam in the bass as well as a more open, more transparent treble. The mid-range had a clear, projected character that somehow enhanced the quality of singing voice. Via the fixed output, a creditable rating of 71% was achieved — with the Accuphase as a notional reference.

In context, it is fair to point out that this was below the rating for a Marantz CD85, and that although the DF1 was entertaining, it fell a little short on bass speed and extension, as well as stereo focus and depth. It was therefore surprising to find that the sound was improved via the main or line output, despite the interposition of another amplifier and a volume control (yes we did correct for phase-inversion via this output). The explanation must lie in the improved matching obtained between the high-impedance 'CD direct' output and the line buffer stage. In any event, the perceived soundstage was broader and deeper, while the bass acquired more extension and power and the treble and mid were both more dynamic and better focused. In fact, the rating improved to an audiophile grade of 88%, and with direct coupling to the power amplifiers (by-passing the test station pre-amp) it went up to 92% — in CAI Tempest territory.

Where the Tempest was laid-back and spaciousy ambient, the CJ DF1 was more immediate, with a faster pace, though the tonal quality was not without flaw. Throughout the auditioning there was a mild mid-range emphasis, slight glare and some thinning of vocal weight, with a touch of brittleness and wiriness in the lower treble apparent, for example, on strings. This touch of 'character' indicated that the DF1 should be auditioned carefully before purchase, and cannot be regarded as entirely neutral.

Design and technology
In opening up this model I could not at first work it out, since it was a couple
years since I had last seen the digital IC chips which it uses. But at last the penny dropped with recollection of the earlier CJ Sonographic CD player. This model is based on the Philips CD540, with its original 4-times oversampled 1+bit conversion, and low-level resolution enhanced by noise shaping.

Considerable development has taken place at CJ, and the two TDA 1540 DACs are now allotted a separate PCB surrounded by an array of huge polystyrene capacitors for decoupling the chain of bit-weighting current sources. Digital filtering is accomplished by the usual SAA 7080. The transport is the CDM2 mechanism, not noted for its long-term reliability; it comprises a drawer-load design which requires an adapter for 8cm single discs.

Lab report

With CJ's their valve (tube) background it was not too surprising to find many of the measurements looking more like those for a traditional valve pre-amp. For example, via fixed CD outputs the channel separation never bettered 62dB, and fell to 50dB by 20kHz. In truth these results were satisfactory, but far below what is possible, typically 100dB. However, channel balance was fine and the frequency response was typical of the earlier generation Philips digital filters (Graph 1). No phase-difference was present between channels, and the output was polarity-correct at the fixed output but inverted by the line amplifier feeding the (variable) output.

At full-level, the total harmonic distortion was pretty mediocre at a typical 0.3% mid-band (−50dB), and a little better than 0.1% at 20kHz, remembering that these results refer to noise products in the audible range, i.e., below 20kHz. With the signal-level reduced by 10 dB, the distortion improved by 10dB, showing the effect to be in the low-feedback analogue electronics and not in the digital or convertor section. The HF twin-tone intermodulation results were a little better, though some imbalance in distortion between channels. For −10dB modulation the average difference-tone level was −68dB, considered just satisfactory from a subjective viewpoint. The corresponding −10dB spectrumogram is shown in Graph 2, where the difference products are clearly evident.

Via the fixed output the level was rather lower than usual at 1.12V, sourced from a high 820-ohm impedance. Via the main output, up to 10Vrms was available from a more robust 590-ohm source. De-emphasis correction was accurate, while the transport returned the established, moderate access-rate of 4 seconds, with fairly good error-correction — but somewhat below modern players which can cover 2 or even 4mm gaps. Mechanical noise rate was average; the mechanism 'chirps' a little more than recent designs. Signal-to-noise ratios were satisfactory, but like the other results remained unexceptional. Taken overall, 86dB was a typical figure for the DFI; 118dB is possible.

Interestingly, the −90dB resolution error was reasonable at an average of −2.2dB, and while the specification is only 1-bit, the linearity graph shows a substantially good performance down to −100dB with a dithered test signal (Graph 3). Below −90dB some regular ripple appears on the slope, but this is very unlikely to be audible and was probably a function of the noise-shaping process. Here is modern proof of the inherently good '16-bit' linearity of the original Philips technology, although the wave form at −90dB shows some triangulation visible through the noise (this can be seen in Graph A).

Little difference was observed between the test results via the line buffer and the direct output, and this section gets a clean bill of health. The resemblance to the Motif FET pre-amplifier is not accidental! Sufficient gain and output is provided to drive most cable runs and combinations of power amplifiers, and this would be the preferred mode of use. Line-gain was close to 26dB (or 20 times), with a typical 'A' weighted signal-to-noise ratio of 80dB referred to a nominal 0.5V output.

Conclusion

On the face of it, this is an interesting audiophile contender. With this good sounding CD player, from a respected US source, you also get a neat straight-line FET pre-ampifier of known pedigree, which allows for direct connection to power amplifiers. Compared with the CAI Tempest II it looked good value, and although the much cheaper Marantz CD95 offers a similar standard, it requires an additional pre-ampifier. The nearest equivalent is the Meridian 207 pro, which now attains a similar standard — plus the advantage of a full remote control on the pre-amp section, optional disc inputs, and a more advanced CD transport. On its home market the CJ is the better buy, while in the UK it looks rather expensive.

Neither the technology nor the build quality are particularly impressive, and I expected a little more than this from CJ in 1989, after waiting so long for the CD 'statement.' In a well-matched system the DFI can give fine results, but in my opinion this design is not sufficiently up-to-date to hold a competitive position for very long. *
over the past twelve months, HI
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approach true top end performance with-
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SME V or Air Tangent with a Goldmund,
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was said to be: 'of a piece from the lowest
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Clearaudio Signature
The £995 Signature is the 'budget' version
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the minimalist frame is a hollow boron
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End December 1988) that the design
requires a substantial run-in period; after
which it proved to be a delight to use. It
was clear-sounding, aided by an output
high enough to use into 47k-ohm without
background noise or dynamic compress-
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bay. The only noted spatial weakness was
an inability to reveal maximum stage
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this. Vocals were found to be life-like with
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Dynavector XX-1
Coming from a low profile, Dynavector
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cartridges last year including a model of
an all-new concept. While the company
led the charge towards higher outputs for
m-c designs its XX-1 cartridge includes a
virtual switched flux-dumper through a
front-mounted switch which activates a
shorting wire mounted on the front yoke.
Ken Kessler found (Analogue Supple-
ment November 1988) that bass-heavy
recordings were made tighter, or 'drier'
sounding, using the facility; although the
ability to switch the sound character
according to the music was a benefit. At
its £399 price point, the XX-1 was
thought to be a fine performer, working
well into 47k-ohm inputs. Tracking was
considered exceptional while being easy-
on-the-ears. Supplier: Dynavector Sys-
tems, 32 Reading Road, Woodley, Read-
ing, Berks RG5 3DB. Tel (0754) 699159

Goldring Excel
This £500 design was tested by Ken
Kessler in February 1989. The Excel
employs two gold-tinted aluminium side
pieces bolted together to form the body,
while the frontpiece is made of rosewood.
The flat top is solid with threaded mount-
ing holes and easily identifiable rear pins.
Neodymium magnets are used and the
output is high at 0.5mV. KK found it one of
the least fussy types he'd tried, and the
weight of 8.5g and low to medium com-
pliance made system matching easy. The
Excel worked to spec. straight out of the
box and delivered an unusual mix of
strengths and weaknesses. One of the
widest and most consistent soundstage
spreads without compromising depth was
accompanied by an inability to handle
'wall-of-sound' material, which became
muddled. In conclusion: ideal for classical
and country material but out if you want
to boogie. Supplier: Goldring Products, 8
Greyfriars Road, Bury St Edmunds, Suffolk
IP32 7DQ Tel (0284) 701101.

Kiseki Purpleheart Sapphire
The alloy structured Sapphire, a develop-
ment of the Purple, has its suffix attributed
to the cantilever – the design with its
dyed hardwood sides is now priced at
£699. A flat metal mounting base is
threaded to take bolts. Test results were
mixed; the response showed a treble lift
and separation was only just satisfactory.
The unit was well made and fitted with a
fine, predominantly elliptical stylus. On
the listening tests, conducted in Decem-
bber 1986 by Martin Colloms, the Sapphire
scored better. It was worthy of recom-
mandation and had a high standard of
stereo focus, good bass, well-maintained
performance down to the lowest register
and it excelled in the treble: vocal sibilants were pure and well defined. Available from: Presence Audio, The Old Posthouse, Plumpers Plain, West Sussex RH13 6NU. Tel (0403) 891777

Koetsu Black K
This was the first 'budget' all-metal bodied Koetsu, although it sells for £577. The moving-coil was found to be excellently wound when the unit came under scrutiny from Martin Colloms in December 1986. This well-built and well-aligned design gave a good performance in the lab with a well-controlled frequency response backed by excellent channel uniformity. Fine channel separation was obtained, with good tracking. The sound quality rating was substantially good, thought to suit 'laid back' speakers.

Koetsu Red Signature
This £1298 model is still seen by audiophiles as something of a flagship. No commercial release challenged its tracking ability, no large work proved too majestic, no small work too subtle. From top to bottom, the Koetsu is seamless and betrays no part of the spectrum. KK wrote in April 1986, 'the Koetsu will astound you in its ability to convince you that the event is occurring in that space around your speakers'. Supplier: Absolute Sounds, 318 Worple Road, London SW20 8QJ. Tel 01-947 5047

Krell KC-100
This is a chunky cylindrical design which comes in a machined brass box – all included for £700. The tapered cantilever sports a special elliptical diamond of semi-line contact profile with a lowish compliance and high (13.5g) mass. Ken Kessler found that a run-in of an hour was sufficient in his review (High End December 1988). The output was sufficient to negate the need for a step-up, although it was thought that the sensitivity to temperature was greater than other designs. The upper/midrange to top end was 'shimmering' – being 'fast' like a ribbon tweeter. It was described as powerful, able to deliver slam and handle dynamics well, with excellent sound staging. Supplier: Absolute Sounds, 318 Worple Road, London SW20 8QJ. Tel 01-947 5047

Ortofon MC3000
This is a high-output version of the original MC2000 moving-coil; it arrives complete with straw packing, gold-plated screws and stylus balance plus screwdriver in return for the £800 outlay. Ken Kessler tested the MC3000 in February 1988 when he found reproduction produced with near-mastertape accuracy. The design has greater consistency across the board than most and overall a high rating was given to the unit. Supplier: Ortofon UK Ltd, Chiltern Hill, Chalfont St Peter, Bucks SL9 9UG. Tel (0753) 889949.

Roksan Shiraz
One of the latest designs to come under HFN/RR's scrutiny, the Shiraz was reviewed by Alvin Gold in June 1989. Based around the heart of an EMT, the exotic and prestigious Swiss-made low output m-c, the cantilever is fitted with a 'micro linear' stylus. This is sourced from Fritz Gyger and its shape is related to the van den Hul 11. The body clamps the generator in position using three spikes. Tracking at 2.2g, output was found to be on the high side for a low-output cartridge and loading of 100ohms is recommended. A 'lot of bottle and class', summed up the auditioning, while the unit worked well onrega arms and Rega's Analogue. Supplier: Roksan Engineering Limited, 11 Ddole Road, Llandrindod Wells, Powys. Tel (0597) 4911

Rowland Complement
Not a new design as such, the Complement was conceived in 1985 by Mr Ikeda who was briefed to ignore cost constraints. His $2250 design was examined in October 1988 by Ken Kessler. As there is no cantilever, a rod protrudes from the bottom of the body which also incorporates a stylus pointing straight downward in 'Decca style' and aiding VTA/SRA adjustment. With a cartridge weighing 15.5g, tonearm matching could be restrictive, although the Rowland was used successfully with the Alphason HR-100-MCS. Description by KK: 'having the best of both worlds, the Complement was adjudged to have impact, sparkle, attack and detail: shining in its portrayal of ambience and soundstage. In conclusion KK felt the model would suit Decca refugees rather than m-c users looking for an upgrade, since some may find it aggressive on first hearing. Supplier: Gamepath Ltd, 25 Heathfield, Stacey Bushes, Milton Keynes MK12 6HR. Tel (0908) 317707

Spectral Moving-Coil Reference
Not available in the UK this model has to be ordered from abroad. This didn't stop Ken Kessler testing it for The High End in December 1988. Made for a Californian amplifier manufacturer, the Spectral would cost around £650. The cantilever is aluminium, fitted with a 'super-polished' Line Contact diamond. Compliance was found to be low, at 8cu, and the weight is 9.5g. Because of its 0.21mV output a pre-amp with high-gain input is required. Thought to be almost immune to the vagaries of system matching the MCR had exceptional coherence, blinding transparency – rich without being sluggish, detailed not clinical and fast without sounding breathless. In conclusion accurate and musical. Supplier: Spectral Audio Associates, PO Box 1775, Mountain View, California 94042, USA. ▶
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These three loudspeakers have been drawn from a much larger HFN/RR group test, employing a more compact format than previously to allow a substantial number of models to be covered in depth. The scheme uses full laboratory test evaluation as well as extensive, unsighted panel auditioning. Further groups of speakers from the survey will be included in the coming months covering a wide variety of models, from large panel designs to small, compact bookshelf cabinets. The median price for models in the overall survey is £350, so the three here sit below the group average. The AR142 is the most expensive at £300, comprising a three-unit design, while the others are both two-way models, £200 for the Monitor Audio and £220 for the Rogers LS4a, manufactured by Swisstone Electronics.

Auditioned in test sessions which spanned some 65 speaker models, a varied programme was employed, from rock to classical, choral works to orchestral pieces, and over a range of volume levels. The main drive system was rather heavyweight, with its Krell amplification and Goldmund turntable, but back-up tests were made using a Cyrus One amplifier and a Philips CD 582 player. With the model 132 undergoing revision, factions below average, this speaker was scored some 65 speaker models, a varied programme was employed, from rock to classical, choral works to orchestral pieces, and over a range of volume levels. The main drive system was rather heavyweight, with its Krell amplification and Goldmund turntable, but back-up tests were made using a Cyrus One amplifier and a Philips CD 582 player. With the model 132 undergoing revision, the panel did not rate this speaker highly. The proportions are slim, the suggested position for use being free-space on a matching stand, clear of the back wall.

Medium-sized loudspeakers from three well-known names: the Acoustic Research AR142, Monitor Audio R300MD and Rogers LS4a

by Martin Colloms

**Design and technology**

Nominally a three-way model, the 210mm bass and 170mm bass-mid units work in parallel up into the midrange, coupled to a sealed-box of 30 litres. The effective diameters are 165 and 130mm respectively, with the flared diaphragms employing a stiff, graphite-loaded polypropylene cone material. The tweeter is a 25mm plastic diaphragmed dome unit, ferro-fluid damped/cooled. The Acoustic Research AR142 is built of the usual 15mm chipboard, while the speaker's enclosure is enhanced by a double thickness laminated driver baffle, considerably helping to reduce traces of unwanted driver/chassis vibrations which may be generated. The few crossover parts in evidence arc of normal commercial quality, and the final slope measured is 6-12dB octave, this depending on the particular transition.

**Lab report**

Measuring a high 90dB/watt sensitivity, but with a low 4.50himpedance loading (Graph 1c), the 1-2kHz response (Graph 1a) shows a mild bass rise, with a fairly even frequency response to the upper crossover. This was followed by a sharp phasing notch and an excess of upper treble, +3dB or so referred to 1kHz. The grille had very little effect, as largely expected, but the pair-matching was nothing special at ±1dB. The —6dB point was 49Hz, with the response extending to 30Hz in-room.

With 3/4-octave help at 2 metres (Graph 1b), the forward energy response looks more respectable—a touch of 'boom and tizzle' but well integrated, particularly on the lateral axes. Some response prominence is seen in the 1-2kHz range, and this is also apparent in the room-averaged response as outlined in Graph 1f, where the curve also suggests a fairly good overall balance. This agreed with the listening results we obtained, while the presence dulness and subsequent treble recovery reported subjectively was also apparent.

At 96dB the distortion was pretty average: Shown clearly on Graph 1e, though the treble response to the upper crossover. This was followed by a sharp phasing notch and an excess of upper treble, +3dB or so referred to 1kHz. The grille had very little effect, as largely expected, but the pair-matching was nothing special at ±1dB. The —6dB point was 49Hz, with the response extending to 30Hz in-room.

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At 96dB the distortion was pretty average: Shown clearly on Graph 1e, though the rise at 11Hz doesn't look very impress-
With a 100W maximum input, up to level (Graph Id) matters are much investigative. However, at the lower 86dB sound level (Graph Id) matters are much improved to a 'good' level throughout. With a 100W maximum input, up to 105dBA should be possible in an average room – a decently high sound level and sufficient for most environments.

Conclusion
At this price level, one is entitled to expect more in terms of clarity, stereo depth and dynamics. Here, the direct-coupled principle alone is not sufficient to deliver the required standard. The 142 can play to loud levels, but it did so at the expense of heavier-than-average amplifier loading and could sound a bit harsh when driven hard.

Stereo images lacked sufficient depth and transparency, and while the general sound was quite well balanced and interfaced cleanly with the listening room, elements of mid hardness and treble grain were not appreciated. The bass did not come together as a unified whole, lacking real slam and speed. On axis, the reference frequency response looked lumpy, with the phase problem at 6kHz leading to some audible variation of sound quality on the vertical axis.

To summarize, neither the results of the listening audition nor the lab tests were very promising. While the 142 performance was no disaster, it was not recommendable.

MONITOR AUDIO R300MD

With several successful speaker systems in its range, all using metal-dome tweeters, Monitor Audio's designer has fought hard to deliver this lower cost model which nonetheless retains the metal-dome concept. A sealed-box system which can tolerate a position nearer to the back wall than most designs, its placement on a good stand is worthwhile, one 45-50cm high. Uncritical of position, it is likewise uncrítical of amplifier type owing to its easy loading, while a good working sensitivity also helps in the wider choice of amplifier.

Typical of the Monitor Audio line, the finish is in a fine grade of real-wood veneer, while the cabinet design is completed by a properly rebated, detachable grille. Electrical connection is made via normal 3-way combined binding-post/4mm sockets to the speaker's rear.

Sound quality
While the results from the listening panel agreed closely on this model and awarded it an above-average score of 54%, they had mixed feelings about this design, finding in it a blend of virtues and flaws. But the flaws were not all that serious.

Concerning tonal balance, the sound was mid centred, but so broadly that it was more of a character effect than a specific narrow-band prominence. By comparison, both bass and treble seemed mildly depressed, but not enough to draw serious criticism. In the bass the 300MD was dry and fast, not extended to the lowest register but respectfully tuneful and, if driven hard, capable of delivering good slam. The mid showed mild coloration, some 'wooden' and 'cone' sounds plus a mild 'nasality'. Its strength lay in a pleasing level of clarity as well as an ability to portray musical dynamics in an interesting manner.

The treble was not particularly even, suggesting exaggeration in the upper range, and a touch of 'grain' and 'breathiness' on vocals. But the main treble range sounded clear and musical.

Stereo soundstages were well focused, showing good width. Depth was not very good, but the 300MD's innate clarity gave a good impression of the recorded acoustic, lending a proper sense of space and ambience.

Design and technology
With the cabinet produced by Monitor Audio themselves, the 28 litre carcase is made from high-density 15mm chipboard and, encompasses longitudinal bracing on each side panel for extra rigidity. The driver baffle thickness has been increased to 19mm to reduce vibration. A sealed-box design using an acoustic foam lining, the bass/mid-range in the Monitor Audio R300MD is supplied by a 220mm steel-frame driver, custom-made, and fitted with a 160mm paper-pulp cone with a flared contour and coated with a damping

---

**ACOUSTIC RESEARCH AR142**

| Graph 1a. AR 142: on-axis response at 1m |
| Graph 1b. AR 142: one-third octave response family at 2m |
| Graph 1c. AR 142: modulus of impedance, ohms |
| Graph 1d. AR 142: distortion at 86dB spl |

**Test results**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>AR142</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (height x width x depth, cm)</td>
<td>56 x 25 x 8</td>
</tr>
<tr>
<td>Recommended amplifier power per channel</td>
<td>10-100W</td>
</tr>
<tr>
<td>Recommended placement</td>
<td>On matching stand, free-space</td>
</tr>
<tr>
<td>Frequency response within</td>
<td>± 3dB (2m)</td>
</tr>
<tr>
<td>LF sensitivity (–6dB) at 1m</td>
<td>49Hz</td>
</tr>
<tr>
<td>Bass-frequency extension</td>
<td>70Hz</td>
</tr>
<tr>
<td>Voltage sensitivity (ref 2.83V at 1m)</td>
<td>90dBA</td>
</tr>
<tr>
<td>Approximate maximum sound level (pair at 2m)</td>
<td>105dBA</td>
</tr>
<tr>
<td>Impedance characteristics (ease of drive)</td>
<td>Average</td>
</tr>
<tr>
<td>Forward response uniformity</td>
<td>Fairly good</td>
</tr>
<tr>
<td>Typical price per pair (inc VAT)</td>
<td>£300</td>
</tr>
</tbody>
</table>

**Supplier:**

Teledyne Acoustic Research, High Street, Houghton Regis, Dunstable, Bedfordshire LU5 5QJ. Tel (0582) 867777

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*Hi-Fi News & Record Review* AUGUST 1989
layer. The treble is produced by a 19mm SEAS unit, an aluminium version of the popular soft polyamide model, and is ferro-fluid damped.

The normal-quality crossover is 1st-order electrical for the bass and 2nd-order for the treble or high-pass section. The system is hard-wired and employs multi-strand cable throughout the design.

**Lab report**

From the standard reference measurement, the sensitivity was near the average at 88dB/W, and in practice is aided by the very kind amplifier loading this speaker presents. With an impedance minimum of 8ohms, and a rating of '12', it was easy to drive (Graph 2c). Under anechoic conditions the bass extended to 60Hz for —6dB, an early rolloff, by the room disturbance. At 2 metres the 15' octave. The grille imposed some minor extension to a frequency of 40Hz.

The measured response indicated a practical sensitivity was near the average —6dB, an early rolloff, by the room disturbance. At 2 metres the 15' octave. The grille imposed some minor extension to a frequency of 40Hz.

Reference response data showed very good pair-matching to ±0.4dB, plus a respectably flat response (Graph 2a), though with mild lift in the final treble octave. The grille imposed some minor disturbance. At 2 metres the 15' vertical response shows more loss in the crossover range than usual (Graph 2b), but the lateral off-axis responses are rather better, the 45° output being most interesting. Signs of a mild mid plateau are apparent, and were confirmed by the room average response (Graph 2f), which is nonetheless seen to be fairly well balanced overall.

Distortion, especially the more critical 3rd-harmonic, was particularly good with this speaker (Graph 2d and e), and it also handled power well. With up to 100W peak allowed, it could produce up to 103dBA from a stereo pair.

**Conclusion**

Mildly mid-dominant, a trend seen in different measurements and confirmed by the listening, the 300MD survived this imbalance by delivering a lively, informative sound containing considerable musical detail, and a degree of pace and natural dynamics which held the listening panel's attention. Coloration was not particularly low, yet it did not get in the way of the music; but it is fair to say that this speaker was liked more on rock than on classical material.

Technically, the low distortion levels were exceptional for a speaker of this type, and reflected the special high-linearity motor design employed in the MA-designed bass-mid unit. Its healthy sensitivity was worth more by virtue of the easy loading imparted by the impedance characteristic. Thus the 300MD will not unduly stress any amplifier.

Build quality and finish was very good — and the overall performance prompts a recommendation.

**ROGERS LS4a**

This could well be one of those rare ‘natural’ designs where everything neatly into place: specification, performance and price. This compact example of British loudspeaker design uses up-to-date drive-units including a metal-dome tweeter in a high-quality sealed-box enclosure. Standing at a height of 43cm, the recommended placement is on 50.5cm high stands with the speakers arranged so that their axes cross just in front of the listener.

Electrical connection is via 4mm socket/bindng-posts and the grille is designed to stay in place (it is pretty hard to remove in any case). Amplifiers in the 15-100W range are suitable, and it should be both easy to drive and offer a healthy sensitivity.

**Sound quality**

Scoring an almost immediate hit with the members on the listening panel, the LS4a jumped straight into the ‘good’ class with a rating of 61%. Possessing an audibly BBC ‘monitor’ pedigree, the LS4a quickly demonstrated an excellent tonal balance coupled with a wide frequency range. Coloration was controlled to the point that it attracted very little attention, and in audition most programme was reproduced with a natural sense of weight. Little can be said about the mid-register, so unobtrusive was its working. It showed good levels of musical detail in the midrange, blending smoothly with the treble, which was nicely balanced and again held no nasty surprises.

