

HIFICRITIC

AUDIO REVIEW MAGAZINE
£15 Vol7/No1 JAN - MAR 2013

STAN'S SAFARI

Stan Curtis discovers a powerful statistical analysis tool that explains some of the differences we can clearly hear

ALEXIA SCRUTINISED

Martin Colloms discovers that Wilson Audio's new Alexia floorstander is something rather special

THE NEW BOSS?

Does Naim's new NDS network-connected digital player/streamer/DAC deliver flagship worthy performance?

FOCAL WITH NAIM

Focal's managing director Gerard Chretien tells Steve Harris about his own company and the Naim Audio merger

HEADSOUNDS

Headphones and earbuds are hot right now, but they're often not as good as they pretend. We put a dozen through their paces

ULTIMATE CONTROLLER

Linn's Akurate DSM streamer/pre-amp can handle virtually anything – analogue or digital – that's thrown at it

MUSIC & MUCH MORE

REVIEWED THIS ISSUE: NAIM NDS, C.E.C. TL3N/DA3N, WILSON AUDIO ALEXIA, LINN AKURATE DSM, AUDIOQUEST DRAGONFLY, GRADO SR80i, CAMBRIDGE AUDIO DACMAGIC 100, THINKSOUND TS02+, MICROMEGA MYDAC, GRADO SR325i, PSB M4U 2, MARTIN LOGAN MIKROS 70, CONCERT FIDELITY CF-08LSX2, BEYER CUSTOM ONE PRO, BOWERS & WILKINS P5, BEYER T70/T70P, GRADO PS1000, BEYER DTX 501P, BOWERS & WILKINS P3, VON SCHWEIKERT UNIFIELD-2, SENNHEISER IE80



Contents

- 4 STAN'S SAFARI No21**
Stan discovers a powerful statistical analysis tool that helps explain the differences we can clearly hear, but which defy accepted 'scientific wisdom'
- 7 BLISS**
Christian Schuller describes his road to musical bliss
- 10 ALEXIA SCRUTINISED**
Martin Colloms discovers that the *Alexia*, the latest floorstander from Wilson Audio, is something rather special
- 18 MADE IN JAPAN**
Japanese hi-fi specialists rarely operate outside Japan. C.E.C. is one exception, and here we review the TL3N disc drive and DA3N DAC
- 
- 20 THE NEW BOSS?**
Does Naim's new *NDS* network-connected digital player/streamer/DAC deliver the performance worthy of a 'flagship' model?
- 26 FOCAL WITH NAIM**
Focal's managing director Gerard Chretien tells Steve Harris about his own company and its merger with Naim Audio
- 29 RIPPING YARNS**
Jason Kennedy reports on the computer hi-fi developments he encountered at America's CES
- 30 TUBE ROLLING**
This minimalist Japanese pre-amplifier from Concert Fidelity has easy access for trying out different valves
- 33 HEADSOUNDS**
Headphones and earbuds are the hot hi-fi products right now, but experience suggests they're often not as good as they pretend, so Martin Colloms has put a dozen through their paces

- 40 VSA UNIFIELD-2