Stereo images from the Rogers LS4a were presented with good depth, stable, confident focus, and good width. Ambience was nicely captured, and the general scale of the soundstage was decently large, in fact rather better than usual for this class of speaker. Despite its ‘classical’ tonal quality the LS4a was considered even-handed in its replay of both rock and classical material played through it, indicating a generally fine balance of subjective quality factors and with good life and pace shown on all material.

**Design and technology**

Evolved from the earlier LS4 design, the ‘a’ version denotes an improvement in the tweeter type; a pure piston is now fitted, a register, though rock fans might note a mild thinness in the bass and wish for a touch more dynamic slam. Little can be said about the mid-register, so unobtrusive was its working. It showed good levels of musical detail in the midrange, blending smoothly with the treble, which was nicely balanced and again held no nasty surprises.

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Evolved from the earlier LS4 design, the ‘a’ version denotes an improvement in the tweeter type; a pure piston is now fitted, a 19mm aluminium-dome model from SEAS. The bass unit is a Rogers 210mm
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steel-frame with a strong, flared polypropylene cone of 170mm active diameter and a surprisingly compliant surround termination. A complex 8-element crossover is employed and this blends the driver outputs at 3kHz, with approximation to a 4th-order acoustic rolloff.

A sealed-box 20 litre enclosure, the 15mm thick carcase is unbraced but has panel damping together with an acoustic foam lining. The interior is hard-wired and, given the high performance seen in this review, perhaps designer Ross would also consider bi-wiring for the LS4a? We await with bated breath.

Lab report
Checking out at a healthy 88dB/W, the reference response was at its best with the grille left in place in accordance with Rogers' own recommendation. The plot in Graph 3a reveals the whole story. With only a minor fall-away of impedance in the high treble (Graph 3c), the amplifier load rating was 'good' for this nominally 8ohm model. Fine power-handling allowed for up to 103dBA from a stereo pair under normal conditions, and the distortion results were also most respectable, particularly at the 'crusing' 80dB sound level (Graph 3d). At 96dB the 2nd-harmonic predominated, which was as it should be (Graph 3c).

The reference response is nicely uniform, with a ~6dB point at 5kHz and a slow rolloff below. In-room this translated to 3.5Hz, and the speaker integrated well with my room, resulting in a tidy, well-balanced response strongly confirming the panel opinion (Graph 3f). At 2 metres, the output near crossover dipped as usual on the 15° vertical axis (Graph 3b), but taken overall the off-axis responses showed good consistency, with the main trend also in agreement with subjective panel data which was derived from the listening test sessions.

Conclusion
Nearly every speaker designer has experienced the phenomenon. Years of study and careful work produce range after range of dependable models, and then occasionally a star is born — a model where everything in the design quite simply falls into place. The new Rogers LS4a is such a speaker.

The panel agreed closely on its merits — this speaker's watchword was balance. Not just tonal balance, which was one of its trump cards, but also a total balance of all the key subjective parameters. Nothing sticks out, nothing was missing. It could play to decent volume levels, and it coped with all classes of programme. The amplifier loading was also straightforward, with a —6dB point at 54Hz and a moderate distortion.

The LS4a was a genuine all-rounder, uncritical in so many respects that it may be expected to deliver a good performance under a wide range of conditions, from a variety of sources. A strong recommendation was assured for this model.

GROUP CONCLUSION
Of the three models, included in this small test group, the Rogers was clearly outstanding. Indeed, the indications were that this compact model would be a strong performer on comparison tests in any company at anywhere near the price. Successfully exploiting metal-dome tweeter technology, it offered a fine balance of technical performance and sound quality factors, with high build quality; in conclusion, the value rating must be 'very good'.

In the case of the Acoustic Research AR142, its heart was quite clearly in the right place, but the design was not in our view well enough balanced or sufficiently refined for it to overcome some basic flaws. The listening panel was pretty tough in its assessment, however, and in truth the end score for the listening tests was not all that far below the group average; the group including very much more expensive speakers as well as many cheaper ones.

Monitor Audio's 300MD must be rated a success. It has some 'character' — a degree of midrange projection and forwardness — but otherwise it proved lively and dynamic, achieving an above-average score at a well-below-average price. The bass response was found to be rather limited, but it was fast and articulate in this range, and a firm recommendation is appropriate.

Next month: three more moderately-priced models come under scrutiny.
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price £59.00

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Amplifiers are the heart of a good hi-fi system, the control and interface centre for everything. It's irrelevant how good your ancillary equipment is if the amplifier doesn't measure up, as the rest of the system can then never realize its full potential. When choosing an amplifier it is also important to make sure that it is compatible with the rest of your system in terms of input and matching requirements, and that it has a power output which will attain the volume levels you desire with your chosen speakers. Then it only remains to choose one with the sound you like!

This month we have found three affordable models covering a spread of technologies and a range of prices stretching from £160 up to £350 — two British and one Japanese. Marantz has been doing well with its CD players recently, so it's time to put one of its amps through its paces, Arcam has provided a little budget Alpha box, and after a long absence from these pages Naim makes a showing with the Nait II.

The reference system and ancillary equipment were chosen from components suited to this price band. I used Goodmans Maxims, Celestion SL6S and, ultimately, the price-mismatched Celestion SL700 loudspeakers. LP sources were served by Rega Planar 2 with A&R P77 cartridge, and Linn Sondek/RCB306/VDH MC10, while CD signals came from Philips CD582, a Marantz CD85, and a Meridian 207.

**Arcam Alpha II**

While the Black Box digital processor has been gathering attention, Arcam has been busy redesigning its range of amplifiers. The Alpha II is the latest upgrade from the established range, and retains much of its earlier aesthetics and a reasonable price. The alloy case is finished in matt-black, with white decals, a green 'on' LED, and blue highlighting for the control positions and Alpha insignia. The facia is divided into two, the top being devoid of controls; these are left to fill the lower section. There are full bass, treble and balance facilities (not defeatable), tape monitor, a rotary source selector, and a headphone output. The finish and workmanship are to a high standard inside and out, with commendable panel fit.

The disc stage is based on a single low-noise NE5532N op-amp which sets the gain for moving-magnet cartridges, with a plug-in module available to cater for moving-coils. The tone controls use the ubiquitous NE5534 op-amp, with ±15V supplies coming from 78/79 chip regulators. The power amp employs discrete transistors, with TIP output devices conforming to the usual complementary pattern. The power-supply is based on a substantial toroidal transformer, with split rails used via 6800µF 35V Rubycon electrolytics. Protection involves 2x2A fuses.

The whole is mounted on a large single PCB, while the case forms the heatsink with the output transistors screwed on aluminium mounts. The transformer is at the right-hand end and the disc input stage at the left. Thus hum problems may arise if the unit is stacked with a CD player.

The inputs available (via phono-sockets) are disc, CD, aux and tape, with the speaker outputs available from six 4mm plugs. This allows either direct or switched speaker connection, with the common terminals shared by both.

**Sound quality**

The Alpha is a competent amp in most respects. It doesn't mind being driven hard, and at 30W per channel it gets fairly loud. At this price it is hard not to make comparisons with the slightly more expensive and less versatile Mission Cyrus I, which has been grabbing a lot of attention of late. In comparison, the Alpha lacks a bit of drive, the bass is a little soft and it doesn't focus as well. It may lack some of the depth, width and ambience, but in tonality terms it's more relaxed than the Cyrus. The 'rhythmic' quality could also be better; bass notes lack impact. The treble shows a touch of grain and there is a general lack of air. On LP the story is much the same — if anything the bass loses control to the extent that there is some perceived overhang.

The Alpha is never hard or aggressive,
but it lacks the life and pace of the best designs. Still, it’s very competent for the price, and in its latest guise the Alpha maintains a competitive edge in comparison with similarly priced products. Given £160, there is little around that I would rather have.

Lab report

Though showing bandlimited characteristics, the frequency response of the phono stage was accurate through the midrange, with very slight treble lift. Likewise, the line/CD response was bandlimited (less at LF, more at HF), with -3dB points at 10kHz and 4kHz (Graph 1). Power output held up across the normal 20Hz-20kHz limits, with 14.8dBW achieved at 1kHz (40W into 8ohms). This fell by almost 3dB when both channels were applied to a 4ohm load, but with a peak current capability of +7.7A and 14.7dBW available with a burst signal into a 2ohm load, it shows decent load tolerance for a little amp.

Total harmonic distortion at rated power output was a respectable -76dB at the midband (0.04%), rising slightly to 0.1% at the band limits. Intermodulation was well suppressed on both the line and phono inputs, while the supply stability test is relatively free of artefacts, with the 100Hz component 74dB down (Graph 2). The signal-to-noise ratio on the disc input was an honourable 72dB, but that of the line input improved on this by only 5dB, and could have been better. The output impedance rose slightly with frequency, but with a maximum of only 0.1ohm it’s fine. The DC-offset was low on the speaker terminals and non-existent on tape, which would give an astonishing 1.2V output before clipping, enough for any domestic requirement.

Overload margins were fine on all inputs, and volume balance tracking was very good for a budget amplifier. Stereo separation was good on the line input, falling from 84dB in the bass to 60dB at 20kHz, and was only a little worse via the phono stage. Input sensitivity and loading of the disc stage were judged to be sensible, and will match most m-c cartridges well; but the line inputs were only moderately sensitive and may require the volume to be tweaked a little high with some sources.

Conclusion

A&R Cambridge continues to offer well-made, sensibly priced equipment which should give a long service life. While they are not making any great leaps in sound quality, the amps are improving. Whether this is enough in an ever-more-competitive market will be decided by you and the competition.

MARANTZ PM64 II

Although Marantz’s amplifiers have generally been slightly less well received than its CD players, this does not mean that they’re uncompetitive. They are just not the sonic bargains that their digital partners are. The PM64 II is called a digital monitoring amplifier, but there isn’t anything remotely digital inside; the amp is designed so that the amplifier is running in Class-A for the majority of listening, only switching into the Class-AB mode for high-level peaks. Copper-plating is used on many of the components to eliminate electromagnetic distortion – including the screws which hold it all together!

The disc stage consists of a couple of low-noise Fet’s and a dual op-amp, with some decent Cerene electrolytics in coupling and decoupling roles. Input switching is remote on this board, and a complex wiring harness (which gets a little messy in places) links the two. Good quality Alps volume control is used, but the rest of the potentiometers are pretty ordinary. The power amplifier is complex, reflecting the Quarter-A design, and is based on a mixture of IC, hybrid, and discrete transistor circuitry.

Sound quality

During listening, the amplifier was...
allowed to warm up for a few hours before it was put to the test, and warm up it did, with the Quarter-A output circuitry giving off a considerable amount of heat. It was first auditioned though the CD input on 'CD-direct', with the tone controls defeated, and I admit to being just a little disappointed in its performance. The treble was rather obvious, with grain and a consequent lack of detail. It didn’t focus too well, somewhat smearing what had been pinpoint on some of the better reference amps into amorphous areas of considerably larger dimensions. The mid sounded strangely coloured, a little larger than life but lacking some detail and pace. Strings could be a little sour on occasion, with an overall hardening of the sound. The voices of sopranos in particular could become a mite hard and forced.

The low frequencies were similarly unspectacular. There was a distinct lack of speed and slam, bass notes tending to slur into one another, muddying and thickening the sound. Although the amplifier has prodigious power and is capable of handling very loud, it tends to clog-up when driven hard and was always preferred at lower volume settings — even though there was a tendency to try it up louder to regain the lost detail.

The soundstage was wide, but rather restricted in depth. It isn’t particularly transparent either. As noted earlier, the stereo focus also was rather ordinary, and this is on loudspeakers which focus particularly well. With the tone controls switched in, things got even worse, and stereo focus all but vanished when these were altered. Taken off CD-direct, the bass was quite heavy, the treble grainier and the mid thicker, shedding more detail. The disc input was tried on m-m from the Rega/A&K P77 (disc-direct, with tone controls defeated), and much of the character found on the CD input was still present. Stage-width was good, but depth and an element of three-dimensionality were lacking. The bass didn’t have good control and the treble was splashy and imprecise. Driven into the moving-coil input from my Linn Sondek/Rega RB300/VD1 MC10 combination, things improved a little, but presentation of the sound stage wasn’t good enough to show off the superior front-end.

Lab report
Total harmonic distortion on the line inputs was low, with a worst figure of \(-7\text{dB} (0.015\%)\) recorded at 20kHz. Full-power HF intermodulation distortion was exceptionally good at \(-100\text{dB}\), and likely the linearity on the disc inputs in the gain settings. Disc signal-to-noise ratio on the m-m setting was a competent 71dB, but that of the m-c input was only just about acceptable at 64dB. The Aux/CD inputs were only a few decibels better than for the m-m disc stage, and should have been the little quieter. DC output offset was similar on both channels at a low 10mV, while a maximum of 9V signal was available from a 500ohm source for recording.

The input overload margins show no cause for concern, with good figures returned everywhere. Stereo separation on the disc input was a respectable 65dB in the midband, but fell at the frequency extremes; on aux input the story is rather better. The sensitivities and input impedances of all the inputs are sensibly chosen and will mate with most equipment well.

With a single channel driven, the power output into 8ohms easily exceeded its rating, with 21.7dBW recorded at 20Hz to 20kHz, into 4ohms (both channels) the output stood up well, with almost 20dBW (200W) achieved at 1kHz. The one-channel pulse output into 2ohms was 22.5dBW, and 19A is available for current peaks. The supply modulation spectogram is particularly clean (Graph 5), with only a slight 50Hz artefact seen on the 40dB down. The frequency response of the line stage showed some slight tailoring, with mild roll-offs in both directions but within \(-0.5\text{dB} \text{ limits over 20Hz-40kHz and } -2\text{dB} 40Hz-20kHz\). The m-m response (Graph 4) shows a slight bass boost (+0.4dB) and an ultrasonic rise (+1dB) after a minute treble trough, but the important midband is almost flat. No ultrasonic rise or appreciable bass lift was seen on the moving-coil input. This had a more severe subsonic roll-off and a slight treble recess to \(-0.25\text{dB} above 4kHz\).

Conclusion
Good lab performance, clever circuitry and a healthy power output aren’t enough to rescue this design. The separate tone controls for each channel are a marketing indulgence rather than an aid to serious listening, while with all those facilities available the PM64 II will surely appeal to people who like tinkering with the sound rather than hi-fi fundamentalists. I’m sure that a less elaborate form of construction would bring benefits in sonic performance. With the small size and the dials employed (CD-direct and tone controls defeated) the sound just about survives, but with plenty of stiff competition in this price range I feel that — given its track record with CD — Marantz is capable of better.

NAIM NAiT II
Naim is a highly respected British manufacturer with a firm following. It originally specialized in amplifiers, but in recent years has expanded the product line-up to cover speakers and tone-arms. However, the company’s policy of evolution rather than revolution in circuit design has provided steady progress for the mainline Nait, wherein the Nait represents the Naim approach to a budget amplifier. Launched some four years ago as an inexpensive component, the latest employs CD-direct and tone controls defeated) the sound just about survives, but with plenty of stiff competition in this price range I feel that — given its track record with CD — Marantz is capable of better.

### MARANTZ PM64 II

#### Test results

<table>
<thead>
<tr>
<th>Power output</th>
<th>Rated power into 8ohms (spec)</th>
<th>14W</th>
<th>20W (spec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One chnl (ohms) (DBW)</td>
<td>19.4</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>BOTH chnl chnl (DBW)</td>
<td>9.1</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>One chnl (ohms) (DBW)</td>
<td>19.4</td>
<td>10.5</td>
<td></td>
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<tr>
<td>BOTH chnl (DBW)</td>
<td>9.1</td>
<td>5.3</td>
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<tr>
<td>Intermodulation (1kHz, 8kHz)</td>
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<td></td>
</tr>
<tr>
<td>Insensitive peak current</td>
<td>22.5</td>
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#### Distortion

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<th>AUX/CD, dB</th>
<th>8-bit</th>
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<tbody>
<tr>
<td>0.225</td>
<td>0.225</td>
<td></td>
<td></td>
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<tr>
<td>Noise</td>
<td>Disc (m) input (HBF CCIR w/10dB</td>
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<td></td>
</tr>
<tr>
<td>(dB)</td>
<td>channel)</td>
<td>21.5</td>
<td></td>
</tr>
<tr>
<td>Disc (dB)</td>
<td>21.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aux/CD input (HBF, CCIR w/10dB</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rated, unweighted (min watt)</td>
<td>21.5</td>
<td></td>
<td></td>
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<tr>
<td>DC output offset</td>
<td>21.5</td>
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</table>

#### Input overload

<table>
<thead>
<tr>
<th>20kHz</th>
<th>1kHz</th>
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<tbody>
<tr>
<td>1.1kHz</td>
<td>1.1kHz</td>
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#### Input impedance

<table>
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<th>1kHz</th>
<th>2ohms</th>
</tr>
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<tbody>
<tr>
<td>0.225</td>
<td>0.225</td>
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</table>

#### Output impedance (damping)

| Channel balance disc at 1kHz | 21.5 |
| Channel balance disc at 8kHz | 21.5 |
| Channel balance disc at 16kHz | 21.5 |
| Channel balance disc at 32kHz | 21.5 |

#### Output power

<table>
<thead>
<tr>
<th>Aud/CD input (dBW)</th>
<th>115W (20.5dBW)</th>
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</thead>
<tbody>
<tr>
<td>ONE channel (8ohm)</td>
<td>21.7</td>
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<tr>
<td>BOTH channels (4ohm)</td>
<td>21.7</td>
</tr>
<tr>
<td>BOTH channels (8ohm)</td>
<td>21.7</td>
</tr>
<tr>
<td>BOTH channels (8ohm)</td>
<td>21.7</td>
</tr>
</tbody>
</table>

#### Output, pre-amp (tapes)

| Channel balance disc at 1kHz | 21.7 |
| Channel balance disc at 8kHz | 21.7 |
| Channel balance disc at 16kHz | 21.7 |
| Channel balance disc at 32kHz | 21.7 |

#### Output, pre-amp (tapes)

| Channel balance disc at 1kHz | 21.7 |
| Channel balance disc at 8kHz | 21.7 |
| Channel balance disc at 16kHz | 21.7 |
| Channel balance disc at 32kHz | 21.7 |

#### Typical price, including VAT

| £350 |

#### Supplier

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ward, no-nonsense one.

The regular Naim extruded alloy case with a black textured finish and satin front panel are used, with the Naim logo now back-lit green to denote operation. The front-panel push-buttons have been replaced by rotary selectors. The large volume and selector knobs, traditional Naim and taken straight from the 32, are joined by small balance, power on/off and mute/normal/monitor controls. Inputs are 5pin DIN, except LP disc which uses gold-plated phono sockets (m-m only). Other inputs are aux, tape and tuner. The speaker outlets are 4mm sockets.

The interior is exceptionally neat and well laid-out. The output stage is of the direct-coupled complementary bipolar variety, while the pre-amp uses Naim's discrete transistor single-rail capacitor-coupled stages.

Sound quality

When fed from either CD or LP sources the Nait delighted with an easy, tuneful flow of music. Rhythmically coherent at all volumes, the perceived integration of bass, mid and treble was excellent. It has an easy, musical way about it, interesting and strong. The bass drove tunefully along, underpinning the rest of the amp's able performance. In its best areas the Nait II puts many a more expensive product to shame.

Up through the midband there was plenty of air, with reasonable levels of revealed detail. Stage width and depth were both very good. It drew listeners' attention in a way hard to credit at this price. Indeed, it goes some way to achieving high-end status in specific areas, for while it doesn't have the nth degree of detail or extended bass, it presents the information it gives in a convincing, if somewhat individualistic fashion. It will not suit everybody. Power output is low, but it clips well and goes louder than its measurement would suggest, and would obviously suit speakers of high sensitivity.

All music benefits from the Nait's behaviour. It has drive, integrity, coherence, and a measure of space and ambience. Have I perhaps gone over the top about it? Well, why not? This is the first reasonably priced amp I have had this year which kept me listening. In a small room it worked exceedingly well with my 700s, as long as I didn't ask too much of it in terms of level.

It's not all perfect. The bass is slightly odd, a little over-emphasized at times and somewhat coloured, even boxy in its upper regions — probably the effect of LP band-limiting, but I always found it interesting and lively, with fine differentiation. The treble has more than just a hint of grain, and it throws away some of the inner detail available from more transparent amps. Focus wasn't one of its strong features either. Nevertheless, in its own way it is currently the best sounding amp in its price range. What more can I say?

Lab report

The power into 8ohms was 13.5dBW in the midband (22.5W against the specified 15W) with the output falling slightly at the frequency extremes. Into 4ohms with both channels driven the output went down by only 2dB, suggesting fair load tolerance. The peak current delivery is perfectly adequate for the power available, substantially by the 20m pulsed output test. Harmonic distortion was little more than adequate at the frequency extremes (—90dB or 0.3%), but the midband figure of —79dB is respectable. HIF intermodulation was adequate on the aux input at full power, but on gram the 1kHz difference-tone rose to —46dB (0.5%). Noise performance was passable, with the disc input returning —6dB and the aux —71dB, with no benefit gained by reducing the volume control to minimum.

DC output offset was 17mV on the left and 10mV on the right channel. Input overload margins were merely adequate for the disc stage, whereas the aux overload figures were excellent over the whole frequency range. Stereo separation fell as the frequency increased, but the worst figures returned at 20kHz are still decent, with aux slightly better than disc. Output impedance was fairly low, throughout. The volume/balance tracking must be considered good, with just over 1dB aberration at 60dB below maximum level. However, sensitivity is fairly high, which means that when listening to CD the lower end of the volume control range is important, but a balance control is provided anyway.

The disc input sensitivity is sensible and the amp should mate with most moving magnet cartridges. Frequency response measurements showed both the line and disc stages to be carefully tailored, with —4dB points at 55Hz and 28kHz, and steep roll-offs at either end (Graph 5). The graph response differed from aux by a mere 0.2dB in the 3-10kHz region. The supply modulation test (Graph 6) shows a fairly strong 100Hz artefact at exactly 50dB down, and in essence the lab performance is only fair.

Conclusion

The Nait II is small in more ways than one. Its size and its power output are both diminutive, while the minimalist design and lack of a moving-coil input restrict its application. It is quite expensive in terms of available watts, and the lab performance hardly suggests state-of-the-art, although construction is to a high standard. It has good load tolerance, even if it does require fairly sensitive speakers. For all this, in some respects the Nait currently defines the sound quality possible from small amplifiers, and as such it earns my respect and recommendation.

GROUP CONCLUSION

Although the Marantz is similarly priced to the Naim, the approach adopted by the two firms is conspicuously different. The Marantz is much bigger, offers plenty of power, lots of controls and a fine labora-
tory performance. The Naim is small, but

AMELFIERS

Graph 5. Naim Nait II: frequency responses aux input

Graph 6. Naim Nait II: power supply modulation spares from 35Hz test-tone

Test results

Power output

<table>
<thead>
<tr>
<th>Spec</th>
<th>Spec</th>
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<tbody>
<tr>
<td>15W (1% THD)</td>
<td>20Hz</td>
<td>1kHz</td>
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<tr>
<td>Disc</td>
<td>chnl</td>
<td>20Hz</td>
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<tr>
<td>13.2</td>
<td>15.5</td>
<td>15.5</td>
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<tr>
<td>Both</td>
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<td>10.6</td>
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<tr>
<td>Disc</td>
<td>chnl</td>
<td>10.6</td>
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Distortion

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<tr>
<th>THD</th>
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<tr>
<td>20Hz</td>
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<td>1%</td>
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Noise

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Intermodulation

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Input overload

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<tr>
<td>20Hz</td>
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<tr>
<td>0.5%</td>
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Channel balance disc at 1kHz

<table>
<thead>
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<tr>
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Volume balance tracking

<table>
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<tr>
<td>0.3%</td>
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Output: pre-amp (aux)

<table>
<thead>
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<th>Output: pre-amp (aux)</th>
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<tr>
<td>10mV</td>
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Disc eq error 400Hz /5kHz

<table>
<thead>
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<th>Disc eq error 400Hz /5kHz</th>
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<tr>
<td>2%</td>
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Typical price, including VAT

<table>
<thead>
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<tbody>
<tr>
<td>£150</td>
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Suppliers:

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

low power output few controls and only just about passes muster in the lab. However, within the constraints of its operating capability the Nait is the clear winner where sound quality is concerned and it deserves recommendation. The Arcam Alpha continues to improve, and although outclassed by the Naim it must be remembered that it is only half the price. Currently, for integrated amplifiers under £2000, the Arcam Alpha is most definitely up among the leaders.
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Three mid-priced CD players:
Aiwa XC-004, Akai CD62 and Technics SL-P555

by Martin Colloms

These three machines are all competitive products, sufficiently distanced from the budget region to offer further improvements in build quality, finish, facilities and technology. All are full-width machines with drawer loading, remote control, and a headphone socket complete with its own level control. Unusually, the Aiwa has no digital output facility, optical or wired, but the Akai has both and the Technics an optical output only. The Aiwa is built in Singapore, while the other two are made in Japan.

All three sport comprehensive front panels with a daunting array of control buttons. The pricing puts them in the same class as the Maranta CD 65SE and 75SE, current performance leaders which are proving hard to beat. Standards are however continuing to rise, and some designers are seeking a competitive edge via the exploitation of modern microprocessor technology, this being implemented with the aim of providing as many user operation facilities as possible.

AIWA XC-004

There is not much to distinguish the XC-004 from other similar players. Up to 20 tracks can be programmed in any chosen order, with buttons for tracks 1–10 available on both the player and the hand-held remote control panels. Index points may be accessed, while functions such as random- or shuffle-play, and full-track or programmed A–B phrase repeat are provided. To aid cassette recording, a peak search facility finds the loudest portion on the disc and holds it on repeat to give record-level calibration; and if a matching Aiwa cassette recorder is used, a connection is provided to link it to the CD player. The fluorescent display offers the usual information, with simultaneous readout of track number, index, and the various available timings (remaining, elapsed, total and track) all accessed via the time button. The XC-004 has no digital output. In this test the Aiwa is the lowest priced at £229.

Sound quality

Following comparisons with the Marantz CD95 and several other references, the XC-004 emerged as pretty average these days for a better example, but in truth, quite a good sound at 60%. It possessed a good level of clarity, revealing instrumental lines well. Complex material was handled without significant confusion or congestion, and clarity was maintained down to low volume and modulation levels. Stereo images were well focused, and both stage width and depth were above average, even if that last touch of transparence was absent.

Some of the impression of good mid definition was associated with a trace of hardness noted on piano, while the rendition of musical transients as a whole was poorer than for other machines in its class. Edges were dulled and slowed, while the feeling of rhythm and bass was downbeat — the general effect somewhat closed-in and lacking air. Conversely, the player did demonstrate good control throughout the frequency range, and no single area could be singled out for criticism. In this respect it remained easy to listen to, with a low incidence of listener fatigue.

Technical details

The inside of this machine is straightforward, comprising a single PCB with little evidence of audiophile grade components. Dual 16-bit DACs are used, with the ubiquitous Burr Brown PCM 56s serially driven, while the panel logo refers to 18-bit conversion at a 4-times resample rate, digital filtering. The extra 2-bit resolution is achieved by digital ranging at the filter stage, followed by variable ana-
print-out errors, for which we apologise)

A chain of dual ICs come next (JRC NJM 2082s), while de-emphasis and muting are accomplished by solid-state circuitry. The main microprocessors are predictably supplied by Sony, and include the established CXA 1082B and CXA 1081 control chip. Power-supplies are quite limited and the tri-beam transport in only mild suspension decoupling. Main supply is via 2-core, with exposed live terminals inside the casing.

**Lab report**

Although many results were more than satisfactory, this player suffered from a silly design fault: it just entered clipping at MSB or full modulation. Fortunately this was not so serious as to affect listening-test results significantly, due to the rarity of true peak-level modulation on music discs. Flat-out, the distortion averaged -20dB or 10%, the resulting spectrum showing a full quota of harmonics (Graph 1). The two-tone intermodulation test signals also clipped, giving an average difference-tone distortion of -22dB. Upon reducing the test level by 10dB these problems were removed, and the better (LH) channel then scored -91dB (0.003%) for midband distortion. But a L/R discrepancy still gave -47dB (0.44%) on the other channel.

Good results were obtained at lower modulation levels; for example, -35dB distortion at -70dB (1kHz dithered). The corresponding spectrogram was decently clean right up to 10kHz, with spurious in this region rejected by 115dB down to approximately 4µV. Further up the frequency range things were not so good, as this player delivered an excessive 20mV peak to peak in the 40MHz range even into a 75-ohm termination. In the audio band, however, signal-to-noise ratios were fine, with accurate channel balance, while stereo separation was more than satisfactory. The frequency response was very flat almost right up to 20kHz, at which point it dipped sharply to -2dB. Error-correction was impressive at a maximum gap of 0.5mm; some players get up to 4.0mm these days.

**Conclusion**

Aiwa has produced a machine which offers a good presentation, but has fewer facilities than many. In the lab, the ultrasonic interference level, and some other aspects could be improved. On sound quality, it achieved a competent standard, and although the player is not outstanding, it is good enough for a recommendation due to its competitive price: one of the best Aiwa players to date.

**AKAI CD62**

Akai is taking a serious interest in the budget-end of the CD market and making an impression in the UK by leading on the essential requirement: high sound quality. Like its competitors, the Akai CD62 is well finished in the usual satin-black and carries a good array of features. Some cassette dubbing facilities are provided – a fashionable move these days – for example, 'auto-space' to apply a 4-second pause between tracks to aid track-seeking cassette players, and a timed-programme feature. In this mode the tape running time can be entered into the CD player and it will adjust its replay for a best fit in the tape running time, pausing when it is time to turn over or reverse.

Billed as an 8-times oversampled 18-bit player, the Akai employed a quick-operating transport mechanism using a linear-motor drive, an indication of the improving level of technology used by the independents. Up to 20 tracks may be programmed in any chosen order, via a numeric array on the front panel or a key-pad on the infra-red remote control. The latter has the usual facilities, including A-B music phrase repeat and full programming. On the display there is a track programme calendar, with both track numbers and timings presented. CD singles (8cm discs) can be played without an adaptor, and the CD62's price is £325.

**Sound quality**

The sound of this player was a touch untidy, but it nevertheless manages a sufficient degree of dynamic life and pace to help lift it above the ordinary. This, together with a well-balanced performance, resulted in a strong sonic score of 71%. Compared to many of its counterparts, the Akai CD62 generated interest among the reviewers – it sounded faster and livelier, more open and more involving. These benefits easily outweighed minor objections concerning a mild loss of focal precision in the treble, with a touch of 'zing' and forwardness also apparent at this end of the spectrum.

The bass showed good slam and articulation, while mid definition was also well above the usual standard. Performance was also enhanced by impressive recovery of the natural acoustic ambience present in many good recordings, helping
to give a good impression of depth and space to the stereo soundstage. Good levels of detail were maintained over a wide dynamic range, regardless of the complexity of the material, and the overall impression was one of an effusive, confident approach to digital replay.

Technical details
Using 8-times oversampling technology, via a digital filter clocked at a rate of 3-42.8kHz, the two 16-bit Burr Brown PCM 56P D/A converters are worked pretty hard in this player, and are unlikely to deliver full resolution at and below -90dB. Following the 56Ps, the circuitry looks rather like that in one of the Marantz 'SE' series, with those green 'Ceramic' electrolytic capacitors of selected audio quality, plus a sprinkling of copper-foil polystyrene filter capacitors.

Many aspects of the mechanical engineering show that attention has been paid to detail, even though the case lid is undamped. Specific points include strong mountings for the main PCBs, and separate fixings for the mains transformer to reduce transmitted frame vibration. The transport is a high-quality linear-motor type, well mounted on a damped, high-compliance, coil-spring suspension. Good disc clamping has been provided, and live mains connections are properly shrouded. A separate headphone amplifier is fitted.

Lab report
The Akai's near-flawless channel balance and flat mid-band was slightly marred by a trace of treble lift, although +0.2dB at 20kHz is unlikely to have any audible consequences. Channel separation was 112dB at midband, declining to a still superior 88dB at 20kHz, while with dual DA converters no inter-channel time-delay was observed. Despite a high oversampling rate, the DACs produced good results for HF intermodulation, with an average of -90dB at peak level and -98dB at -10dB modulation.

Measuring close to -90dB at full level over the 20Hz to 20kHz frequency range, the peak-level harmonic distortion results were very good, and there was no indication of compression. The -78dB distortion result (0.011%) at -10dB modulation suggested that some tiny linearity errors were present, while the results for -70dB dithered 1kHz tones confirmed this with a linearity difference between the channels and a mean distortion level of -29dB. Graph 4 is for the better channel, while Graph 5 shows the full spectrum out to 100kHz, including a burst of spuriae at 88kHz - twice the sampling rate but at a low peak amplitude of -95dB relative to full level.

Down at -90dB modulation (1kHz dithered) the analysis shows a high level of 2nd and 3rd harmonic distortion as well as an irregular sinewave shape (Graph 5). At -90dB the output level was 6dB below par (well matched between channels), while the linearity plot (Graph 7) shows a slope error between -75 and -95dB. It then attempts some corrective action, and the result is considered not too bad down to -110dB.

De-emphasis was respectively accurate, while the output was 2.3V from a 600-ohm impedance. Error-correction was not outstanding, passing only a 0.5mm gap; this is adequate, but more reserve would be to this player's advantage. Signal-to-noise ratios were fine at typically 100dB. Some 7mV p-p of RF was present at the output; considering the prime frequency of 50MHz, such outputs should be better filtered.

Conclusion
While some aspects of its lab-measured performance could be improved, this player provides good build quality, a comprehensive specification, versatile digital outputs, and a lively, up-to-date sound quality. Akai has tried for a good sound with this design, and has succeeded. Strongly recommended.

TECHNICS SL-P555
An impressive-looking machine, the 555 is presented in Technics' usual high-quality charcoal gunmetal finish complete with a solid aluminium front panel. It is distinguished by large display accompanied by a sizeable control knob derived from the SL-P999 design. Comprehensive tape-edit facilities are also provided to aid dubbing to tape, including a peak search meter to aid setting the maximum recording level. A 10-key array plus '10' multiplier is present on the conveniently angled fascia, while this is also duplicated as a numeric keypad on the remote.

The latter has superior ergonomics, achieved by its neat differentiation of functions using clear labelling, colour differences and button size. A full facility design, the remote transmitter also includes control of the output level over a 0 to -12dB range: helpful for fine tuning of volume level but of no great use otherwise. This is a traditional Technics feature and is accomplished in the digital domain.

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including A-4 phrase repeat, random- or shuffle-play, and programming for up to 32 tracks in any desired order. And 5in. (8cm) discs can be played. The large fluorescent display deserves special mention. It signals when emphasis is present, indicates the various edit modes, shows whether the digital output is present, and varies the other settings. In addition to the track programming section, it also has a signal line-level indicator, to aid programme assessment prior to recording.

Sound quality
Scoring an above-average 6½, the SL-P555 presented an interesting blend of qualities. There was no question concerning the excellent treble, which sounded pure and grainless — airy, delicate and informative. No blurring of treble focus was evident, a common fault with CD replay. Vocal syllabics were accurate and clearly defined. The bass was good, clean and well extended, sounding generally tidy. Through the mid-range the sound was consistently neutral, while stereo focus was very good. Transparency rated a little above average. The 555 tended to sound polite and rather too even-tempered, although it was classed as offering very good 'high fidelity.' More bro would have helped raise listener interest, and the reproduction was considered to lack sufficient drive and life to match its good performance in other areas.

Technical details
A remarkably small PCB and relatively few visible components have been fitted. The reason is simple: the ICs are all surface mounted directly on the underside of the board. As regards decode technology, Technics is suffering from a marketing problem here. Having led the research field with the low-bit, high-oversampling MASH system, it was decided to conceal it in domestic players because of the minor shortfall in measured signal-to-noise ratio. The first domestic player, the SL-P200, therefore concealed its true identity, and now we have the same state of affairs.

The front panel says '4 DAC linear 18-bit', but this is not the case. The 555 is a MASH technology player, using pulse-width modulation to decode a high oversampled, digitally filtered signal at a 64-times rate. The DAC is single-bit, augmented by a second bit to improve accuracy, and in theory at least it should deliver near-perfect monotonicity and linearity. In this player the MASH chip is time-shared between the two channels, so only one DAC is present rather than the four proclaimed on the panel! The transport is an excellent Technics design, with a fast-response linear-motor drive plus fast-effect drive and life to match its good performance in other areas.

Lab report
The 555 has superb channel-balance and a decay if not perfectly flat frequency response, the latter unusual these days in registering an extended (if very slight) shelving (Graph 8). Note that there is a minor phase difference between the two channels at 20kHz due to the use of the time-shared DAC. At a normal code rate, 90° is the resulting shift for a time-shared design, but the raw 64-times oversampling produced a value here of 2.4° — too small to be of any significance.

Full-level harmonic distortion was fine. The figure of —96dB distortion at —10dB modulation was state-of-the-art, and pointed to mild peak-level compression. Indeed, no distortion harmonics as such were visible on a wide-hand display, just a slightly coloured noise spectrum. No specific spurious were evident up to 100kHz and down to —120dB, while RF analysis showed only 1mV p-p at around 1.2MHz, which the 75-ohm load suppressed.

Investigating linearity, the one-on-one perfection of Technics low-bit conversion was clearly seen, and taking into account some noise contribution below —110dB, the transition function looks pretty good down to the —120dB test limit. Each intersection meets perfectly (Graph 9), while the single measured figures tallied exactly, showing negligible resolution errors at —90dB. In further confirmation, the double plot for a low-level sinewave and its spectrum (Graph 10) shows a textbook result.

The performance was also impressive at high frequencies. IF intermodulation was also excellent. Peak white-noise was handled without clipping and error-correction was very good, while both shock and vibration were handled well.

Conclusion
While MASH hasn't resulted in a startling uplift in subjective sound quality, the sonics were nonetheless very presentable. The SL-P555 is an excellent example of a mainstream player offering fine build and finish, with a very good lab performance. Every facility worked well, and the player was undoubtedly good value.

CD PLAYERS

Supplier:
Panasonic Consumer Electronics UK, Willoughby Road, Bracknell, Berks, RG12 4FP. Tel: (0344) 862 444

TECHNICS SL-P555

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Graph 8. Technics SL-P555: Frequency response

Graph 9. Technics SL-P555: Linearity plot below —60dB

Graph 10. Technics SL-P555: Dithered 1kHz sinewave at —90dB, waveform below, dawsonium spectrum above

Test results
The race to produce new and interesting products is hotting up. Technics' engineers have developed a digital power amplifier which is something more than a standard power amp with an on-board processor.

The first striking feature takes the form of a large, semi-shrouded volume control set in the centre of the front panel. Below this are four digital input selector buttons, covering two optical sources, one coaxial, and a DAT coaxial input. To the left is the operation mode selector: digital, variable analogue, and a fixed analogue input which allows the device to be used as a normal power amplifier. On the right is the speaker switching: off (useful for headphone listening), set A, set B, or both together — handy for bi-wiring.

Gold-plated RCA phono inputs are used for all inputs with the exception of the opticals, which employ Toslink fixing. The speaker outlets are binding-posts only, and casework is up to the normal Technics standard. The case panels are made from steel and, continuing the fashion, large feet are employed.

Technics is claiming some innovative technology for this amp. Borrowing from the long-running Class-AA system, it has taken an interesting route in the search for improved signal-to-noise ratios. The output stage is a unity-gain current amplifier fed from a voltage which must obviously be the same as that appearing at the speaker terminals. Where Technics claims innovation is that this signal is provided by employing a high-voltage current-to-voltage converter at the DAC's output stage. By making this converter a variable-gain device, the volume control is kept out of the direct signal path, being in the feedback loop of the converter instead. In this way the signal-to-noise ratio is increased to that inherent in the amplifier and is independent of volume control setting. Technics claims a S/N ratio of 112dB, providing a very large dynamic range.

The D/A converter uses four DACs to provide 20-bit resolution in conjunction with an 8-times oversampling digital filter. This eliminates zero-cross distortion as in Technics current CD players. The Yamaha ADIC is used for digital acquisition, followed by a Technics digital filter and Burr Brown PCM56P 16-bit DACs.

Internal construction is complex. The converter sits in its own screened box above the main body of the power amplifier. Remove this, and the power amp is laid out beneath, using double-mono construction with independent heatsinks at either side. The two transformers have oxygen-free copper windings, and special high-speed supply capacitors are used. Also, OCC wire is used in critical applications. A further PCB is located vertically behind the front panel, taking care of switching, volume control, and line amplification. For analogue inputs a stage with 45dB of gain is employed after the volume control to feed the unit-gain current amp.

Sound quality

Equipment used for listening tests comprised Celestion SL700 loudspeakers and Meridian 207, with a Marantz CD85 CD. Through its internal digital processor the SE-M100 delivered a very detailed sound. The bass was fairly extended but a shade heavy, and given the right (wrong) material it became a touch boomy. The mid-range was thinned on voice and had traces of exaggerated sibilance. Strings could sound squeaky, with some glare: slightly thin without enough body and texture. The treble was precise, with images well constructed and exhibiting fine focus. The amp does have some measure of transparency and the stage width was good; but it was a touch 'mechanical' in its rendering, unable to preserve fully the intricate relationships between various strands of the music, especially when things became complex.

Fed through the analogue circuits from a normal CD player, the sound produced...
was decidedly different. From the Meridian and the Marantz the treble was somewhat lazier – it lost that precise imaging and huge stage width, but at the same time it became easier to live with and to my mind more musically enjoyable. Rhythm seemed improved to some extent, and although things weren't all sweetness and light, it made a very brave effort. Strings could still turn a bit acid at times, a trace of glare persisted, and the bass remained a mite ploddy. But the sound was still reasonably detailed and lively, gaining more natural dynamics, while retaining ambience depth, space and transparency. The top has some grain and rizz, and as this appeared irrespective of source it must be attributed to the power amplifier proper.

Lab report
The power amplifier part can obviously be treated as a normal PA, but there is a line-amp as well. The digital processor was tested like any other, but with the audio output taken from the speaker terminals.

Power amp section
The specified 100W output was easily achieved into an 8ohm load, and with just one channel driven over 135W was attained before programme clip. Into 4ohms the power limited at 20dBW (200W), but the rise remained a mite ploddy. But the sound was still reasonably detailed and lively, gaining more natural dynamics, while retaining ambience depth, space and transparency. The top has some grain and rizz, and as this appeared irrespective of source it must be attributed to the power amplifier proper.

The frequency response was slightly up to 20kHz. Channel separation was slightly better at low and mid frequencies than on the line input, but worse by 5dB at 20kHz. Harmonic distortion was low, with about -90dB recorded for a full-level signal right up to 20kHz, while the -43dB THD measured at -70dB level was particularly praiseworthy for a digital device. HF intermodulation was as clean as a whistle.

The frequency response was flat from the bass through the midrange, but shows some asymmetric roll-off in the high treble (Graph 1). The signal-to-noise ratio (ref. 0dBW) was better than 100dB under all measurement conditions, fulfilling Technics' claims. Turning the output up to 20V for a 0dB reference revealed the ultrasonic spuriae for a -70dB level of 1kHz tone to be 125dB down, and Graph 2 shows this clean behaviour. The low-level linearity test demonstrates almost perfect resolution down to -110dB (Graph 3), the -90dB sinewave is well constructed (Graph 4), with a corresponding resolution error of only 0.3dB, and dynamic range, as claimed, is large.

Conclusion
Technics has a habit of making amplifiers which measure exceeding well and have a touch of novel circuit design. To this end it has produced a more than interesting product. At £560 it offers reasonable power output, a good lab performance and excellent build quality. Sound quality makes this one of the best Technics power amplifiers ever, with or without the digital converter in use. In comparison with its competitors it is better than average, but it does fall a little short of the best available in this price range.

Test results

<table>
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<tr>
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<td>Power Output</td>
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Supplier:
Pansonic Consumer Electronics, Willoughby Road, Bracknell, Berkshire. Tel: (0344) 862444.
'It was years ago but, I can still remember buying my first real hi-fi turntable. I was a student working weekends in the local take-away, it took about six months to save the money for that turntable. You see, I'd set my sights on one of those reviewer legend beasts, carved out of the living rock. Geez, it looked and sounded pretty.

I hopped the train to Cardiff. It was one of those drizzly, grey days that Cardiff wears so well. Panic, I couldn't find the shop. A cute blonde with drop-dead looks set me straight. It was a tiny, cramped affair jammed full with real hi-fi. I met the owner, "Tall Tony", he was busy but, not too busy to help. Well, the Living Legend sounded right, looked right and I parted with the cash. But, how was I gonna get it back home. It weighed in like Orson Welles in leg-irons. Tony had an idea, he's deliver it, set it up and check it over before leaving me to it. Man! That guy was a Saint.

A couple of days later there we were in my sleazy room, Billie singing the Blues and Tony doing the fine tuning.

Well, I've gotten out of the take-away business and Tony's got Audio Excellence into three new shops and the Blues, well, the Blues plays on.'
estled amongst a new range of Sony ES products is the TA-F650ESD amplifier. Modeled on the cheaper TA-F530FS, but equipped with a proprietary 1-bit D/A converter it is the first product to employ the fruits of Philips' BitStream PDM technology.

Aside from the converter, this amplifier is exceptionally well built for the price and offers a total of four standard line inputs (including two tape) in addition to both m-m and m-c disc stages. Bass, treble and balance knobs are complemented by a huge rotary volume control and peripheral features such as source direct, —20dB mute, mono/stereo mode, and full rec-out switching.

Separate optical digital inputs (plus one output) are provided for CD and DAT sources as an alternative to the standard 75ohm coaxial input. Each of the appropriate 32kHz, ±4kHz and ±8kHz sampling frequencies is indicated by a row of LEDs mounted on the top of the black anodised facia.

Technology
At the heart of this outboard D/A converter lies Philips' new PDM CMOS IC, the SAA7220, which effectively replaces the established SAA7220/TDA1515 chip-set at a lower cost using new technology. Sony has also elected to use the reliable YM3623B digital interface IC from Yamaha which provides a separate output for subcode data (de-emphasis switching, etc.), 16-bit serial data is addressed by the SAA7220 IC via a delay-line RAM and subject to 4-times oversampling using an integral FIR transversal filter. The gain of this filter is modified to redress the 0.5dB loss (at 20kHz) encountered using the subsequent 32-times interpolation filter.

Having increased the oversampled frequency to 5.6448 MHz a very high level of quantization noise (produced by the truncation of these analogue pulses and restores the original analog signal) is reduced to zero by this time-averaging, a process that is complete before the signal has reached the 0-20kHz passband. As a result the quantization noise (produced by truncating each 17-bit word to a 1-bit word) reaches a maximum at the 11.2896 MHz sampling frequency but is reduced by around 100dB throughout the audio band.

Finally the 1-bit data stream is output to the integral PDM DAC. This is a switched capacitor device that responds to each logic signal (either a '0' or a '1') by producing a fixed-width, fixed-height analogue pulse. These +1/-1 pulses emerge as a continuous variation in signal density. any variation in signal density between the 'upper' and 'lower' pulses therefore represents both a change in amplitude and frequency of the reconstructed waveform.

Peak output waveforms are represented by a succession of full scale density pulse trains occupying the +1 and -1 transitions in succession. An internal integrating op-amp time-averages this stream of analogue pulses and restores the original passband waveform intact. Therefore an equal density of +1 and -1 pulses represents no net output after filtering.

Philips' BitStream or PDM system should not be confused with Technics' MASH/PWM scheme. MASH is a parallel form. The latter is visible on the 3D spurious output plot which demonstrates the 2nd-order stopband images typical of a Philips oversampling filter despite this integrated FIR filter offering an improved stopband rejection of 54dB. 11th order reached a minimum of 0.0034% at peak level but its odd-order characteristic appeared more to do with the integrating up-amp than the DAC itself. Not shown is the ultrasonic distortion plot, was principally odd-order in nature. Noise was low, stereo separation poor via m-c (~40dB to ~50dB) and the output impedance a trifle high at 0.215ohm. Sony's TA-F650ESD also displayed a fair sensitivity to the AM RF test, demodulating IM RF signals in the 1-4 MHz and 22-35 MHz regions. The fundamental resonance of the input RC network was put at 28 MHz, resulting in some +22dB peak noise modulation clearly audible as a roughness and muddling via the line input.

The PDM D/A converter offered a linearity of some 15.5 bits but, though this is exceeded by many multi-bit DACs, the PDM converter remains fundamentally monotonic to this level. Passband ripples peaked at around 0.08dB while ripples in the stopband amounted to 12dB, both functions of the aperture effect in the FIR filter. The latter is visible on the 3D spurious output plot which demonstrates the 2nd-order stopband images typical of a Philips oversampling filter despite this integrated FIR filter offering an improved stopband rejection of 54dB. 11th order reached a minimum of 0.0034% at peak level but its odd-order characteristic appeared more to do with the integrating up-amp than the DAC itself. Not shown is the peculiar elevation of the noise floor around the base of peak-level, high frequency signals. The peculiar elevation of the noise floor around the base of peak-level, high frequency signals — this appears to be a peculiarity of the PDM system.

Lab report
Viewed as a conventional amplifier the Sony TA-F650ESD offered a full 128W into 8ohms with an increase of +1.8dB into 4ohms. THD rose to a maximum of 0.0089% but, as shown by the ultrasonic distortion plot, was principally odd-order in nature. Noise was low, stereo separation poor via m-c (~40dB to ~50dB) and the output impedance a trifle high at 0.215ohm. Sony's TA-F650ESD also displayed a fair sensitivity to the AM RF test, demodulating IM RF signals in the 1-4 MHz and 22-35 MHz regions. The fundamental resonance of the input RC network was put at 28 MHz, resulting in some +22dB peak noise modulation clearly audible as a roughness and muddling via the line input.

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Sound quality
Listening fairly briefly via the disc phono inputs I felt that deep bass notes were restricted both in extension and impact, just as a trace of sibilance was introduced
**Turntable**

Dual CS430 Dual C5430 Dual CS430 Dual CS430 Dual CS430

**Amps**

AR A03 Yamaha AX300

**Speakers**

Wharfedale Delta 3D

Goodmans

11+ ARCAM A1

Denon PMA 250

Marantz PM 35

NAD 3020E

Ratel RA810A

Heybrook H81

Mission 761

NAD 3130

NAD 3240PE

Rotel RA8208X3

NAD 3225

Ratel RA8408X3

Ratel RA8708X

AR 122

Heybrook

DM550

Gale GS210

Ratel RA8208X3

Mission

KEF

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Musical Fidelity

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Quad

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Demon DCD 1520/2 extra £488.00 Marantz CD 582 extra £52.00

Marantz CD 65/2 extra £136.00 Marantz CD 65/2 SE extra £179.00

Marantz CD 75/2 extra £175.00 Marantz CD 75/2 SE extra £221.00

NAD 5220 extra £191.00 NAD 5240 extra £162.00 NAD 5320 extra £154.00

Ratel RCD 8208 extra £102.00 Rotel RCD 8208x2 extra £136.00

Yamaha CD x 4 extra £136.00 Yamaha CDX 710 extra £136.00

Yamaha CDX 810 extra £179.00

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World Radio History
with most vocals. Its presentation was gentle, subtle rather than brash or forward and in this respect very listenable. Nevertheless those who have a desire for an immediate or hard-hitting sound from disc will be disappointed.

Via the conventional analogue CD input (using a Musical Fidelity Digilog), this amplifier sounded notably rough throughout the upper octaves while also slightly leaden in the lower registers. However, using the digital input with an Arcam D170 transport mechanism brought about a welcome improvement in both the delicacy and poise of subtle treble details. Odd as it seemed, the 630's analogue input actually sounded more 'digital' than the digital (PDM) input! For instance, this quality was highlighted by the improvement in timbral definition of the solo clarinet from the gold CD of Art Blakey & the Jazz Messengers' I Want to Talk About You. Through the analogue input, the light texture of this instrument appeared slightly rough and flat, despite sounding fuller and more natural via the PDM converter. Nevertheless these comparisons served to reveal no profound difference between either analogue or digital input, implying that the subsequent amplifier section was acting as an effective mask.

Consequently the reconstructed PDM signal was routed via the tape output of the 630 and into my usual reference system comprising PIP pre-amp, Deltec DPA50S power amp, and Magneplanar 2.5R loudspeakers. Listening tests were also performed with an experimental, outboard, version of the PDM converter, removed completely from the influence of the Sony amplifier. The amplifier itself warmed up fairly quickly; however, the PDM converter optimized only after a couple of hours of actual use.

Via this 'isolated' PDM converter the powerful, dynamic sound of Yello's Race was portrayed as never before. Bass of the Sony amplifier. The amplifier itself also performed with an experimental, and in this respect very listenable. Nevertheless those who have a desire for an immediate or hard-hitting sound from disc will be disappointed.

Conclusion

I would scarcely have thought it possible but, assuming this PDM D/A converter is at least partially representative of the breed, all multiple-bit CD players, high-end or otherwise, are likely to become obsolete over a very short period. A bold statement, perhaps, but all who have heard the potential of PDM will not easily forget its subjective prowess. Clearly Sony is less convinced of the potency of this conversion system, otherwise they would surely not have hidden it away in an integrated amplifier!

Today's PDM is rock-bottom technology, cost-effective CMOS chips designed to run with cheap crystal oscillators on an equally basic 5V supply. Limited only by the speed of commercial CMOS chips it is conceivable that the current 11.2896 MHz sampling rate may be elevated by increasing the degree of oversampling. If, at the same time, the order of the noise shaping was also increased (say from 2nd, 3rd to 4th order) then the potential resolution of such a converter could easily exceed 20-bits or more. All this while still retaining the undoubted benefits of a monotonic 1-bit converter.

At £350 Sony's TA-F630ESD is a gift. Think of it as quite the best outboard D/A converter yet built but accompanied with a free integrated amplifier, and few listeners could fail to be delighted.+
CASTLE WARWICK LOUDSPEAKER

How much loudspeaker do you expect to get for £169? At 465x250x230mm (hwd), the Warwick is a somewhat bigger box than is currently fashionable at the price; and once the neat, wooden-framed grille has been removed, the speaker looks very much the traditional Castle product, due to the company's continued use of its own drive units. Behind the gauze-like cover, the tweeter has a dome product, due to the company's continued grille has been removed, the speaker box than is currently fashionable at the Warwick is a somewhat bigger get for £169? At 465x250x230mm (hwd), the Warwick is a somewhat bigger.

LOUDSPEAKER

of about 110mm. The enclosure is reflex foam type), has an effective cone diameter while the bass/mid (a new soft rubber surround replacing the old Castle plastic element of around 17mm active diameter, 80-170MHz, resulting in a noise-floor modulation of +22dB (max) between 2-20kHz.

This breach of the input filter has been closed with a further RC network, comprising a very low value polystyrene cap and Roederstein metal film resistor, mounted at the very input to the 8000P amplifier. This is a 1st-order filter with a −3dB point set at 6MHz!

My initial listening tests indicate that the revised 8000P benefits from a sweeter, smoother treble that is both less grainy and less fatiguing while also appearing to offer a greater detail resolution throughout the upper octaves. The sensation of stereo depth and musical

'warmth' is also somewhat improved.

There is absolutely no discernible difference in the conventional closed-loop measurements between original and modified 8000P amplifiers. Nevertheless there is a considerable subjective difference between the Id and the new 8000Ps, a difference that correlates firmly with a change in the RF noise-modulation plot first published last month. This second plot highlights Audiolab's excellent suppression of the original 117MHz resonance while still betraying some 2-3dB of the earlier 70MHz breakthrough (note that the z-axis should be calibrated in divisions of 20MHz from 0-200MHz).

On listening, it was immediately obvious that the overall balance was a little on the lean side, but it was not over-bright. The speakers proved quite good at resolving clues to the size of a recorded acoustic, and, on reasonably reverberant recordings, conveying the sense of space around solo instruments reasonably well too. On a BBC Radio 3 male spoken voice, though, the Castles made the presenter sound lightweight and slightly thin-toned, failing to provide all the ambient information necessary to bring him to life. By this test, the mid-range was thought reasonably neutral if lacking ultimate lucidity, but there were signs of some 'reedy' and hollow-sounding colorations and there was clearly a limit to the amount of low-level detail that the speakers could produce.

Inevitably, the Castle Warwick has to be compared with the Wharfedale 505.2, which offers a little less box if rather more technology for the same money. Only marginally less sensitive (86dB/W as against Castle's 88dB/W), the Wharfedale offers good dynamics and a generally punchier sound, which, combined with its neutral and detailed midband, make it the better all-rounder. But the Warwick's dry and even 'polite' quality did suit most classical programme material, refusing to get too muddled or harsh with large orchestral forces. Apart from this, the Warwick offers a light-footed rhythmic clarity which made chamber music and solo piano very enjoyable too. In fact, the freedom from sluggishness in the lower registers means that the Castles will help almost any music will bounce along happily. The exceptions are the categories of rock which rely on the visceral impact of heavy bass. That neat gold Castle badge had noted (HFN/RR June '89) by plotting resonance, centred on 117MHz, which I tor in the input RC network was found to be responsible for an 80MHz breakthrough (note that the z-axis should be calibrated in divisions of 20MHz from 0-200MHz).

The upshot is that Audiolab's highly-respected 8000P now sounds even better; existing owners can also benefit from this very simple but effective upgrade: contact Audiolab for details.

Steve Harris

Supplier: Castle Acoustics Ltd, Skipton, North Yorkshire BD23 2TT. Tel (0756) 5333

AUDIOLAB 8000P POWER AMPLIFIER: AN UPDATE

Following my recent study of Audio Frequency/Radio Frequency Intermodulation, Audiolab the quietly confirmed RF resonance, centred on 117MHz, which I had noted (HFN/RR June '89) by plotting the line input impedance vs frequency across the UHIF region. The inherent series inductance of the twisted-pair input cabling plus the inductance of the capacitor in the input RC network was found to be responsible for an RF bandpass of 80-170MHz, resulting in a noise-floor modulation of +22dB (max) between 2-20kHz.

This breach of the input filter has been closed with a further RC network, comprising a very low value polystyrene cap and Roederstein metal film resistor, mounted at the very input to the 8000P amplifier. This is a 1st-order filter with a −3dB point set at 6MHz!

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Paul Miller

Supplier: Audiolab, Cambridge Systems Technology Ltd, 26 Roman Way Industrial Estate, Godmanchester, Huntingdon PE18 8LN. Tel: (0480) 55221

Audiolab 8000P Power amplifier (earlier production): RF noise floor modulation

Same test on current-production 800P, showing suppression of noise-floor modulation effects

80

10-11 NEWS & RECORD REVIEW AUGUST 1989
MUSICAL FIDELITY
A370 REVISITED

The A370 has enjoyed several years production, with the serial numbers approaching 450 at the time of writing – a pretty successful run for an amplifier in this price and power class (£2250, 185W/channel). Fully reviewed in HFNR/R in Sept ’86, it was reassessed in Jan ‘88, and despite a subsequent revision through 1988 have lead to this reappraisal for the ‘89 series. Some basic power checks have been carried out, but the bulk of the assessment concerns new listening tests and a check on the standing output-stage current.

Originally and erroneously presented as a Class-A 185W/channel power amplifier, this description has been amended, and a fairer one would be ‘enriched Class-A/B’, implying a higher-than-usual level of Class-A bias for low-level signals. A check on an output device showed a 60mV drop across the 0.47ohm sensing resistor, representing a current of 128mA. Given the parallel-connected, one per phase output MOSFETs, this allows for an equivalent standing-current reserve of 0.9A RMS, or 6.5W into 8ohms. The A370 in consequence runs a little cooler than in its predecessor, probably improved at 63%, this equalled at a lower power level, and with a far poorer current reserve. The bass was high-class, with real slam and depth, a sound which comes from a massive power-supply properly exploited. Articulate and tuneful, the bass was also correctly dry and controlled. The tonal quality was improved through the mid, with string-tone increased in sweetness and definition. Overall tonal balance remains slightly thin and forward – an aspect clearly illustrated by MF’s own MA100. The treble was also considered to be of equally high quality, with very good detail resolution, a low incidence of grain, edge, or sibilance, and only a mild loss of precision registration and focus with the matching formant sounds. Compared with the new top references, the treble was considered to be slightly ‘laid back’. Stereo images had very good width, fine depth, and pretty good perspectives. The whole presentation was imbued with a sense of driving power and good instrumental definition.

As an example of a mainstream amplifier, the current A370 is admirable. Competitively priced for its considerable power output and dynamic range, it continues to set an enviable standard which suits all kinds of programme, and has the ability to maintain this performance over a wide range of loadings. Martin Collins

ROKSAN SHIRAZ LAB MEASUREMENTS

Following the review by Alvin Gold of Roksan’s Shiraz Cartridge (HFNR/R, June 1989: see also the summary on page 53 of this issue) which included Chris Bryant’s measurements on a current Artemiz arm, we are now able to complete the picture by including Chris’s measurements on the Shiraz itself.

Roksan Shiraz cartridge: frequency response and stereo separation

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HARMAN/KARDON PM635i AMPLIFIER

‘High Instantaneous Current Capability’ (HIC) remains the byword for Harman/Kardon’s amplifier range, in which, after some small but possibly significant design changes, the popular PM635 was replaced by the PM635i.

High current capability is said to allow for the instantaneous changes of impedance in a loudspeaker during music reproduction, which (according to the results of research carried out some years ago by Marić Otača) can result in a demand for three to six times more current than that needed to drive the nominal 8ohm resistive load. If the amplifier cannot deliver this, dynamic range will be reduced and distortion increased. It has to be said that most manufacturers do not boast of high-current capability, considering it intrinsic in their designs.

H-K’s quoted 18A instantaneous current for the 635 is presumably now seen as overkill, since the figure is reduced to 15A for the 635i. Outward changes affect the control knobs, now of a ‘squared’ design, and the use of selector switches instead of push buttons.

There are new input/output facilities, including tape dubbing and a spartan video input: a pity H-K could not have added a moving-coil phono at the same time. Smoothing capacitors have been increased from 6800 to 8200µF, and other components have been uprated.

In terms of sound quality, the old PM635 was very good, with an ‘accurate’ sound that seemed to encompass the whole musical spectrum without strain; however, it could sound slightly hard for some voices. Turning to the new 635i, the difference was small and not immediately obvious. It has a slightly brighter quality; when pressed to the limit, the new model seems slightly more ‘composed’ than the older. Very high instruments (such as triangle) sounded cleaner, but the effect was regarded as slight. However, the PM635i’s new facilities are useful enough to make it a thoroughly good replacement for what was already a very reasonable product.

Michael Powell
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by Sorrel Breunig

It is impossible to categorize Steven Isserlis, and that pleases him. (Attempts have been made, of course, ranging from 'a cellist's cellist', to 'the Rupert Everett of the cello'!) The natural exuberance and quiet reflectiveness of his personality combine to make him an artist of great diversity.

He made his recording debut in 1985 with the two Brahms Cello Sonatas for Hyperion. The signing of an exclusive international contract with Virgin Classics last year means that he now has a busy schedule — with the possibility of three or four recordings a year — bringing his work to a much wider audience but with it, publicity. He has particularly strong views about that, and is reluctant to become involved in the current trend for marketing artists.

'I think people can be marketed. Obviously, you need people to know about you, to know your records are being made. You need a certain amount of publicity — how it's done is the main thing. I think artists ought to be careful. I don't want to sound self-righteous, and then for an awful advertisement to appear of me! But I think one should make sure that all publicity is something to do with what one is. It is possible to write interestingly for everybody about music, but clothes and that sort of thing have got nothing to do with music. A person I refer to, who has an almost ideal career, is András Schiff. Or, for instance, Murray Perahia, somebody who's respected by all musicians: there's a lot of publicity about him, but it refers to the music. Both of the have a special understanding of certain sorts of music and it's all to do with that.'

Beginning his recording career comparatively late has meant that he did not have the pressure of being 'hyped' when very young, and for that he is grateful. 'I suppose the pressure was on me to play a different way. I got a bit labelled, when the Brahms Sonatas came out, with the gut-strings thing. I got a lot of flack about it. Well, I had some good and some bad reactions and, again, it was pigeon-holing me so I made sure it wasn't mentioned again. Nobody can criticize me now for that, because nobody knows what strings I play on. No critic ever mentions it.'

About not recording earlier in your career — did you deliberately hold back from it? 'No — it just didn't happen really. It wasn't for a long time that I was thinking about recordings. Well — I was very nervous about it for a long time, I suppose. But then when I recorded the Brahms Sonatas, it was with Andrew Keener producing, which was very nice [a collaboration, which happily, was able to continue with later Hyperion recordings, and on EMI: the Britten Cello Symphony with Bridge's Oration] and I suppose I've relaxed a bit after that and each time it becomes easier. Basically, I enjoy it now. If it goes well, very much! I used to be very scared of microphones. I used to think "God, I mustn't make a mistake". That's the point of a good producer, it sort of frees you, and you don't have to think about that. He notices the mistakes, you just think about the music. So I do as many complete takes, big chunks, as I can — most people hate patching. I'm just trying to give performances.'

You chose the Elgar Concerto for your first recording with Virgin. It is, presumably, a work you were very familiar with from your concert performances? 'Yes. It was an obvious first choice for Virgin. We planned it together, I can't remember whether I or they suggested it.'

How do you decide when you are ready to record a work like that? 'I suppose when you don't come off the concert platform seething with frustration every time you play it, its original coupling was going to be the Schumann; that was my idea, which Virgin talked me out of; they didn't think it was a good coupling. I'm still not sure that it isn't a good coupling, but I am very glad that they talked me out of it, because I don't think that I am ready yet to record the Schumann. I certainly don't feel ready to record the Bach Suites or Beethoven as a brilliant soloist with a particularly fine gift, too, for ensemble work allowing him to express his wide-ranging musical interests.
Kim Walker —

Bel Canto Bassoon

'Bel canto' literally 'beautiful singing', is the Italian vocal art characterised by beauty of tone, lyrical and graceful phrasing, and a seemingly effortless technique.

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was written in the middle of the war, wouldn't normally bring such extra-musical word that always comes into my mind when of playing. But I wouldn't approach it affected every phrase.'

"I do hope that I took everything that I did with the Britten and Bridge you recorded. Every time I look at any bar in the piece.'

"I'm not sure. But I must say that the one work, it is ... regret. Regret of its time — all that was lost in war. I'm not thinking "regret" every time I look at any bar in the piece."

"There is a connection there of course, with the Jewish people. I think that's something that's always come into my mind when I play it ... regret. Regret of its time — all that was lost in war. I'm not thinking "regret" every time I look at any bar in the piece."

"Well, in fact, those three works — and I wouldn't normally bring such extra-musical associations to works necessarily — are all eleged for war, I think. But that's coincidence. I really don't think of that of a lot of music. The Poulenc Sonata, for instance; that was written in the middle of the war, but it's certainly not a war-like piece at all. It's very accessible; it's certainly not a war-like piece at all."

"I'm not sure. But I must say that the one work, it is ... regret. Regret of its time — all that was lost in war. I'm not thinking "regret" every time I look at any bar in the piece."

"I have a project with Virgin to do quite a lot of that. Again, it's unknown stuff. It's not great music, but music that gives pleasure, wonderful music in its way."

"I suppose my enthusiasms spread! I also love contemporary music. John Taverner has written a piece for me — The Protecting Veil — it's a gorgeous piece, stunning music. That was the only work we asked him to perform at the Proms on September 4th with Oliver Knussen conducting."

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Sorabji Sessions

If music is, as most people would agree, an art based on communication, the case of Kaikhosru Shapurji Sorabji is indeed a stretch. He had never attempt to attend those performances of his works, and in 1956 forbade any performance without his explicit permission. Until his death in 1988, he did not deign to visit his pianists — two of whom (Petri and Cortot) never played any of his music in public — three organists and three singers. Yet his music has aroused the highest admiration in many musicians who have read the scores, and in the few people who, to date, have heard any of it. So why the silence?

Sorabji was born in 1892 in Chingford, Essex. Privately educated, he began piano lessons with his mother at the age of six and was mostly self-taught from his mid-teens on. His musical tastes were broad, and he was familiar with much new music of the early 20th-century long before it became widely known. He began composing around 1914, and his early works were influenced by (among others) Scriabin, Szymanowski, Godowsky, and Busoni. Performances of these, mostly by himself, were rare, but many commentators were much impressed by his compositions.

In June 1930 he completed Opus Clavis, dedicated, 12 pages in manuscript of some of the most extraordinary piano music ever written. The composer himself said of the final sections 'The harmony bites like nitric acid and the counterpoint grinds like the mills of God'. Four fugues, a theme and 49 variations, a passacaglia and 81 cadenzas, framed by an introit and a coda crenellate, make up the work, in a structure not unlike Busoni's Fantasia Contrapuntistica. Playing for some hours, it is not to be taken lightly, but what really sets OC apart is the perfectly unique sound world it occupies.

In 1957, while at the Royal Northern College of Music, John Ogdon was given a score of OC by Peter Maxwell Davies, then a fellow student. Ogdon's phenomenal technical and musical vision soon absorbed the work, and in 1959 he played it to its dedicatee, the great Scots poet Hugh MacDiarmid. Twenty-five years later, Chris Rice found this hard to accept; 'I don't believe that he was never interested in performances. He was principally concerned about bad performances giving people the wrong idea of the music.' Indeed, Sorabji wrote in his music being 'unsuitable for performance under present, or indeed any foreseeable future, conditions. No performance at all is preferable to an unsuitable performance.'

The sessions were a low-key affair, involving only Ogdon, Rice (engineer and producer), and me (page-turner). Work was intense, with hardly a pause. The listeners found them particularly interesting; 'In work of this long-term flow of the ideas. The sonorities of OC are its most striking and memorable feature. They operate in a similar way to those of Messiaen, and have a comparable transcendental quality. Ogdon finds them particularly interesting. 'In working on OC, I have tried to develop a more incisive sound to deal with the complex chords and make the counterpoint work. Use of the pedals is very important, too. I use as little as possible in the fugues, to keep the textures clear. Some of the textures remind me of Brahms, in fact. Brahms! There are also echoes of Hindemith in places, which is probably coincident.'

Why did Sorabji not wish his works to be performed? Hinton knew Sorabji well for many years, and found that 'He didn't seem very interested in performance, and although he helped the budding performer try to play his music and whom he thought capable of doing so, he had no wish to attend their performances and risk making a spectacle of himself'.

Sorabji's profound understanding being communicated through his own music? Let us hope that the miracle will spread.
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## Information

CLASSICAL REVIEWS are based on the Compact Disc, unless indicated (CD). The catalogue number is followed by total playing time, and equivalent LPM (MusicaDisc) numbers. The catalogue number with a hyphen, eg, on LP — now CD, or LP release. RECORD POP/JAZZ REVIEWS are based on the LP, unless shown: CD. Equivalent MC number is given in brackets. (XR: MusicaDiscs 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 1* — denotes outstanding quality. © HI-FI News & Review
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SORABJI: Opus Clavicembalisticum
John Ogdon (pno)
Altarus AIR-CD9075 (4CDs, 284m 39s)

This is spoken of as Sorabji's masterpiece, which seems rather glib considering how little of his music we know and how much less we know of his vision. Certainly, there is no question of course; yet one does wonder about, say, the 1000-page 'Jami' Symphony or the Symphonic Variations for piano, said to last for six hours. Actually, the first idea to be got rid of is that Opus Clavicembalisticum is an unending orgy of post-Romantic hyper-virtuosity. In view of Alkan's Etudes Op.39, or the 1838 version of Liszt's Etudes d'Exécution Transcendante, it cannot be said that the executive demands it makes are quite without precedent — although length is indeed another factor. Something approaching five hours (with intervals) is not considered excessive by listeners to certain operas, but an immense strain is there imposed on a lone pianist (even with intervals). Whether we are thinking of Ogdon's concert performance in London last year, or the above recording, done in only three sessions, this is one of the great pianistic feats of our time. The problem is level of performance: and the first step is to grasp that it is far from being a pianistic triumph only. OC is an exceedingly difficult work not just to play but also to understand as a whole, and if there is something more astonishing here than Ogdon's performance it is his musical insight, sustained over vast stretches of terrain. True, he has been playing OC for a large part of his life, and the admirable (also seizable) booklet included with this boxed set has photographs taken at a private performance that he gave 30 years ago for, among others, the work's dedicatee, Hugh McDiarmid. Some passages, such as the second section of the fourth Fugue, are storms, one might say hurricanes, of notes, yet although OC is tightly packed with incidents it contains passages of the most striking simplicity, such as Variations 60 or 74 of the Passacaglia. There are other again, like Variation 63, which are not simple but are completely unadorned. In fact virtuosity in any ordinary sense is not an issue in OC's four Fugues, which include what are, musically speaking, this work's most difficult-to-comprehend pages yet also finally its most rewarding. Fugue III, nearly the longest movement, is particularly demanding and I had to go back to it repeatedly in the course of preparing this review. Though scarcely providing the score's most spectacular moments, these fugues contain Sorabji's most original thinking here, and, while each has a character of its own, each rises to great intensity. Ogdon's projection of the form of these pieces, especially Fugues III and IV, is probably the most remarkable single aspect of his interpretation of this often sparsely marked score. If OC is anything to go by, Sorabji's fugues are very much a question of counterpoint first, and harmony second. At the opposite pole to them are the two huge variation movements, which at the deepest level arise from harmonic considerations. Although the Adagio which forms the second part of the second Interlude contains what is perhaps, in any conventional sense, the work's most beautiful music, now related to OC which means practically all of us — would do best to start by repeatedly listening to the twin sets of variations. One, a theme with 49 variations, makes up the first Interlude, while the Passacaglia, which has 81 variations (cf the first movement of Organ Symphony No.1, reviewed here in May), follows the Adagio. With great immediacy they present very many aspects of Sorabji's composing, not least the seemingly inexhaustible invention of his piano writing.

Even when we have made progress in absorbing the sometimes densely concentrated original contrapuntal thinking of the fugues, and the bewildering diversity of the variations, problems remain both for listeners and for this composer's as yet few interpreters. These arise from OCs (and his other works') lack of an evident background. In part this is a matter of our ignorance of Sorabji's output as a whole, but also of our lack of knowledge of the origins of his style and methods. No.18 in the first variation set always reminds me of one aspect of the music of Bernard van Dieren, yet such echoes from elsewhere are precious few in these 252 pages. Except for Busoni. It would not apply, I think, to Sorabji's other pieces, but if one crucial work prefigures Fantasia Contrappuntistica. Certainly important aspects of OC are missed if one is unacquainted with that earlier work. Even if oblique, Sorabji's repeated reference to it is significant and deliberately — comparable in fact to the allusions to Beethoven's Hammerklavier in Barraqué's Piano Sonata and Brahms' Sonata Op.1. As traced by Ronald Stevenson's helpful analysis of OC in the accompanying booklet, Sorabji's references go beyond the Fantasia to Doktor Faust and Violin Sonata 2. I find myself reminded of Busoni's Elegies urgent points also. Whether Sorabji had these other Busoni pieces consciously in mind, as he unquestionably did the Fantasia, is of course, another matter. But he in no sense worked in Busoni's shadow, for one can hardly imagine a score of more disconcertingly complete originality than OC. The need to know other major compositions of his becomes urgent.

BARTOK: String Quartets 3-5
Chilingirian Qt
Chandos CHAN 8634 (67m 40s) (also LP/MC)

The Chilingirian's Bartok series is being released in sequence — Quartets 1 and 2 were reviewed last August, Six is promised for the Emersons. [A:1] Kenneth Demmott

BEETHOVEN: Symphonies 1-9 □ Symphonies 6 & 10
Chandos CHAN 8712/17 (4CDs, 414m 43s) (also 6LP/MC)

My very first experience of Walter Weller as co-reviewer ended predictably in persuading us that these are not difficult works, as, for example, the Emersons did. Perhaps we should have been more aware of the technical problems; they may well reflect the stresses inherent in Bartok's music. Certainly, one does get a feeling of struggle, especially at the outset of 4 and during the initative exchanges that characterize the last. Occasionally, too, the near-perfect unison of the four players falters at the fastest speeds — and some are very fast indeed. With the recent reappearance of Buso on the Linden recording, and existing sets by the Takacs and Alban Berg, lovers of these quartets are well catered for. These Chilingirian performances stand very high on the list though still surpassed in all-round brilliance by the Emersons. [A:1] Max Harrison

RECORD OF THE MONTH

BALAIKIREV: Sonata/MUSSORGSKY: Pictures at an Exhibition/SCRIABIN: Sonata Op.1
Ronald Smith (pno)
Nimbus NI 5187 (65m 58s)

The Ninth is the most concentrated of Scriabin's sonatas and as such it remains beyond the grasp of many pianists. While producing a beautiful sound, as in the molto meno rivo section, Smith is sometimes just a bit five hours (with intervals) is not considered excessive by listeners to certain operas, but an immense strain is there imposed on a lone pianist (even with intervals). Whether we are thinking of Ogdon's concert performance in London last year, or the above recording, done in only three sessions, this is one of the great pianistic feats of our time. The problem is level of performance: and the first step is to grasp that it is far from being a pianistic triumph only. OC is an exceedingly difficult work not just to play but also to understand as a whole, and if there is something more astonishing here than Ogdon's performance it is his musical insight, sustained over vast stretches of terrain. True, he has been playing OC for a large part of his life, and the admirable (also seizable) booklet included with this boxed set has photographs taken at a private performance that he gave 30 years ago for, among others, the work's dedicatee, Hugh McDiarmid. Some passages, such as the second section of the fourth Fugue, are storms, one might say hurricanes, of notes, yet although OC is tightly packed with incidents it contains passages of the most striking simplicity, such as Variations 60 or 74 of the Passacaglia. There are other again, like Variation 63, which are not simple but are completely unadorned. In fact virtuosity in any ordinary sense is not an issue in OC's four Fugues, which include what are, musically speaking, this work's most difficult-to-comprehend pages yet also finally its most rewarding. Fugue III, nearly the longest movement, is particularly demanding and I had to go back to it repeatedly in the course of preparing this review. Though scarcely providing the score's most spectacular moments, these fugues contain Sorabji's most original thinking here, and, while each has a character of its own, each rises to great intensity. Ogdon's projection of the form of these pieces, especially Fugues III and IV, is probably the most remarkable single aspect of his interpretation of this often sparsely marked score. If OC is anything to go by, Sorabji's fugues are very much a question of counterpoint first, and harmony second. At the opposite pole to them are the two huge variation movements, which at the deepest level arise from harmonic considerations. Although the Adagio which forms the second part of the second Interlude contains what is perhaps, in any conventional sense, the work's most beautiful music, now related to OC which means practically all of us — would do best to start by repeatedly listening to the twin sets of variations. One, a theme with 49 variations, makes up the first Interlude, while the Passacaglia, which has 81 variations (cf the first movement of Organ Symphony No.1, reviewed here in May), follows the Adagio. With great immediacy they present very many aspects of Sorabji's composing, not least the seemingly inexhaustible invention of his piano writing.

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BEETHOVEN: Symphonies 1-9 □ Symphonies 6 & 10
Chandos CHAN 8712/17 (4CDs, 414m 43s) (also 6LP/MC)

My very first experience of Walter Weller as...
BEETHOVEN: Piano Sonatas — in d, Op.31/2 'Tempest' D  Waldstein D Les Adieux in g, Op.79
Maurizio Pollini
DG 427 642-2 (72m 03s) (also LP/PMC)

A thicket in the path of the analyst, this disc offers sonatas we know and love in perform-
ances which need to be played quite loud if one is to appreciate the complexity of the music's
structure, which takes the listener on a comprehen-
sive journey. And only the ending of the very
last recitative in Op.31:1 (1) [155-8] really
'speaks'. Someone defined architecture as 'frozen music'. Here, we seem to have 'frozen music', Whatever the misguided, an assertive releve must be acknowledged — one with magnificent sound, though Pollini's occasional exhalations may disturb.

Christopher Breunig

BERLIOZ: Symphonie Funèbre et Triomphale/GOSSEC: Symphonie Militaire D Marche Lugubre/JARDIN: Over-
ture in C/CHERUBINI: Hymne à la Vic-
toire/LEFEVRE: Hymne à l'Agriculture/ ROUGET DE LISLE: Hymne à la Liberté
(La Marseillaise, arr. Gossec)
The Wallace Collection/Leeds Festival Chi
Wallace
Nimbus NI 5175 (57m 16s)

The Davis and Dutoit recordings of Berlioz's 'No.10' are triumphant, but otherwise are filled on 2CD sets, while Dondeyne's single-disc Paris performance (without chorus) is convincing. So, knowing of the Wallace Collection's rising reputation in the brass/ percussion field, one expects more of the rest of this Nimbus version. However, while John Wallace's team play with more professional aplomb than their French counterparts, and devote as much care to the music's instrumental detail as to its mighty climaxes, their brisk overall manner is disappointingly

The opening March takes 4m less than Davis/Dutoit and 8m less than Dondeyne, thereby abandoning all funereal dignity; and, despite Dudley Bright's fine trombone playing
the Oration is also rather hasty. As for the Apotheosis, while its choral ending is asser-
tively triumphant, the movement's jaun-
dy pace suggests more jollity than majesty. A newcomer to the work might well be impressed, but the general mood suggested here is hardly one of ceremonial homage to the revolutionary dead of 1805.

That was a minor revolution, but over half of this CD's time is devoted to an intriguing collection of music associated with the great 1789 event. The six pieces employ similar 'open-air' instrumentation, but feature a mixture of styles stretching back to the Mozartian wind serenade. All are played with conviction and precision, plus fine contributions from the two brass groups.

John Crabbe

BRITTEN: Simple Symphony/JANACEK: Suite/SUCHON: Serenade
Slovak CO/Warchal
Opus 9350 1773 (46m 5s) (Raré Records)

An attractive programme, a bit short on time perhaps, but imaginatively put together and very well recorded. Opus is the Slovak record outlet based in布拉索夫, though this, independent of Supraphon/Panton which is centred in Prague. Their set of Schmidt works is quite

William Wallace
further evidence of the excellence of Czechoslovak string playing. Britten's little frolic is a great favourite there, and this is a shapely and engaging account of it. Janacek being a Moldavian is claimed by both sides, but his sympathies lay closer to the Slovaks than to the more Westernised Bohemian (Czechs, and this early Suite, not too often heard because it lacks much of the individuality of the later music, is both attractive and skilfully set out. So is Eugen Suchon's Serenade: Suchon, together with his contemporary Cikker, is among the few Slovak composers to have penetrated far beyond their national frontiers. He used to be represented on record by his opera Sratopluk but this Serenade is now his only one showing on British lists. Opus have some important examples on record so perhaps the distributor can persuade them to release a representative sample. [A:*]

Kenneth Donnett

BRITTEN: Albert Herring

Pears/Fisher/Cantelo/Peters/Brammigan/ Ward/Wilson/ECO/Britten

Decca 421 849-2 (2CDs, 137m 56s) © 1964

BRITTEN: Billy Budd □ The Holy Sonnets of John Donne □ Songs and Proverbs of William Blake*

Pears/Glossop/Langdon*Fischer-Dieskau/ Ambrosian Opera Ch/LSO/Britten

Decca 421 428-2 (3CDs, 204m 55s) © 1965, *1957

BRITTEN: The Prince of the Pagodas □ Diversions for piano and orchestra* Royal Opera House Orch/BrittenJulius Katchen *pno*/LSO/Britten

Decca 421 855-2 (2CDs, 124m 55s) © 1957, *1954

(CD) transfer for Decca's Britten discography seems like a slow process, but at least it is eventually complete one. That much is clear when The Prince of the Pagodas is part of the latest batch. It was the first of Britten's recordings to be made in stereo (the Diversions, recorded in 1954, are in plain sturdy mono, without electronic trimmings, though that isn't made clear anywhere in the notes) and sets an honourable precedent for the Culshaw delights to come. Only the string sound and tape hiss gives any hint of its vintage, and the bass is fuller now that I remember it on the Ace of Diamonds reissue. The performance energetic, sharp-edged and not without a certain wide-eyed magic for the Salamander's mysterious manifestations - belies the composer's poor opinion of his ballet, and it's probably the nearest we shall come to a full assessment now that Michael Lankester's substantial selection has established itself outside the concert hall (there are a few cuts here). Your response will depend upon how authentic a 'Britten experience' you demand from the source. I don't recognize his personal stamp on much of the music, but it is fascinating to hear brilliantly orchestrated pastiche which takes into account early as well as late Prokofiev, Bartok's Wooden Prince as well as his Miraculous Mandarin, the Stravinsky of the Rite, Apollo and Agon. The Four Kings' dances show the collage-method at its most dazzling; exuberance has run, decidedly, thin, though, in the tepid parody of the Act 5 Pas de Six. The dramatic scenes offer instrumental colour without much substance (the elements of Act Two, Scene One, or inspired tributes to

Tchaikovsky's skill at effecting transformations with simple means. A curate's egg, in short - and that doesn't even begin to take account of the gamelan music, which is on another level altogether, and cunningly fused with the action. [A:B:1]

The two operas show Britten's conducting respectively at its incisive peak and (understandably) reticent second-best, which is still very good indeed. One marvels at the rich textures of the chamber forces in Albert, with never an accent missed or a punch pulled. The lad's apronstring angst becomes something to take seriously: Pears is at his fullest in the expansive longings of I (i), and when his disgust after the fete seems almost too clean-as-a-whistle still, the instrumentalists powerfully urge his busting out. Little wonder, perhaps, that Britten the conductor shirks the murky depths and shining peaks of Billy Budd as if he were almost afraid of what his unconscious has brought forth. The hint of reserve in the disturbing twilight of Herring 2 (ii) is extended here to the first E-flat clearing of the clouds in 'Blow her away' and Vere's defusive confidence before Cogartner's accusation of Billy. Even so, the unerringly precise writing for woodwind and brass is clearly etched and remains in the mind long after the immediate impact of the performance.

Pears, sounding much less secure in the upper reaches now, rises to Vere's crisis with a memorable fluctuation between repression, dark authority and anguish; Glossop, too, reserves the gamut of his tonal palette for Billy-as-redeemer. Michael Langdon's bass may be the colour of Claggart to the life, but at neither dynamic end of the scale does he manage to suggest Forster's poisoned sexual discharge. Perhaps, in a clearer-speaking age, we have been spoilt for more powerfully explicit characterizations. The supporting casts for both operas reinforce Britten's skilful characterisations - especially Robert Tear, fresh-voiced in the 'savage parade' which he manages to suggest Forster's poisoned sexual discharge. Perhaps, in a clearer-speaking age, we have been spoilt for more powerfully explicit characterizations. The supporting casts for both operas reinforce Britten's skilful characterisations - especially Robert Tear, fresh-voiced in the Novice's music (haunting, all of it) and John Shirley-Quirk's First Lieutenant on HMS Indomitable, Sylvia Fisher and Owen Brannigan combining humour and menace in equal measure as Lordfax's bussiesbodys, set against the flexible lovers of Catherine Wilson and Joseph Ward. There is the chilling presence, too, of Fischer-Dieskau in the Blake settings, providing a malignant counterpart to Clag- gart in the awesome climax of 'A Poison Tree'. [A:1] Herring, [A:B:1] Budd.

David Nice

BRITTEN: Les Illuminations □ 4 Chansons Françaises □ Serenade for tenor, horn & strings

Felicity Lott (sop)/Anthony Rolfe Johnson (ten)/Michael Thompson (horn)/SNO: Thomson

Chandos CHAN 8657 (58m 55s) (also LP/MC)

Beautiful, stunningly accomplished performances are combined here with a subtly-balanced recording which conveys just the right degree of nearness to voices and orchestra. The result is an outstanding disc, one of the best ever made of Britten's music. Never since Peter Pears and Dennis Brain have any pair of artists, in my experience, imparted such magic as do Anthony Rolfe Johnson and Michael Thompson to the most celebrated of all Britten's smaller-scaled works, the Serenade for tenor, born and strings. Indeed I am not sure if Pears himself ever ventured the subtlety of inflexion which Rolfe Johnson lavishes on Tennyson's echoes, 'dying, dying, dying'.

Felicity Lott takes on the French song-cycles Les Illuminations, to poetry by Rimbaud, with its sinewy and brilliant accompaniment for string orchestra. From her initial entry with its marvellously ringing attack (as the poet proclaims his ownership of the key to the 'savage parade' which he describes), she maintains a closely controlled yet thrilling artistry. The composer's optional low notes, reckoned too perilous for some sopranos, are confidently taken. As a bonus, Felicity Lott adds the four unfamil- iar French songs with orchestral accompani- ment which Britten composed before he was 15 (but which have only recently been published). They have an almost cloying richness which the composer discarded later, but who would wish to sacrifice them now?

Byrden Thomson is not the first name I would have mentioned among Britten conduc- tors, but no one could outrank him in his sensitivity here, nor in the response which he gets from the Scottish National Orchestra. [A:*1]

Arthur Jacobs
This is the suite Copland made in 1958 from his original 'pit orchestra' version of Appalachian Spring, written for 13 players and designed to fit comfortably into a theatre. Its advantages over the more familiar orchestral version are on the genuinely unerring luminosity of the music and its touching intimacy, much of which is distanced by large orchestras. The Symphony, with its heavy complement of winds, would seem to call for weightier strings than an orchestra of the size of Orpheus could supply, but in the event the mix is remarkably effective, and conforms to the composer's idea of it having the 'psychic clarity and immediacy of a jazz-inspired movement' where, as in several of the more lyrical symphonies, Copland devoted the symphonies, tone poems, and orchestral works — the first 78 sides, and (ii) (iii) were redone later that Spring — something of a precedent for what was to become a common technique. So, the EMI disc must have prior claim; but Sammon's, though the most dimly reproduced in these recordings from 1932, surely is the artistic personification of the composer's generally well thought-out tempi and his always sensitive approach. All these qualities are to be found in the symphony, Devon's sunniest and most Czech in feeling. There have been many excellent accounts of this, but Jarvi's is a very serendipitous moment of pastoral of the tone poems, receives a quicker in all three movements than the Menuhin orchestras all over the world, and the orchestras remain the artistic personification of the composer's in Germany, where Hayman labours to support the orchestras. Jarvi's is a very serendipitous moment of the orchestra again. This is the second account of his youthful and very impressionistic quintet to appear in the last six months. (Schiff/Talvac's Decca version was reviewed in April). What is the major influence operating on the composer — and Brahms's was a strong one — the individuality and power of the work and its deliberately undeniably. Decca's team, being Hungarian, brought a certain Lizstian dash to the piece, which the British team translates into a more generalised though not less persuasive passione. The Quartet, in the uncomfortable key of D-flat, is another early work dating from 1906 and a more typical example of Dohnanyi's work than the Sextet which Decca offers. It is an impressive and large-scale piece in the Brahmsian tradition, full of surprises and unexpected touches of a kind that make Bartók's admiration for Dohnanyi's music, as well as his organizing abilities, perfectly understandable. There is an alternative LP version by the Vienna Arts Qt on Schwann coupled with the first Quartet which has not come my way. Few, however, need be disappointed by this present recording and is a superb read. On the Gabrieli-Chandos partnership: [A:11] An admirably played and recorded programme. [A:1]: Kennedy Dommett

This brings to a conclusion Jarvi's series devoted to the symphonies, tone poems, and some overtures, a series distinguished by some memorable performances and fine recordings. Not all the CD versions have reached me, but those in that format have shown up a wealth of detail enhanced by the conductor's generally well thought-out tempi and his always sensitive approach. All these qualities are to be found in the symphony, Devon's sunniest and most Czech in feeling. There have been many excellent accounts of this, but Jarvi's is a very serendipitous moment of the orchestra again. This is the second account of his youthful and very impressionistic quintet to appear in the last six months. (Schiff/Talvac's Decca version was reviewed in April). What is the major influence operating on the composer — and Brahms's was a strong one — the individuality and power of the work and its deliberately undeniably. Decca's team, being Hungarian, brought a certain Lizstian dash to the piece, which the British team translates into a more generalised though not less persuasive passione. The Quartet, in the uncomfortable key of D-flat, is another early work dating from 1906 and a more typical example of Dohnanyi's work than the Sextet which Decca offers. It is an impressive and large-scale piece in the Brahmsian tradition, full of surprises and unexpected touches of a kind that make Bartók's admiration for Dohnanyi's music, as well as his organizing abilities, perfectly understandable. There is an alternative LP version by the Vienna Arts Qt on Schwann coupled with the first Quartet which has not come my way. Few, however, need be disappointed by this present recording and is a superb read. On the Gabrieli-Chandos partnership: [A:1]: Kennedy Dommett

Christopher Breuning
On the other hand, the more 'show-y' side gets the full Rattle razz-a-ma-tazz, and the music picks up accordingly - though the chorus is not especially well focused. This brings one to the question of Gereshwin's equivocal score. If, like Mazrael, one goes for the full operatic treatment, one can be easily convinced that the piece really has pretensions to 'grand' opera; whereas if one listens to the equally authoritative RCA version by DeMain, one is quite happy to settle for 'Super-Broadway' status. His is a view favoured by many Americans, and it certainly has its advantages, not least because it persuades us to overlook Duse's Heyward's sadly dated dialogue. Rattle seems to see it as America's Carmen but would like it to become Glyndebourne's Show Boat - the cynical might say musical comedy trying to become musical tragedy. Had he opted wholly for one or the other, preferably the latter, he might have been more successful. As it is, either of the alternative versions seems preferable, and dependent on where in the scale you place Porgy and Bess [A:2] Kenneth Domnott

by Mozart's or Prout's additions; it is absolutely complete; and the sound, with prominent harpsichord throughout, is excellently balanced.

In 1954 it could not be expected to have today's fashionable restoration of Handelian practices: double-dotting to make sharper rhythms, appoggiatura to avoid note-repetition, elaboration of melodic lines with trills and cadenzas, etc. Though I personally miss these, and find the recitatives slightly dull in consequence, I revel in much of this performance with its keen edge of sensitivity. 'And there were shepherds ...', slow and meditative, is followed by a huge excitement at 'And suddenly there was with the angel'. Margaret Ritchie fairly bubbles with enthusiasm at 'Shout, O daughter of Jerusalem'. Classification is hard: it would have been [A:1] in the 1950s, but... [perhaps B/C then? - Mus Ed] Arthur Jacobs

HANDEL: Carmelle Vespers
Jill Feldman, Emma Kirkby, Emily Van Evera (sop)/Margaret Cable, Mary Nichols (con)/Joseph Cornell (ten)/David Thomas

The other Handel contributions, including Das Nusch-Nuschi, a marionette play set in Burma, involves the seduction of the King's wives by his general and that luckless Luthien provided a score of, for him, unsurpassed opulence and diversity, full of colour and spectacular displays of compositional techniques. This recording, the first of the complete work, allows us to relish its youthful preciosity. It realises the promise of the Matteo Dalioachi who decorates the box cover, and though the cast is not uniformly excellent, the principal roles are well cast and characterised. The piece captures a storm of patriotic enthusiasm under Fritz Busch in Stuttgart in July 1921 because of a quote from Tristan in a...
context which made it seem derogatory to champions of the 'purity' of German Art. The producers have provided an English translation of the libretto, or at least some trite note on the genesis of the opera, but, surprisingly, no synopsis or translation of the libretto. [A11]

Kenneth Dommelt

HINDEMITH: Cardillac
Selisiert/Berliner RSO/Albert
Wergo WER 60148-9/50 (2CDs), 88m 30s

Das Nusch-Nusch may be Hindemith's most opulently scored opera, but Cardillac (1926) is possibly his most intellectually satisfying, the latter philosophical dramas Mathis der Maler and Die Harmonie der Welt, or the sestetonic Wilder piece The Long Christmas Dinner notwithstanding. This tale of the goldsmith, so besotted by his love of the material of his craft that he murders because of it, has echoes of a fictional Cellini, but Ferdinand Lion's libretto is more intense and more concentrated than that which De Wally and Barbier provided for Berlioz's opera on a similar theme. Cardillac was recorded several years ago by DG with a distinguished cast headed by Fischer-Dieskau. This new recording, part of Wergo's Hindemith Edition, can boast no star names – Siegmund Nimsgern, the Cardillac of Wergo's Hindemith Edition, can boast no

Stephen R. Cook

JANACEK: Taras Bulba D Sinfonietta
Slovak PO/Nazareth
Opus 9350 2013 (47m 55s)

Daniel Nazareth is an Indian conductor who graduated from the RCM, but I am ashamed to say that I had not previously heard of him. After listening to this record though I shall be on the look out for him, for these two Janacek staples, ideal companion pieces, have seldom sounded so thrilling, even at the hands of Mackerras or Rattle, or so grandiloquently recorded. The sound, engineered in Bratislava and polished in Austria, is extraordinarily vivid, as befits the most lavish of Janacek's scores. As it happens we also have a new Sinfonietta from DG with Abbado this month, but on pretty well all counts this more modestly packaged version wins hands down, though of the two pieces it is perhaps Taras Bulba which makes the greater impact. The ingenuity of Janacek's orchestration seldom has a chance to reveal itself so completely as here, where its carefully chosen grottoesque are able to make their point in glorious Technicolour, so to speak. [A11]*[1]

Kenneth Dommelt

JANACEK: Diary of One Who Disappeared □ Sinfonietta
Philips/Langel (ten)/Brigitte Bailleys (sop)/JPO/Abbado
DG 427 313-2 (58m 18s)

This version of the Diary is a curiosity. Janacek apparently considered staging the work, and such a performance was given in Ljubljana in 1926. In 1943 Ota Zitak and Vaclav Sedlacek, two people closely associated with Janacek, contributed an orchestral transcription of the composer's piano score which keeps unusually close to the original and retains much of the original flavour without trying to ape the individuality of its style. Zitak was the orchestrator and Sedlacek, who was Janacek's copyist, helped. The transcription was made for another stage performance given in Pilz but it has not to my knowledge been recorded before. Despite having been modified by Janacek, the solo tenor line remains fiercely demanding and Langridge sounds under strain at times but his performance has style. The Sinfonietta makes an odd coupling really, though it is hard to see what else of Janacek's would have made a better. It receives a good, straightforward, though not especially inspired reading from Abbado, but perhaps listening to it after Nazareth's splendid Opus recording worked against it. [A11][2]

Kenneth Dommelt

Eric Parkin (pno)
Abacus APA 402-2 (65m 07s) (Harmonia Mundi)

That I knew none of Kenneth Leighton's output before receiving this disc was clearly very much to my cost. There is fine music presented here, music at once tough, attractive, and pianistic (in the sense of suiting the instrument), but also probably powerful and emotional work, compara

Kenneth Dommett

MARTINU: Cello Sonatas
Hamish Milne (pno)
CRD CRD 3338 (54m 56s) CRD 3339 (60m 22s)

Medtner's is not music for pianists who seek facile success, least of all the Op.25 Sonata (1911), one of the outstanding sonatas from the early years of the century and among his greatest achievements. Grove's mention of 'overladen' textures applies only to the earliest works and to almost nothing here. Indeed, the links with Brahms and Schumann have also been exaggerated and, despite an occasional hint of Medtner's friend Rachmaninov, as in Op.112, all this music has a personal tone. His is a highly disciplined art yet one prolific in imaginative fantasy and, again with the Sonata Op.25 as an excellent illustration, some of its singular force, its feeling of constant growth, its
strong sense of direction, arise from the tension between these two. Given that his style is admirably conservatist, one can scarcely be unaware of the full-blooded and Romantic character of these pieces, their vitality and rhythmic variety — not least in the matters of syncopa-
tion and cross-rhythms — or of the contra-
pointal skill which shapes the rich textures.

The range is from Ophelia's despairing,
dislocated lament Op.1:1:1, with its harmo-
nic strangeness, to furious outbursts like Op.
35:4. Again, in either Milne's or Wild's
interpretation Op.9:3 surges like a spring
tide, as does Op.26:2, while Op.39:1 is
introduced like Busoni or late Liszt. Medt-
cr's Sonata Op.25 is the main exhibit,
however, making great interpretative and
technical demands and lasting 35 minutes.
Milne surpasses himself, and one can only
regret that he had not had the career to
work his gifts entitle him. The phenomenal
Wild has not exactly been greeted with open
arms by the major companies either, but,
with his vast technique and sensitive range
of colours, he is ideally suited to Medtner.
'In trutina' is delightful. In Op.47, which
though described as an improvisation is
another major piece, lasting 26 kaleidosco-
pic minutes. Indeed the Sonata Op.56 and
the particularly fierce Sonata Tragica, last of
the Op.39 set, are also of notable weight and
substance.

I would not be without any of these CDs,
but recommend CRD 34:9 first, because of
Op.15:3, then the Chusky because of Op.47.[A:1]
Max Harrison

MOZART: Clarinet Concerto* COPLAND: Clarinet Concerto/STRAUSS: Duet Certo

Richard Hosford (cl) Matthew Wilkie (hmn)/COE/Schneider* Fischer

ASV CD COE 811 (60m 19s)

A most effective piece of programming into
which Copland's concerto fits surprisingly
well. Its reflective opening blends nicely
with Mozart, and its angular finale makes a
good foil for Strauss's creamy harmonies. For
Mozart Hosford takes up the basset-clarinet
and gives a performance of style, less intro-
verted than some but with a poised slow
movement and a bright finale. Schneider is
the conductor here, and a very sympathetic
one, with the COE in excellent form. The
rest of the programme is conducted by
Thierry Fischer. Copland receives similar
treatment, luminous and intimate to begin
with, the cadenza flowering convincingly
into the 'crudeity' of the finale. Balance
between soloist and orchestra is particularly
good here; with the sinfully tone-deaf
aspect of the soloist tends to throw him into high
relief. Strauss's intimate little Concertino is
more draped and restrained, with some lovely
playing by Wilkie. This kind of Strauss is not
to all tastes, but the assertion that his late
work tended to be a tired attempt to
recreate past glories is scarcely borne out by
this delightful music.[A:1]
Kenneth Dommett

MOZART: Opera and Concert Arias

Olaf Bär/Dresden Staatskapelle/Vonk

EMI CDC 749 5652 (54m 25s)

A well-balanced recital of 14 baritone arias,
from La finta giardiniera, Figaro, Don

Prokofiev's Piano Concertos 1 & 2 — excerpt

Vladimir Feltsman (pno)/LSO/Tilson

Thomas

CBS CD 44818 (54m 18s) (also LP/MC)

Prokofiev's acid wit in his First Piano Con-
certo suits Feltsman's lean, whip-lash sonor-
ity ideally, and here this currently multi-
celebrated Russian virtuoso is in his ele-
ment. There are none of those tiny casings of
tempo that betray insecurity, and the mix of
high-speed whiny and athleticism is stun-
ingly impressive. Feltsman's rubato, too, in
the meno mosso is a bold and idiomatic
reflection of both 'blue' rhapsodizing and
pulverizing chordal virtuosity. The record-
ing is finely balanced, and in the monstrously
demanding second Concerto Feltsman again
meets every technical demand with alpine
case. His performance may be less mem-
orable or monolithic than Jacob Zak's, in
his old MK recording, largely because his cool
and sardonic view of Prokofiev's punch-
drunk brilliance (in the first-movement
cadenza) reduces the full impact of such writing. But
the modern CD format allows us to hear every
facet of the composer's malignant humour in
both these wildly nonconformist Concertos
with crystal clarity. Michael Tilson Thomas
provides a suave and exemplary partnership,
and Feltsman's encore ('Romeo bids Juliet
farewell') is magnificently played. Readers
curious about this pianist should also investi-
gate a 2CD set (also on CBS) of his New
York debut recital, a daunting occasion that
mirrors some hyper-tense but hauntingly
individual performances. A record of
Schubert's Wanderer Fantasie and six
Moments Musicaux is also in the States.[A:1]

Kenneth Dommett
PROKOFIEV: Peter and the Wolf

SAINTE-SAENS: Carnival of the Animals

MOZART: Eine Kleine Nachtmusik

John Gielgud (nar)/Academy of London Strings

Virgin Classics VC 790 7862 (60m 55s) (also LP/MC)

You may think the Mozart sits oddly with Prokofiev/Saint-Saëns (it once backed Böhm's VPO Carnival, on DG) but the thought occurs only because I suspect most listeners will tend to play this CD from beginning to end, so playing it is. With Sir John engaged for Peter, I suppose the sheer charm of the enterprise might have been anticipated (he 'ties' with his old friend Ralph Richardson as the most engaging narrator on record). You just settle into a comfy chair and become a child once more. But, the telling of the story is in the music too. And Richard Stamp, with his orchestra largely comprising American-trained musicians, directs three winning performances in a row, the Prokofiev making you realize anew just what a little masterpiece it is. (Tellingly, Stamp seems to bring into focus all the splendours of Prokofiev's imagination — it is the ice-cracking Nesky reminder, just before the duck goes for 'a nice swim'.) Any drama student will, however, be envying the aplomb with which Gielgud modulates the entry of his interjections, so that we are eager to hear the following musical episode.

There is no speech with the Saint-Saëns: an excellent performance which matches the high standard of the fascinating Kremer/Argerich (Philips), yet is less intellectually contrived. The soloists are not so well known here, but that proves meaningless. Arguably Stamp tries to do a little too much difficult to do justice to the music suitable only for idle background listening; more concentrated essence; quirkiness and the strangest prophecy. Alive with the sort of harmonic and rhythmic ambiguity that can throw all expectations, there are even forebodings of a Gesamtkunstwerk (and ornamentation of K175 in A-minor look forward to the 'Musettes' of the Out of Doors Suite.) In K515 in C, the pastoralism dissolves in a burst of laughter, K115 is boldly declamatory and, all in all, it is hard to choose from this cornucopia of treasures and musical surprises.

With outstanding advocacy from Horowitz, Debut did turn to the Prokofiev sonatas, but the three Paganini makes the point that Gielgud's work subtitled Quartetto riepilogo, and the largely reflective Seventh (1969) ought to suffice to confirm Rosenberg's claims to wider experience.

The notes are most informative and the transfers to CD have been extremely well done, especially of that genuinely historic Kyndel Quartet recording for Swedish Radio of No.1 in 1946 which shows almost no sign of age. Mostly [A*:1] Bryce Morrison

RACHMANINOV: Piano Concerto 3

Paganini Rhapsody

Vladimir Feltsman (pno)/Israel PO/ Mehta

CBS CD 44761 (64m 54s) (also LP/MC)

In 1987 Vladimir Feltsman arrived in America to a hall of public acclaim after years of oppression and neglect in his native Russia. But I doubt whether this recording will do much to enhance an already uncertain reputation. The Third Concerto is taken from a 'live' concert (no details on CBS's uninformative sleeve) and, from time to time, is flecked with the sort of idiosyncrasy that tends to occur in the studio. It is the easy, however, to feel gratitude for Feltsman's monochrome sonority, a sound lacking the fullness and colour of a truly great Rachmaninov pianist. Proficient rather than inspired, his performance is disfigured in the finale by a cut that is — thank goodness — no longer fashionable, by a lackluster accompaniment and indifferent engineering. Feltsman chooses the less elaborate and arguably more beautiful of Rachmaninov's two versions and one can imagine the spot in which each of the soloists sits, spread in the hall. There aren't in the Vienna or Berlin class for the apparent vivacity of Katchen, Agayeff, or Gilels and Cliburn (now on CD in America).

The Pagatnini Rhapsody, a studio performance this time, is also — most oddly — cut. A tame unfocussed start to Variations 7 and 8 in particular, and a lack of character in general hardly encourages comparison with other recordings, most notably by Earl Wild, Vladimir Ashkenazy and Julius Katchen.

[B:3] Bryce Morrison

ROSENBERG: String Quartets 1, 6 & 8

Kyndel/Gotland/Copenhagen Qts

Caprice CAP 21352 (66m 55s) (®) 1956, '75, '80

These two discs, largely comprising reissues of historical importance, are part of a series of four CDs containing all existing Rosenberg's quartets. The wide exposure of Shostakovich's sardonic cackles on the fourth of the six concertos carves for him a reputation which, had his work received equal recognition, Rosenberg might well have shared. Indeed, as the six works represented demonstrate, his range is quite as wide as Shostakovich's, wider in certain respects since he possessed a vein of humour unvitiated by the sardonic strain that colours that of the Soviet composer.

The Rosenberg Quartet's playing is faultless (of course, they have more than 20 recordings in their catalogue). But I doubt whether this recording will do much to enhance an already uncertain reputation. The recordings are of demonstration quality and the sleeve design, of a painting by Paul Cézanne, is more than eye-catching. [A*:1] Bryce Morrison

SCHUMANN: Carnaval □ Papillons □ Fantasiestücke, Op.111

Bernard d'Ascoli (pno)

Nimbus NI 5170 (56m 18s)

Did Sir John Gielgud ever write a dull Sonata? Listening to Andras Schiff's enterprising selection of Scarlatti, Satie, and Ravel, we might well have shared. Indeed, as the six Scarlatti quartets written in 1738, '39, '40, '45, '46, '47 (the most notorious of which is that for K175 in A-minor look forward to the 'Musettes' of the Out of Doors Suite.) In K515 in C, the whimsical pastoralism dissolves in a burst of laughter, K115 is boldly declamatory and, all in all, it is hard to choose from this cornucopia of treasures and musical surprises.

With outstanding advocacy from Horowitz, Debut did turn to the Prokofiev sonatas, but the three Paganini makes the point that Gielgud's work subtitled Quartetto riepilogo, and the largely reflective Seventh (1969) ought to suffice to confirm Rosenberg's claims to wider experience.

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Kenneth Donnett

SATIE: 6 Gnossiennes □ Véritables Préludes flasques □ Vieux séquins et vielles cuirasses □ Chapitres tournés en tous sens □ Trois Gymnopédies □ Embruns desséchés □ Je te veux □ Sonatine □ Heures séculaires et instanternées □ Le Picadilly □ Avant-dernières pensées □ Sports et Diversissements

Anne Quefflec (pno)

Virgin VC 790 7542 (76m 14s) (also LP/MC)

Satie's insistence that he wrote furniture music suitable only for idle background chatter receives short shrift from Anne Quefflec. Her imaginative brio confounds all expectations, ruffles all possible complacency and, unlike so many of her rivals on record, she is intent on every whimsical note. Her Gnossiennes are as hypnotic as her Gymnopédies, elegant and indolent evocations of a timeless past. Her Le Picadilly struts and cavorts with the masterly aplomb of a true Paris, rather than London. She seductively based on the words 'Le Picadilly', the charming pastiche of a timeless past. Her Le Picadilly struts and cavorts with the masterly dexterity that may well be the fault of the recording which surrounds the piano sound in an unfaltering and opaque haze. 'Sphinctes', as in Alicia de...
Larrocha’s virtuosity is overwhelming as she exerts eloquence, the Scherzino with more springy or ultra-precise articulacy. Rarely can the greater authority, of a more lavish coloration (the Faschingsschwank aus Wien, this time) persuade to digital tape the performance is in a variable speed cassette deck for review. From the first notes, the dark orchestral colours at which these performers excel strongly that this is not light entertainment. Even in the most cataclysmic climaxes, here taken to what must surely be the limit of orchestral power, pessimism never takes over; for all its trauma, this symphony is ultimately the victory of the ‘still, small voice’ and Mravinsky’s achievement in commanding the full scale of the conflicts in the music is in its incredibly short space of one hour. (Long? The symphony is a miracle of compression.) Playing is everywhere utterly beyond reproach, and I must single out the hair-raisingly apocalyptic trumpet solo in the 3rd movement for especial praise.

In the light of the above comments, it is a pity I cannot recommend this CD. The coupling dates, written to fit the composer’s metre; but this cannot help the night, which’ and the stress cannot help the night’, naturally stresses the last syllable. Yet as one listens to the Fourth and Eleventh quartets which follow, it becomes obvious that this reticence is not an affectation or a consequence of a lack of commitment, but a considered philosophy. For theCoull’s reluctance to submit to the music’s energy, and the Coull’s unassuming literalness, forces you to re-examine your presuppositions.

It is a work of power. The matter of language, however, makes me uneasy. Shostakovich set Michelangelo’s Italian verse in fairly free Russian translation. Though the titles on the CD package are given in German, the text is an Italian, with an attempt to fit Michelangelo’s original text to the music. Musical changes must inevitably be made, mostly repetitions of notes and filling-in of rests. More important, the stresses come out wrong. In the composer’s setting, ‘Vota eto noch’ (‘Here is the night’) naturally stresses the last syllable. Fischer-Dieskau sings ‘la notte, che’ (‘the night, which’) and the stress cannot help coming on the ‘which’ no matter how carefully the singer tries to smooth it over. I would understand entirely if Fischer-Dieskau had chosen to sing in German, to a text written to fit the comic situation; this way of speech, however, is not suitable for a language which is essentially musical.

Aribert Reimann, the composer of the

The recordings, when you bother to notice them, faithfully capture an immense range of sonority. Piano records of this calibre are a rare event. Even in her matchless performances of the Spanish repertoire Alicia de Larrocha has seldom confirmed her status more magnificently as one of the world’s greatest virtuosi.

Authenticity, as such, can be overrated. The importance of this issue is not that Mravinsky conducted the work’s premiere but that he was a great musician who, in the 36 years between that premiere and the performance presented here, clearly developed the sort of kinship with it that minor talents never achieve, and major talents, only sometimes. And what better instrument for Mravinsky’s genius that the Leningrad Philharmonic, which he conducted for over 40 years and brought to the top handful of world-class orchestras? Shostakovich’s 8th is not an ‘easy’ work. On the contrary, it is foreboding and unsettling. From the first notes, the dark orchestral colours at which these performers excel strongly that this is not light entertainment. Even in the most cataclysmic climaxes, here taken to what must surely be the limit of orchestral power, pessimism never takes over; for all its trauma, this symphony is ultimately the victory of the ‘still, small voice’ and Mravinsky’s achievement in commanding the full scale of the conflicts in the music is in its incredibly short space of one hour. (Long? The symphony is a miracle of compression.) Playing is everywhere utterly beyond reproach, and I must single out the hair-raisingly apocalyptic trumpet solo in the 3rd movement for especial praise.

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Aribert Reimann, the composer of the
Lear seen earlier this year at the English National Opera, has dedicated to Fischer-Dieskau three further Michelangelo settings (in this case actually composed to the Italian words!) in the same starkly declamatory style – the second song 10 minutes long. I found them wearisome. But Reimann is an excellent accompanist. Occasionally, the placing of the microphone in relation to the piano picks up some unwanted harmonics in the loudest passages, but the sound is otherwise highly acceptable. [B:1] Arthur Jacobs

R STRAUSS: Don Quixote □ Le Bourgeois Gentilhomme – excerpts
Paul Tortelier (v1c)/PRO/Beecham
EMI CDH 763 1062 (66m 23s) @) recordings from 1947.

It was this 1947 recording of Don Quixote which launched his solo career. Tortelier avers. At the time of the Beecham centenary (when the seven movements from Le Bourgeois Gentilhomme Suite chosen by Sir Thomas Beecham made with Wallenstein/PRO/Beecham) I cannot imagine anyone who (as I did) came to know this work through either of Tortelier’s later versions with Kempe would think any other cellist so well matched temperamentally to the role.

This 1947 version is – typically – less drawn out than Strauss performances are today. The Karajan 1976, for instance, is overall 10% longer; only in the Battle and the Sheep is Beecham markedly slower. But Beecham’s swifter Knight’s vigil, and Don Quixote’s Death are no less moving, though Tortelier’s ‘last breath’ became more affecting in his Kempe recordings. In fact, there is some stray intonation and ensemble which contemporary record-producers would not have let pass, but what matters more is Beecham’s acute perception of the scoring: his is a far lighter, sharper colour palette than post-Karajan conductors use: ‘Tortelier’s Don Quixote is complementary to more modern versions, Gentilhomme’ is simply unsurpassed: for style, for the sheer wholeheartedness of it, for the way in which it flows. Just listen to the glorious vulgarity of the rasping brass attack in ‘The Fencing Master’, the hilarity that ensues; or the sweetness of Oscar Lampé’s violin solos in ‘Dance of the Tailors’.

Lyndon Jenkins’s note gives the fascinating background to these characterful and significant risseus. Keith Hardwick has done a fine job on the preparation and digital remastering. [H:1/1*] Christopher Breunig

Pinchas Zukerman (v)/Marc Neikrug (p) Philips 420 944-2 (55m 26s)

I was ever so slightly disappointed by this disc. The combination of ‘rarity’ and old favourites: played by Zukerman, seemed auspicious, but the performances never quite convinced me. For one thing, both pieces are taken a bit on the slow and heavy side for my liking, but this is a matter of taste and mine could be wrong. Rather more palpably, Zukerman’s intonation is not all it might be in places, and the Prokofiev in particular is full of exposed places where the ‘motivo’ in the finale, auduged by full mechant-chy potential in the ‘birch tree’ melody.

After that, the return of the dance is no facile final optimism; rather an ugly echo of Berlioz’s ‘Witches’ Sabbath’, or a premonition of manic Russian finales to come in the symphonies of Prokofiev and Shostakovich.

The symphonic rhetoric is unusually clear, too, in this Romeo and Juliet. Once again, detailed dynamics and careful phrasing freshen familiar themes, and the keen forward impetus of the development leaves me in no doubt that this is as remarkable an exercise in form as anything in the Fourth or Sixth Symphonies. CBS’s sound is dry but by no means as coarse-cut as it was for Abbado’s recording of the Second. [A:B:1/1*]

David Nice

VIVALDI: Recorder Concertos – in c, RV441 □ in C, RV444 □ in a, RV108 □ in a, RV435 □ in F, RV442 □ in C, RV443 Peter Holstog (recs)/Parley of Inst/Holman Hyperion CDA 66328 (59m 99s)

These performances use soprano or treble recorders, with single period strings, ie quartet plus contrabass viol, and organ or harpsichord continuo. Player/director Peter Holman explains this in his exemplary note. I suppose that, after the pleasure of encountering again the delightful concerto for soprano recorder RV441 (“P79), which I first heard in Linde’s old Archiv recording, and finding that +12, with its Siciliano middle movement, is the original of the Fifth of the Op.10 Flute Concertos (timings here very consistent with those of the English Concert recording), then two aspects of this new disc struck me most. One was the incredibly seamless breathing of the agile Amsterdam soloist; second the richness of sound in this Mowatt/Faulkner production. The venue is not stated, and there is quite a level of ambient noise, but the sound does have that full-bodied glow suggesting Faulkner’s predilection for valves somewhere in the chain. In sum, this is a release which, whilst conforming to authenticist requirements, must appeal equally to the general collector with its crisp but warmly expressive playing, and attractive programme-content [A:*+1*]

Christopher Breunig
Oddly, the sound in this Un tel production comes closer to the Decca 1979 Concert with Boskovsky (their first digital release), having a similar dryness, than to the DG/Un tel 1987 Karajan, with its honeyed sweetness. Comparing the three shows just how much a conductor puts his stamp on the orchestra - even in repertoire which you might think they could play perfectly well standing on their heads. Carlos Kleiber is best in fast pieces like the Csardas, or the 'Jockey' Polka. Even without making comparisons, the rather chilly character of the music-making stands out. There's something faintly obsessional about Kleiber's conducting; he drives the music hard, creates a lot of tension. And he seems compelled to draw attention all the while to what he is doing with the orchestra and the pieces. With the traditional side-drum volleys cut, Radekzky-March is distinctly Prussian - with none of Karajan's easy way of letting everything speak for itself. Boskovsky cuts from a coarser cloth (compare 'At Home with us'), but if he doesn't match Kleiber's precision at the beginning of the piece he beguiles - as he does in the polka Moulinet - in a way that is foreign to Kleiber's nature.

Predictably, Kleiber is quicker than Karajan in the Fledermaus Overture, and at first his reading excites. Yet I am afraid that 'diminishing returns' has to be the conclusion here (for this whole set). Take the Ritter Prazm item, recorded in 1967 by Boskovsky (with solo violin and cimbalom in the introduction, not done in the CBS). For all the energy and whiplash excitement of this 1989 version, it is Boskovsky who, when the tempo hots up, really conjures up the wild rhythms and exhilaration of this character piece.

Listening to the Vienna Philharmonic under these interpreters, and to Böhm, sedate but nonetheless relaxed even under studio recording conditions, is rather like sipping expensive chocolate from different confectioners. Kleiber's tastes highly individual, but his recipe lacks the 'glow', the chocolatey, creamy richness. The know-how ingredient. If you want live atmosphere, orchestral vibrato and harmonic integrity, this is the right price set will certainly satisfy. Strauss connoisseurs will be critical of it. Incidentally, no descriptive notes are included in the leaflet. [A1/2]

Christopher Breunig

GUILDAHLL STRINGS
BRITTEN: Serenade/SAFFORD: Symphony/TIPPETT: Little Music/6 Variations on an Elizabethan Theme (Sellenger's Round)/WALTON: Sonata for String Orchestra Gullilboat String Ens RCA RD 87846 (60m 18s)

To paraphrase Cardus on Sibelius, glasses of pure cold water rather than cocktails are the stuff of dreams. The forces have something to do with it (six violins, two each of violach and cellos, and a double bass), but so has the approach, sparing on vibrato (and, dare one say it) very British in its reticence, with only a handful of rich clichés. Perhaps to what mass of music with which it can happen when it chooses. Slow movements are subtly done - wonderful Fijarian introspection in the Pizzicato Polka of 'The Loves of the Saraband'; cool control for the two Tippett Andantes - while their faster counterparts are clean and airy, a little light on bass perhaps, but that too seems to be a conscious decision. Some perplexing questions hover over the Walton, since it is a straightforward reworking of the 1947 Quartet, and excellent work from solo forces at the start makes you think that anything is gained from just a couple more instruments per part [the first recording was from ASM/Marriner - Mus Ed]; the first movement Fugue and the subsequent Presto are cases in point. But I am sure that I would have guessed Walton's hand in his contribution to the six 'Sellenger's Round' Variations - Oldham/Tippett/Berkeley/Britten/Searle/Walton - save perhaps for five bars, but neat distinction is made between the phrases, with a good gutsy sound for the Elizabethan theme. Recording is appropriately clean and full of presence. [A7/1]

David Nice

JAMES BOWMAN
Songs by Vaughan Williams, Howells, Warlock, Ridout & Steptoe James Bowman (c-ten)/Paul Goodwin (ob d'armore)/Denis Grangerberg (vln)/Lionel Handy (vln)/Downshire Players/Asb Meridian CDE 84158 (70m 34s)

From an artist with such a distinguished career, a recital of English song might well be expected to get from one note to the next quickly, but to give each note exactly the right force at exactly the right time - coupled with a high degree of musical sensibility accounts for the ravishing tone and sheer lyrical beauty of the playing, unravaged by even the smallest technical slip. Not quite as billed, this CD contains all the issued after recordings Lhévinne made in the 1920s and 1930s. Included are the Mozart 2-piano sonata and Ravel's 2-piano version of Debussy's 'Fêtes', both with Rosina Lhévinne, Josèf's wife. These are perhaps less successful than other pieces, though not as far as I can tell due to any inequality between the players; they seem to be less Lhévinne's type of music.

Mixed is the pronouncements by the four Chopin studies, in performances which uniquely reveal the logic, magnificence and beauty of Chopin's conception. The full extent of Lhévinne's technique is shown in these, as in Sholty Shulz-Evel's breathtaking transcription of the 'Blue Danube' Waltz with its technical difficulties not only mastered but played sempre cantabile, and in the Schumann Toccata in which the sudden dynamic contrasts are for once not smudged over. Lévinne's transcription of Schumann's 'Frühlingesnacht' is a model of song transcription performance. Lévinne's technique is shown in these, as in Sholty Shulz-Evel's breathtaking transcription of the 'Blue Danube' Waltz with its technical difficulties not only mastered but played sempre cantabile, and in the Schumann Toccata in which the sudden dynamic contrasts are for once not smudged over. Lévinne's transcription of Schumann's 'Frühlingesnacht' is a model of song transcription performance. Richard Black
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BARTOK: Piano Concerto 3 □ Scherzo (1940) Zoltán Kocsis (pno)/Budapest Fest Orchestra /Ferenc Fricsay Philips 416 835-2 (55m 04s) © 1988

The Scherzo is scarcely recognizable as Bartok, but strongly influenced by Strauss. A powerful, confident performance, superseding the earlier, dimly-recorded Tusa/Hungaroton version (Bartok Edition). Musical clarity is explicit, but atmosphere in Concerto 3 is vitiated by some shallow piano-tone and shifting balances. [B:1]

BEETHOVEN: Symphony 6 'Pastoral' □ Symphonies 1-8 /Furtwangler Philharmonic Orch./Furtwangler CMH 763 0342 (70m 50s) □ recordings from 1952, '48

Furtwangler conducts a veritable blitzkrieg on the Eighth, in this 1948 concert performance. It is coupled with the later studio recording, in this 1952 concert performance. It is coupled with the earlier, dimly-recorded Tusa/Hungaroton EMI CDH 763 0342 (70m 50s) © 1959-60.

HAYDN: Symphonies 6-8, `Le Matin', `Le Soir' /Orchestre de Picardie/Cherubini EMI CDM 769 7479 (78m 18s) © 1978

These Queen's Hall concert performances (51m 21s) € 1) live recordings from 1935 (uncredited) was the likeable soloist; but the orchestral playing sounds uncoordinated, scrappy. Ansermet's conducting is not at all laissez-faire — but all this material has dated chronically. For those with a will to persevere [D:2]

MENDELSSOHN: Symphonies 3 & 4 /NPO/Schuricht/Kent Nagano UKCD 2023 (44m 57s) © 1999

The Chicago Franck Symphony was one of RCA's technically and musically outstanding productions; it was half-speed mastered — not very convincingly — for the '05 audiophile LP series. On CD it re-emerges as a recording of majestic weight and muscular strength. Some of the music comes from the Munch's classic Berlioz overtures disc, with the D'Indy a rare three-movement work with an important role for pianoforte. (This recording of the D'Indy was issued from new — but I think it is worth owning this disc.)

CHOPIN: Piano Works □ Études, Barcarolles, Mazurkas, Scherzos, Nocturnes □ Polonaises □ Preludes □ Sonatas □ Waltzes □ Barcarolles □ Berceuse □ Fantasy in E □ Variations and Caprices /Vladimir Ashkenazy (pno) Decca 421 185-2 (1CDs, special price) © 1977-85

No other artist of comparable international standing has recorded so much of Chopin's music for solo piano (there's also the piano duet Variations, with Vovka Ashkenazy, here). The cycle began on LPs programming the music chronologically; but the CD remasterings — five single discs and four 2CD packs, each available separately — brought together the gentler in the conventional way. Roger Bowen and I welcomed wonderful solo playing and a very powerful presentation between February and March 1987. The recordings, some ADRM, come from half-a-dozen locations. Clearly, such a project can only form the basis of a Chopin cycle, but it is a great start. [B:1]*

MENDELSSOHN: Symphonies 3 & 4 □ Muti EMI CD 769 6062 (75m 35s) © 1976-7

Muti's spacious and serious account of 5(1) — with repeat, and a very steady pacing of the Allegro — commands attention. The 'Scottish' is indeed one of his most successful symphonic recordings; the coupled `Italian', too, is a masterly affair — for a showy start to a concert, perhaps, but not for records. Poorish sound too. [B:2/]*


Horenstein's masterly performance of this great symphony more than holds its own against later versions — I like the way the lyrical lines run free over the rigidly held ostinato figure in (1) and, at the climax, the texture is so deftly handled, with dramatic contrasts. Hornenstein preserves the assurance of order, snare-drum notwithstanding. Fine, transparence sound (Bartholomew Hall/Holder/Auger) helps. The tone-poem is similarly impressive. [A/*/A:1]*

RIMSKY-KORSAKOV: Scheherazade □ Sadko □ May Night — overture □ EMI 769 7502 (68m 18s) © 1966

Few Schubertians will not have owned the deletable Bechstein Third/Fifth coupling in one form or another; but the CD brings a clearer, brighter, better-balanced sound — and with admirable engineering, and the later pair are cleaner, brighter — though not as engaging as the old mono LP [ALP 1743]. Beecham's performances are weighty and authoritative, but without the lightness of touch that simply make you smile. In Schubert he succeeds just where Barenboim (seemingly striving for similar effect) failed. [CD:1]*

TCHAIKOVSKY: Symphony 6 'Pathétique' □ Francesca da Rimini □ Philharmonie/Julia/Pollini NPG 1961-71

Tchaikovsky's Symphony 6, with its Beethoven-ish Scherzo, was first coupled with Grieg, on Columbia. This tape is dim, with some feeling of congestion, and rather dry, although there is a hint of coarseness in the Berlioz climaxes. Exemplary conducting. [A/B/C:1]*

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Epic 465186-1

Not for Kathy Mattea the glitzy, synth-swatthed trappings of modern-day Nashville. She elects instead to dress her songs Best Western style though there's none of the syrupy, pedal-steel laden sessions that make some other old-style country records so indigestible. True, there are reasons to put handerchieves to use - 'She Came From Fort Worth', a song about a fading rose given more hope in life than merely years in a roadside diner, is the best of its genre since Dan Loggins tender 'Maggie's Dream', while Wendy Waldman's 'True North' again expresses hope to come, despite a love affair that evolves around calls and cards from cities far away. But there is always this element of expectancy, of dreams being fulfilled, in Mattea's world. No one is down forever. And when she wends a western swing way through 'Burnin' Old Memories' or harks back to the back-porch happy hour, as she does on the dobro-lifted title track, then it's evident that there's not much wrong with Kathy Mattea's world or the people who inhabit it. [A:1]

Surprisingly, K.D. Lang's fourth people who inhabit it. [A:1] does on the dobro-lifted title back-porch happy hour, as she wends a western swing one is down forever. And when fulfilled, in Mattea's world. Not for Kathy Mattea the glitzy, synth-swatthed trappings of modern-day Nashville. She elects instead to dress her songs Best Western style though there's none of the syrupy, pedal-steel laden sessions that make some other old-style country records so indigestible. True, there are reasons to put handerchieves to use - 'She Came From Fort Worth', a song about a fading rose given more hope in life than merely years in a roadside diner, is the best of its genre since Dan Loggins tender 'Maggie's Dream', while Wendy Waldman's 'True North' again expresses hope to come, despite a love affair that evolves around calls and cards from cities far away. But there is always this element of expectancy, of dreams being fulfilled, in Mattea's world. No one is down forever. And when she wends a western swing way through 'Burnin' Old Memories' or harks back to the back-porch happy hour, as she does on the dobro-lifted title track, then it's evident that there's not much wrong with Kathy Mattea's world or the people who inhabit it. [A:1]

Surprisingly, K.D. Lang's fourth

Music City pickers, the Canuck has fashioned yet another album that crosses borderlines and blends various aspects of country music with the sounds stemming from a late night, 40's jukebox. Her bout of Western Swing comes via a sprightly picked versions of Leroy Preston's 'Full Moon Of Love' and Willie Nelson-Faron Young's 'Three Days', the former featuring the drumming of redoubtable jazzman Ed Thigpen, 'Pulling Back The Reins' once more demonstrates her mastery of the Peggy Lee 'Black Coffee' idiom and 'Walkin' In Ani Out Of Your Arms' provides Lang with an opportunity to work with yet another legendary act in The Five Blind Boys Of Alabama. Not that the such name support is required. The Reclines sound as vital as any existing Nashville hit squad, with guitarist Gordie Matthews catching the cat on virtually every track. And if one searches for a fault it can only lay in Lang's tendency to slightly oversell on occasion. Even so, [A:*1] without a doubt. George Jones' latest offering isn't so wonderful. With only eight out of ten new tracks, it forms a doubt that the one-time undisputed king of country, who has so many problems with live appearances these days, can actually get it together in the studio anymore. Not that he sings badly on this Billy Sherrill produced set. But the old accepted formula of mainly routine goodbye songs made magical by that crying voice, has lost the charm it once possessed. But 'Just Out Of Reach' acts as a reminder that composer Pappy Dailey is no longer with us. And if the line 'The milkman whistles softly as he comes up to my door', causes a chuckle amid 'My Baby's Gone', then 'Ya Ba Da Ba Do (So Are You Swears He's Elvis', then you'll have a fairly good idea of what to expect here. Miss MacColl is a mistress of all forms of popular music, investing them with the kind of sharp wit which is scarcely an overabundant commodity. Apart from a so-so cover of Ray Davies 'Days', the material here is all original, written by the lady herself or
concrete Blonde: Free

IRIS Records CDP 241003 2 (45m 30s)

Promising a little more than they can actually deliver. Concrete Blonde seem to fall just short of exciting. I know I should feel more of a buzz than I do because the songs build up so well, but sadly I am left frustrated. The production, by the band, tries to break the mould a little but leaves the music without a strong foundation. I'm not seeking the commercial smothering of raw music, just straining for some satisfaction which I feel sure this group can offer. America is producing more interesting music than it has in years and IRS has released much of it, but I don't think these California musos will stun like REM yet. They are also unlikely to endear themselves to people for only recording just over half an hour. So near and yet so far. [B:2]

Neville Farmer

Robert Gordon

Live at Lone Star

New Rose ROSE 173

New Rose ROSE 173CD

(39m 48s) CD

Gordon was the oddball spillout of New York's 1976 new wave scene. For he wasn't really new wave at all but merely a rockabilly rebel, out of time but well ready to make the most of his seeming misfortune. A draft dodger with a falling marriage and a couple of kids to support, he was a beautiful loser. He teamed with guitar legend Link Wray and was promptly hailed as the man who would make the sounds of Sun as trendy as those of the New York Dolls. Bruce Springsteen wrote 'Fire' for him and it seemed that no-one would ever step on his blue suede shoes. But he proved to be yet another flavour to savour between Britishrock and its producers Full Force, they risk less than most, but somehow I doubt their chances on the Brit-

A little less street than earlier work, this is probably going to be LL&C/J's best seller to date but is where they risk their cult following and for going down mainstream. Moulded into shape by composers, arrangers and producers Full Force, they risk less than most, but somehow I doubt their chances on the Brit-

Sony Grebenshikov

Radio Silence

CBS 465083-1

Of Gazet newt. Yeah I, too, expected some klutzy bohemia, peasant sounding 30 years out

of whack with the West, a vodka-swilling approximation of a rocket who learned his chops from smuggled Presley platters. Wrong. Grebenshikov, in the capable hands of Eurymic Dave Stewart, comes off more like a Russki who has a good line in contraband indie 45s. Maybe the foreknowledge of Grebenshikov's struggle to produce pop behind the Iron Curtain has softened my attitude and maybe I'm hearing as much of Stewart as I am of Boris, but the material tears the speakers, possesses an abrasive edge and a couple of kids to support, he was a beautiful loser. He teamed with guitar legend Link Wray and was promptly hailed as the man who would make the sounds of Sun as trendy as those of the New York Dolls. Bruce Springsteen wrote 'Fire' for him and it seemed that no-one would ever step on his blue suede shoes. But he proved to be yet another flavour to savour between British rock and its...
The FABULOUS THUNDER-BIRDS: POWERFUL STUFF
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THE INMATES: FAST FORWARD
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BIG JOE LOUIS & HIS BLUES KINGS: BIG JOE LOUIS & HIS BLUES KINGS
Blue Horizon/Ace BLUSH 008
SAVOY BROWN: KINGS OF BOOGIE
Sonet SNTF 1017

Just as fish and chips survive the burgerization/pizza-ization of the UK, so do white R&B acts continue to flourish despite the dehumanization of popular music. Foremost among these reactionaries are the Fabulous Thunderbirds, who managed to revive Texas R&B and even flit with the charts. The dust has settled since their flurry with the singles market a couple of years back and it hasn't tainted the band, so it's reassuring to find that the latest LP isn't the same kind of post-celebrity release which signalled the end of the J Geils Band. This is traditional T-Birds fare, hard, lean and serious. [A1/2]

A more than pleasant surprise is the unexpected return of the spiritual link between Dr Feelgood and the Godfathers.

This production is pretty cheap but I'm quite glad I've heard whatever the testcard is on BBC2. [11:31 Neville Farmer]

Times give fulsome thanks to the much-praised modern fusionists and the like? [A3:1] Denis Argent

By current standards, Barry must rank as middle-of-the-road rather than chart pop, and with the sort of worldwide fan club he has, he should be proof against losing ground on the strength (or weakness) of one poor record. This new issue strikes me as monotonous, all at much the same tempo, in much the same tone of voice, on much the same sort of unhappy theme, and some of the songs (not his own 'You Begin Again', and not Jimmy Webb's) sound like collections of all the cliches of modern songs, with the predictable phrases and intervals. It's silly to complain about Bar-

BARRY MANILOW:
BARRY MANILOW
Arista 209 927

Sigh of relief: this is the first McCartney LP in years which hasn't been preceded by nerves on the part of his fans. We'd already had a glimpse of Maccab '89 through his guest appearances on Elvis Costello's Spike, and he sounded like he really was having fun collaborating with Elvis.

SUSANNAH MCCORKLE:
NO MORE BLUES
Concord CDD 4370 (50m 52s) CD
from New Note Distribution

Welcome return of a singer who has been too little recorded. There are star accompanists here too: Ken Peplowski, himself recently reviewed here in a tribute to the new clarinet stars, and such guitarists as Bucky Pizzarelli and Emily Remler. It was 12 years ago when Susannah's first solo British recording of Harry Warren songs.

Then she disappeared, and now she's back with a richer voice and a more varied repertoire. She revives neglected ballads such as 'Ps. I Love You' (typical Mercer words) and 'Everything's Been Done Before' and she takes exciting liberties with 'Sometimes I'm Happy'.

Nothing to do with the music, but why does the man have to appear on the sleeve all stubbly — especially as the list of dozens of credits on the inner sleeve includes a gentleman credited for grooming? Perhaps one of these days there will be a record on which the star will not thank anyone. On this one, some of the underlings give fulsome thanks to Barry! [A/B:1/2] Denis Argent

Barry Maniłow: Barry Maniłow

Never thought that Armstrong's absurdly simple theme of 1936, 'Swing That Music' would be worth serious attention all these years later, but Susannah gives it more than it's worth. The support includes an acoustic guitar solo by Bucky in a style which could have been Lee Blair in the 1936 Luis Russell band that supported Satchmo. There's period piano too from Dave Frishberg, and lots of Ken Peplowski, on tenor and clarinet — and his sax style fittingly resembles Scott Hamilton. Altogether, McCorkle's No More Blues is a record of sheer enjoyment. It sounds as if it was fun to make — and can that be equally true of records by some ry's style because he isn't Tony Bennett or Vic Damone, but even putting one's preferences aside doesn't make this record one to play over and over except out of a sense of reviewer's duty.

Nothing to do with the music, but why does the man have to appear on the sleeve all stubbly — especially as the list of dozens of credits on the inner sleeve includes a gentleman credited for grooming? Perhaps one of these days there will be a record on which the star will not thank anyone. On this one, some of the underlings give fulsome thanks to Barry! [A/B:1/2] Denis Argent
RICHARD MARX: 
REPEAT OFFENDER 
EMI USA CDP-7-90380 (49m 20s) CD

Debut solo album from one who has sung for Lionel Richie. The album's extremely American sentimental ballads are no surprise; and they're just begging to be singles, like ’Right Here Waiting’. It's obvious though that Marx's own taste in music is for boppy, swinging, jiving rock ‘Real World’ style. He sings well and there's some nifty keyboards, sax and guitar thrown in, but the lyrics lack real depth. The generally quite uninspired backing means that a whole facet of the songster's craft has been left unexplored. Despite a sprinkling of good tracks, the album declines the opportunity to be remarkable and slips instead into the category of anonymous background music. [B]2/3 [Karen Doubsuaitte]

JOHN COUGAR MELLENCAMP: BIG DADDY 
Mercury 838 220-1 Mercury 838 220-2 (42m 08s) CD

Though he's still afraid to drop the 'Cougar' name he's alleged to hate so much, Mellencamp can now relax. The Lonesome Jubilee from 18 months back established him with such authority that he appears to have created the niche he's occupying. But Mellencamp is not so much an originator as he is a clever magpie; what he's not so much an originator as he can now relax. The Lonesome Jubilee from 18 months back established him with such authority that he appears to have created the niche he's occupying. But Mellencamp is not so much an originator as he is a clever magpie; what he's not so much an originator as he is a clever magpie; what he's... [A]1/2

PERE UBU: CLOUDLAND 
Phonogram 838 237-1 Phonogram 838 237-2 (49m 20s) CD

Pere Ubu are an idea whose time has well and truly come. A little chart success has belatedly brought their godlike name before a wider public in the shape of ‘Waiting For Mary’, but the gems on this record will open the ears of anyone but a Flowerpot Man. Working within a fairly straightforward rock format, the Ubus bring more wit and panache to the business of making music than a dozen pop lambreaths. Just glue your ears to the likes of ‘Breath’, ‘Bus Called Happiness’ or ‘Love, Love, Love’ (a composition from their earliest years which shows how good they’ve always been) and become a blissful convert. [A]1

TOM PETTY: FULL MOON FEVER 
MCA MCG 6034

The sound of Californian brains boiling in the sun. Actually, that's a bit unfair. Petty has a way with those oh-so-familiar chords which melts cynicism. He's well served here by a smooth Jeff Lynn production (but this is a cut above any aimless Wilburying), and what stands out are the songs, rocking out on 'Runnin' Down A Dream' (great guitar from Heartbreaker Mike Campbell!), or waxing droll on 'Yer So Bad' or 'Zombie Zoo'. [A]1/2

STEVE NICKS: THE OTHER SIDE OF THE MIRROR 
EMI EMD 1008

Stevie Nicks could never be accused of having a sense of humour, but despite her insistence on filling the studio with candles for the sake of atmosphere, she's well capable of turning out the kind of mel- lifluous soft rock as evidenced on 'Rooms On Fire', the first single. For those evenings when you just have to leave your brain at the door, there are worse things that can ooze into your ears. [A]2

PETE CLARK: POP WILL EAT ITSELF: 
THIS IS THE DAY ... THIS IS THE HOUR ... THIS IS THIS! 
RCA PD 74106 (51m 30s) CD

Virtually invented by the media (their very name is derived from an article by NME scribe David Quantick) for the media, PWEI grabbed the front pages as Grebos bearing gifts. Now, with initial publicity and indie success behind them, Clint Poppie & Co have moved on – major label, major deal, major think etc. But their diet of used metal riffs, rap claptrap and sampling can prove wearisome over the long course, though I'd be almost the first to admit that their well-established 'Def Con One' Big Mac monster mash is a track to relish, while 'Wise Up Suckers', with its 'she loves me' soft centre, and 'Not Now James, We're Busy', a frantic tear down a Redneck highway in pursuit of the Soul Godfather, possess their fill of energy and entertainment value. So, while I'm still not fully convinced, I'll hang onto This Is The Hour till the inevitable 'Best Of' eventually comes our way. [A]1/1/2

FRED DELLAR: PREFAB SPROUT: PROTEST SONGS 
CBS/Kitchenware CBS KWLP4

What is one to make of dear old Paddy MacAloon? This record was recorded some years ago and was originally intended as a freebie for faithful fans. That never happened and it is now released as a proper record, which seems fair enough as it was recorded in a proper studio and is not some kind of live throwaway. But whatever the genesis of the record, it offers the usual Sprout conundrum – how is it possible to play it all the way through without either going to sleep or coming over nauseous? Paddy starts well, as usual, but as the tracks succeed one another, beat and bounce make way for the clever whimsy which infests all the group’s activities. Feed this man some steak, now! [B]2/2

QUEEN: THE MIRACLE 
Parlophone CDP/CSD 107 (52m 21s) CD

Queen may be unfashionable among those who always move on and up. Nevertheless, they remain a class act. The Miracle is their strongest release for many an eon and proof that, for the time being at least, Freddie Mercury has forsaken dallying with divas in order to strut and rock convincingly, while Brian May, freed from thumbs-down associations with soap stars, once more wants to be a true guitar hero. The signs are too, that more than a little thought went into the album's structure. Some of the best rhythm patterns in rock have been ripped off and refurbished in best Queen fashion, the mixture of chromium-plated harmony vocals and heavy-hitting riffs proving irresistible when grafted so professionally. All right, so Queen are the Status Quo of the Filofax generation. They neglect to take things too seriously and sound as if they enjoy what they do. But if you think there's anything wrong in that, you're reading the wrong magazine. [A]4

NEVILLE FARMER: LOU RAWLS: AT LAST 
Blue Note B1 91937

How long it's been since I heard a new Lou Rawls LP I just don't know, but this more than makes up for his time away. Harking back to earlier Capitol releases rather than the more soul-oriented hit material, At Last shows us Rawls-as-jazzman/ bluesman, with delivery buoyant and reminiscent of Billy Eckstine and Joe Williams. Rawls follows Aretha in filling the disc with duets; Dianne Reeves, George Benson, Bobby Hutcherson, Ray Charles and others feature prominently. The result
is the classiest, sexiest release since McKerrin's last outing and easily one of the best LPs of the year. The performances are chilling, the material faultless - 'Room With A View' will destroy you - and the band is the kind we only dream about. The score, therefore, is [A*:1***].

Ken Kessler

RILEY/CASTRONARO/MARSH: FEATHERS
Spotify STJ 536
(Spotlite Records, 103 London Road, Sawbridgeworth, Herts.)

It's good to receive a British jazz album and be able to rave about it without any undue chauvinism clouding judgment. Of the three players, Howard Riley has perhaps received the most attention you don't do an encore in the difficult field of freely improvised playing. This album shows how well he does in a variation on that approach free playing with an ear for rhythm and structure. British players are especially strong on this, turning in spontaneous yet precise soloing and pre-composed tunes. Drummer Tony Marsh comes into his own on this album. He's a workman-like player who turns in efficient performances in a variety of settings, but his imaginative playing has been often underrated. He manages to play with poise, precision and with a feel for the music, and he makes the music breathe as a consequence. It all adds up to an absorbing album, with more character than most recent British releases.

Ken Hyder

DIANA ROSS: WORKIN' OVERTIME
EMI EMD 1019
EMI CDP 7252452 2 (43m 22s) CD

Oh dear! Di has forsaken the Avenue (Fifth, of course) for the streets. Which means that, these days, she comes clad in studded leather jackets and ripped jeans à la Bros moos. And, having studied the problems of the lower income world, she has all the answers. Well, one answer, actually. 'Keep on, keep on, keep on dancing, so you don't have to feel the pain', she advises in best Marie Antoinette: 'let them eat cake' mode. Note the repeated phrase 'Keep on, keep on, keep on' - obviously street-people are really into repetition. 'La la la la la (ad infinitum) goes the opening to 'We Stand Together' and 'This House'. 'Na na na na (equally

Ken Kessler

ALDO ROMANO: RITUAL
Owl OWLO50CD (51m 39s) CD

Distributed by Harmonia Mundi

Romano is one of those under-sung European drummers whose playing is usually spot on, without necessarily being innovative. Here, he assembled an impressive quartet with Paolo Fresu, trumpet, Franco D'Andrea, piano and Furio Di Castri, bass. From the first number, the band gets into a groove reminiscent of the classic Coltrane rhythm section. The trumpet uses a studio gimmick thing to create a dazzling, shimmering trumpet sound which he uses effectively. But mostly the music is straightforwardly acoustic. They play a controlled kind of mainstream jazz which finds support among those who choose to frequent wineries at the weekends. Pass the Frascati, Jimmy.

Fred Delbar

TODD RUNDGREN: NEARLY HUMAN
Warner Bros 925 881-1

As apt a title as TR has ever used: Despite producing the kind of heart-wrenching pop which wouldn't be out of place on a Squeeze LP, Rundgren still possesses that otherworldliness which renders the material almost too perfect. This machine-like precision (also common to early 10cc and Roy Wood) is hardly the kind of sin I can't forgive; I'd rather listen to songs crafted with the skill of a watchmaker than to indoo slip. Still, it makes Nearly Human seem like an LP produced for Goldmine readers, one of those overly-eclectic releases designed as much for the brain as for the heart or feet. But I love this deliberate approach, weaned as I was on Merseybeat, so I can handle the irony of Bobby Womack, a guest on one track ('The Want Of A Nail') or a perfect Hall & Oates pastiche ('Can't Stop Running'). But as with everything else Rundgren has issued since Nazz I, this LP is too good for mass consumption.

Ken Kessler

Ken Hyder

Ken Kessler
Argentinian bandoneon players have an extra edge missing from most folky accordionists. They have the knack of playing something simply to catch your attention, then they pull the rug away. Anyone familiar with the work of Thelonious Monk will know the trick, and bandoneon players often do find themselves at home with jazz musicians. Saluzzì has recorded with eminent jazzers, but on this release he's not just the rhythm (forget Come Dancing): exponents would say it's a way of life. Undoubtedly there's loneliness here, passion, and longing, and you don't have to be Argentinean to hear it. [A7:1] Ken Hyder

ROCK/POP/JAZZ

Dancing) - exponents would say ECM 837186-2 (43m 15s) CD

There's no mention here of Thelonious Monk will know the trick, and bandoneon players often do find themselves at home with jazz musicians. Saluzzì has recorded with eminent jazzers, but on this release he's not just the rhythm (forget Come Dancing): exponents would say it's a way of life. Undoubtedly there's loneliness here, passion, and longing, and you don't have to be Argentinean to hear it. [A7:1] Ken Hyder

SHADES OF KENTON:
'ROUND MIDNIGHT CONCE-CT
Hep CD 2043

A decade after his death Stan Kenton's music retains its follow- ing, and the Shades of Kenton band was inevitable. This 63-minute CD is from a concert at Queen's Hall, Edinburgh, in the summer of last year, and they interpret the original Kenton tunes with skill and sympathy. These are by Gerry Mulli- gan, Bill Holman, Lennie Niehaus, Bill Russo as well as Kenton himself. Most of the chosen items, such as 'Painted Rhythm' or 'Intermission Riff', go back a very long way in the Kenton story, and the choice of programme is in fact rather conservative. Nothing wrong with that, but I do wonder if we shall ever hear live performances of some of the things as the pieces written by Robert Graet- tinger for the Innovations in Modern Music edition of Kenton's band. Meanwhile the Shades offer devoted accounts of his more conventional repertoire, and good luck to them. There are some attractive soloists among them, too, such as Doug Whaley (trumpet) on 'Chiapas' and Ivor Deach (alto) on 'Intermission Riff' and elsewhere. [A2] Max Harrison

GEORGE SHEARING AND HANK JONES:
THE SPIRIT OF 176
Concord CCD (55m 33s) CD from New Note Distribution

George was not yet an American citizen in 1948 when, on his first job in the USA, he was intermission pianist at a club where the main attraction was the Ella Fitzgerald Trio, with Hank Jones on piano. For this critic, Nat Hentoff quotes George as recalling Hank 'is my mentor. I absorbed a lesson from Hank every night'. Shear- ing style nowadays is protein, as Concord releases reviews here in recent years have shown. Whatever the influences, one on the other, the two play together here on their pianos with wonderful understand- ing; it's impossible to work out who is playing the lead. The tunes are good, too, a nice mixture of standards and newer tunes, from composers as varied as Monk, Parker, Mary Lou Wil- liams and Gene de Paul - and my own favourite, the opening track written by another great pianist, Joe Bushkin - the lovely Lee Wiley hit, 'Oh, Look At Me Now'. The piano tone (Baldwin instruments credited) seems harsh and percussive, but these two pianists, both now in their 70s, are keeping the flag flying for understandable melodic jazz. [A1] Denis Argent

SHELEYANN ORPHAN:
CENTURY FLOWER
ROUTH TRADE ROUGH 137

Shelleyann Orphan are a band to know. Robert Smith of The Cure loves them and, risking sending his audience to sleep, takes them on tour. Shelleyann Orphan are strange and interesting. The voices sound deliber- ately slowed down, string instruments give the music a whimsical but human feel and the latest addition of electric guitar and drums almost seems like a bit of a cop out. But Shelleyann Orphans are talented and, forgoing the usual heads down no nonsense mind- less boogie, genuinely innovate with aggressive, guitar-driven, celebrated, when the whole thing becomes just inane. 'Cept that this isn't '69 but '89 and the writers are not Bacharach and David but Corinne Drewery and Andy Connell. And the outfront voice is not that of Dust, Di or Maddy but rather that of the Mod- cruppied Ms Drewery. Not that you'd know it. For Swing Out Sister have cloned the genre to perfection. And if they haven't got Bacharach to add the finishing touches, then at least Jimmy Webb is on hand to arrange and conduct on a couple of tracks. You've-doubtless heard 'You On My Mind', the first blast from the past bit single from this album. And the rest, in the main, reflects that same era, when Alpertized trumpet duos flicked in and out of the vocal choruses, when arrangements closed with a nod in the direction of jazz waltzes (yes, Factory fans, that really is Vikki Reilly swooning through 'Where In The World') and when back-up orchestras provided employment for at least 40 hungry musicians. [B1] if you're under 35. Add a star if you're older. Fred Dollar

SWING OUT SISTER:
KALEIDOSCOPE WORLD
Fontana 838 293-1 Fontana 838 293-2 (59m 40s) CD

Suddenly I feel like H.G. Wells. The Time Machine is working again and here I am dumped back in the late '60s. Burt Bacharach is writing those twisty, curled-edge songs and Hal David is snicking lyrics into odd corners, while upfront there are singers like Dusty Springfield, Dionne Warwick and Madeline Bell, all ready to test trusty tonsils on the deli- cious results. 'Cept that this isn't '69 but '89 and the writers are not Bacharach and David but Corinne Drewery and Andy Connell. And the outfront voice is not that of Dust, Di or Maddy but rather that of the Mod- cruppied Ms Drewery. Not that you'd know it. For Swing Out Sister have cloned the genre to perfection. And if they haven't

phoebe snow:
something real
Elektra EKT 56

Another day, another come- back. Phoebe Snow was always one of those singers who seemed on the verge of deliver- ing something terrific. She recorded some superior material, worked with all the right people and often sang in a manner more beguiling than most. Somehow or another, though, little proved entirely satisfactory. Her eight, or so, albums frequently included unforgettable moments but these were submerged in other performances and mate- rial that mattered little. Now, after stints with Shelter, CBS and Mirage, the New York sin- gler has linked with Elektra in order to influence a whole new range of listeners. But nothing's changed. Her opening, title track is as attractive an offering as is likely to come our way this year, a loping, jazz- tingled affair that denotes that Snow has little to learn in the art of song projection. Thereafter, the whole thing becomes just one well-worked but ultimately immemorable record, bound for the FM dumper. Perhaps its fatal, seeking new meetings with old friends. Often there's little to talk about after the first five minutes. [A2] Fred Dollar

TIN MACHINE:
TIN MACHINE
EMI USA MT 1044
EMI USA CDP 791990-2 (50m 50s) CD

Tin Machine marks the much trumpeted return of David Bowie: a stripped-down rock 'n' roll band, bristling with guitars (Bowie and newboy Reeves Gabrels) and bass 'n' drums (Tony and Hunt Sales, the rhythm hurricane which fuelled Iggy Pop's Lust For Life). The opening shot, 'Heaven's In Blue' tells you most of what you need to know about this outing - the ghost of a song saved by Bowie's always intrigu- ing vocals, which evolve/ degenerates into a massive and archaic guitar workout complete with stop-starts and hammy drum crescendos. There are better songs on the LP - 'Crack City' and 'Under The God' - but the basic thrust is Bowie consciously shredding the arty cobwebs which have clogged up his latest couple. Depends on how much time


does he have for Bowie - if you follow his every tic, you'll lap it up. If not, you'll reach for your old meathead blues/rock records from the beginning of time. [A2]

Pete Clark

112

II-B NEWS & RECORD REVIEW
AUGUST 1989
BLUE MURDER: BLUE MURDER
Greenwich

A glimpse at the track listing and lyric sheet might put you off this HM cliché, which finds veteran Carminne Appice acting exactly like that which inspired Spinal Tap. But Blue Murder are just heavy enough to let you ignore the words to 'Sex Child'. [A:2]

BLUE ROYEO: DIAMOND MINE
Risque Disque/WEA 256268-1

Absolutely gorgeous guitar band epic which calls to mind everything jangly from Dylan to Petty to REM to the Eagles, but with a twang all its own. Here's hoping that it benefits from the success of Brickell and the rest. [A:1/1]

NATALIE COLE: GOOD TO BE BACK
EMI CDP 7 48920 2 (46m 5s) CD

Nat's kid plus a load of hot producers who gave her in a manner befitting Soul Train's Vocalist of the Year. This set might just be too refined for today's rappish market and she ain't no Roni, but she's definitely her daddy's daughter. And that means [A:1]

COOKIE CREW: BORN THIS WAY
fffr/London 828134.1

The most notable aspect of this rap effort is that it's British rather than American. The usual clever lyrics and heart-stopping transitions, good enough to keep a few quid on this side of the pond and maybe bring some dollars back. [A:2]

DESPERATE DANNY BAND: SEND THREE AND FOUR MORE...
Veering into a manner befitting Soul Train's Vocalist of the Year. This set might just be too refined for today's rappish market and she ain't no Roni, but she's definitely her daddy's daughter. And that means [A:1]

DEAN DILLON: SLICK NICKEL
Capitol/EMI CDP 7 48920 2 (35m 5s) CD

From one already known for ace songwriting abilities. New Country with deep roots in the Old, worth owning for a cover of 'I Go To Pieces' and his own 'You Sure Got This Off Redneck Feelin' Blue'. [A:1/2]

JEAN PAUL GAULTIER: AROUND THE WORLD
Fontana 838 271-2 (5.2m 17s) CD

Yes, that JPG. And no, we can't resist pointing out that his attitude is reflected in his, version of ultra-deep, nay subterranean house music. Fashion victims: this is your anthem. [A:1/2]

DENNIS GReAVES & THE TRUTH/JUMP
IRS EIRASCAD 1003 (44m 5s) CD

Forget that Greaves has forsaken the retro-R&B movement and that he looks like he has the worst case of attitude this side of Hue & Cry. He and his band rock hard, rock well and deserve more than four lines in the back of a hi-fi mag. [A:1]

HELLOWEEN: LIVE IN THE UK
Noise International/EMI CDP 7 48920 2 (47m 21s) CD

There's solid UK metal and then there's Eurometal as only the Germans can translate it. What it lacks in originality is compensated for with power and enthusiasm. [A:2]

HOLLOWEEN: LIVE IN THE UK
Happas Records HAPPA'S 1 (Happas Records, 129A Hamilton Place, Aberdeen AB2 4BD)

Everything has accelerated: Only a couple of years into the roots boom and here we have retro folk/dance music. This is so creaky that it makes Morris dancers look like Yazz Wannabees. For traditionalists. [A:2]

DESTROY ALL MONSTERS: LIVE
Fan Club/New Rose FC050CD (45m 11s) CD

This is an antitode for those who think Iggy sold out when the Stooges split. Ron Asbenton thinks it's still '69 and the Pistols are nothing more than '69. Vicious, anarchic rock for the faithful. [C:1]

THE JACKIES: SOMETHING COMING
Enigma ENVLP 526

The original surf/punk/speed merchants returning, sounding as loopy as they did in '79 with only a slight slowing of the tempoz to mark the march of time. Their trademark sequitor covers are there, including a timely massacre of Pitney's 'Town Without Pity' and a hilarious 'Hair'. The 1980s may be ending in drag mode, but some guys just wanna have fun. [A:1/1]

T LAVITZ AND THE BAD HABITZ: T LAVITZ AND THE BAD HABITZ
Intima/Enigma ENVLP 525

A pleasing variation on the crossover fusion jazz-rock formula: lean and clean, and funky. Not a complete gutslight a world that's been Sanborn'd to death, but it beats the hell out of Contemporary Instrumental. [A:1/2]

DELBERT McCLINTON: LIVE FROM AUSTIN
Alligator AL-4773

McClint's first live LP and his first of any sort in nearly a decade, a set of tracks defying classification. Too bluesy and soulful for New Country, too country to be mistaken for uptown R'n'B and too good to be ignored. [B:1]

COUNTRY JOE McDONALD: VIET NAM EXPERIENCE
Line/TM/PRT L1CD 9.00418 (73m 02s) CD

Still around and singin' about 'Nam. A folkie: 'Nam is reflected in this, his version of ultra-deep, nay subterranean house music. Fashion victims: this is your anthem. [A:1/2]

THE OJAYS: SERIOUS EMU-USA CDMTL 1041 (45m 3s) CD

50 years on and the sound still works. This is pure, high-gloss 1989 discothec soul, yet there's no mistaking that these gents have been around the block. Listen closely and you can still make out the smooth sensations of the original Back-stabbers. [A:1]

ONSLAUGHT: ONSLAWTH
fffr/London 828142-1

Highlights of this live version include Randy California's 'Hay Watchtower'. [A/B:1/2]

O.S.T.: GHOSTS ... OF THE CIVIL DEAD
Mute Records TONIC 3

Suitably gloomy score for a prison film. About as bleak as it gets, but Nick Cave's fans might find it just about right. [A:2]

O.S.T.: CAN'T STOP THE GIRL
CBS 452805-0

Divine country warbling from a Canadian Who would Be Southern. Rocking rather than rufeful, with an appeal that should defy the country classifications. [A:1]

ALSO RECEIVED:

THE STRANGLERS: RADIO ONE SESSIONS
Strange Fruit/Nighttracics SFN 620

The Stranglers heard live on the Beeb in 1982. [A:B:1]

VARIOUS: JAZZ TODAY VOL. 1
BGP/ACE BGP 1026

10 tracks offered on the new Fantasy jazz catalogue. [A:1/2]

VARIOUS: NITE FLITE 2
CBS 452805-0

TV-advertised smooshers from Sade, Vandross, etc. [A/B:2]
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CHAN 8762 - CD; ABRD/ABTD 1400 - LP & Cassette

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CHAN 8725 - CD; ABRD/ABTD 1385 - LP & Cassette

Purcell: Sonatas Vol. III
Purple Quater
CHAN 8753 - CD; ABRD/ABTD 1401 - LP & Cassette

Beethoven: Symphony No. 2 & 5
City of Birmingham Symphony Orchestra/Weller
CHAN 8752 - CD; ABRD/ABTD 1391 - LP & Cassette

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Note) with sound quality you will not surfiedrivin' material from ' 64, restore long-unavailable Beach For Miles showing how you EMI wouldn't do it so here's See 1972 Warner solo plus a pair of 1964/5. Historic importance aside, it's an exceptional R&B off- to a patchy career, her quavery voice just fragile enough to set hearts athumpin' around the world. Eclectic mix of material makes this [A/A*:1/1/2] and mandatory.

MARIANNE FAITHFULL: MARIANNE FAITHFULL London 820 630-2 (53m 05s) CD The superb liner notes tell the whole story behind this, roughly half of her debut material from 1964/5. Historic importance aside, it's an exceptional R&B off- to a patchy career, her quavery voice just fragile enough to set hearts athumpin' around the world. Eclectic mix of material makes this [A/A*:1/1/2] and mandatory.

TENNESSEE ERNIE FORD: FATHER'S BOOGIE See For Miles SEE 262 Continuing the label's assault on the country reissue market, a revealing 20-track set which makes you wonder why the guy is only remembered for ' 16 Tons'. Brilliant vocal textures from the kind of rich voice which comes along only once in a generation, like Willie Nelson without sinus problems. [A:1/1/]*

FRIENDS AGAIN: TRAPPED AND UNWRAPPED Fontana 836 895-2 (61m 21s) CD Puzzling failure this, another case of a band (Glaswegian) too far ahead (1984/3) of the trend (hyper-professional red-eyed fashion-victim soul-funk). If you like Hue & Cry, Wet, Wet, Wet or any of the other Hall & Oates wannabees, dig in; Friends Again were better than most of the current crop. [A:2/1/]*

THE GROUNDHOGS: HOGWASH See For Miles SEE 252 Mobile Fidelity MFCD 794 (47m 19s) CD The sharp-tongued protest singer's wizard wheeze, shocking the hell out of the faithful by playing a straight rock'n'roll set. Fortunately, most of this audience was hip enough to realise that, hey, the music cooks! Presley and Holly medleys show where Ochs' heart was, while his 'Olke From Muskogee' could be mistaken for the real McCoy. [A:1/1/]*

THE REMAINS: THE REMAINS Fan Club/New Rose FC 012 CD (70m 06s) CD An archivist's dream, 26 tracks from one of the most revered 'critics' choice' bands of the 1960s. Sharp, straightahead rock which fills the gap between garage band and pro. The most important of Boston's might-have-beens. [A/B:1/1/]*

DEL SHANNON: THE DEL SHANNON COLLECTION Line/TPR/PRT IMCD 9.00436 (54m 40s) CD Excellent 15 track collection representing one of the few shining lights of rock's gloom period (1959-63), with slight changes from Edsel's vinyl offer- ing. Contains the first-ever US cover of a Beatles tune. [A/B:1/1/]*

THE TROGGS: WILD THINGS See For Miles SEE 256 Absolutely hilarious package which proves that The Troggs actually were much more stupid than even Spinal Tap. 15 cover versions butchered as never before, only the Troggs don't know it is a record party LP for the over 35s. [A:5/1/]*

VARIOS: COUNTRY MUSIC HOOTENANY See For Miles SEE 254 How the country crowd partied in 1963, a magical concert with the likes of Roy Clark, Merle Travis, Rose Maddox and others. Irresistible, especially the bumptkin chit-chat. [A:1/1/]*

JOE WILLIAMS: HAVING THE BLUES UNDER EUROPEAN SKY Denon DC-8535 (45m 47s) CD The most critically rewarded set yet in Denon's series of jazz reissues, Williams working through a set of bluesy standards which he interprets with absolute cool. A voice for the gods. [B/C:1/1/]*

ZEPHYR: ZEPHYR BGO BGOLP 41 An absolute treasure: long-lost, major-league recording featuring Tommy Bolin, later of Deep Purple. Sounds like a blissful marriage between Rough Trade and Big Brother (with Janis). Fine example of a boogie-ish band with a torch singer up front. [A/B:1/1/]*

ALSO RECEIVED:

CLANNAD: PASTPRESENT RCA PD74074 (61m 58s) CD Their best, a musical and a sonic delight. [A:1/1/]*

BILLY FURY: BILLY London 820 625-2 (47m 18s) CD 20 more tracks in digital, including rarities. [A:1/1/]*

MANFRED MANN: EP COLLECTION See For Miles SEE 252 20 tracks from their now-pricable four-song 7-inchers. [A:1/1/]*
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Taupin's obsession with the true-life squalor of the 'Wild West': American frontier history. Tumbleweed Connection is where Bernie and Elton first demonstrate their adaptable, chameleon-like instincts; qualities which have helped them weather arid periods of glitter, then soul, punk, disco, new romantics, rappers, and a million-and-one other musical (and not-so-musical) fashions.

With Madman across the Water their rate of ascent falters momentarily. Having unexpectedly taken the USA in one night at the Los Angeles Troubadour Club, the team found themselves touring US and having to write this album 'on the road', to meet their contractual obligations. It had all gelled again by the time Honky Chateau was recorded (at Chateau d'Ille-ouville), with the effervescent 'Honky-Cat': 'How can you stop/when your feet say go? Honky Chateau contains 'Rocket Man', the near-nil success Elton had to have his No.1 single in the UK. The lyrics, ostensibly about the boredom and detachment of yer' nine to five astronaut, also hint at Taupin reflecting on elements of his new life in the jet-setting orbit. In 'Mona Lisa and the Mad Hatter Taupin expresses social comment, first encountered downtown NYC. The by now fully formed Taupin/chords continue into the '72 album, Don't shoot me — I'm only the Piano player.

In October 1973, Goodbye Yellow Brick Road was released to universal acclaim. At the time, Bernie was shut away with his first American wife in a tiny cottage not far from the town of Markslaten where 6 years earlier he'd been king of the local wide-boys. Maybe the cottage is the site of 'The Roses in the window box', where 'Love lies bleeding? For, within the year, he would be leaving to live in Los Angeles.

To this day, GBYBR remains one of a handful of thematic double Rock albums where every song is strong and polished orchestrate their adaptable, chameleon-like instincts; qualities which have helped them weather arid periods of glitter, then soul, punk, disco, new romantics, rappers, and a million-and-one other musical (and not-so-musical) fashions.

From humble beginnings to

Elton John's Top 40 hits -

the story of Bernie Taupin

women, 'Raised to be a lady by the golden rule/Alice was the spawn of a public school/With a double-barrel name in the back of her brain ... Reality it seems was just a dream ...' to which Elton composed a rhythm which builds in a series of climaxes over a marching 4/4 tempo. Caribou is widely regarded as a weak album, its quality thinned by the strain of shoe-horning the recording into 4 days amidst arduous touring. Still, it contains what would become one of the best-loved ballads 'Don't let the Sun go down on me'. Captain Fantastic and The Brown Dirt Cowboy (representing BJ and BT respectively) chronicles more of the Wild West alongside their early adventures around Soho. The lyrics are now more focused, but also more introspective and even melancholy. By the time Blue Moves was released in 1976, the songwriting rocket had burned off its first fuel tank. Two years later, Elton 'terminated' his relationship with Bernie and turned to other songwriters to produce more overtly commercial songs. After a much needed rest, the winning partnership re-formed in time to produce a string of classy albums spanning the 1980s. He has also written occasional songs for other artists, notably (Jefferson) Starship's 'We built this city ...'.

Today, Taupin's devotees can enjoy A Cradle of Haloes, a recently published book in which Taupin relates the events and experiences of his childhood and adolescence, including his musical and literary influences. My own interest is intensified by the fact we attended schools at the opposite ends of the same small market town. Against all the odds, he emerged from the secondary modern school (1" only farmed in schools/that were so worn and torn") and narrowly escaped following his peers into picking cauliflowers in the surrounding fields. 

1981 NEWS & RECORD REVIEW AUGUST 1989
To mark the forthcoming London visit of Sir Georg Solti and the Chicago Symphony Orchestra, Decca is releasing superb recordings of two contrasting orchestral masterpieces. Symphony No. 6 (with Leonora Overture No. 3) is the latest addition to Solti's new Beethoven symphony cycle while Shostakovich's Symphony No. 8, which will be featured in the orchestra's final London concert, is Solti's first recording of music by the great Soviet composer.

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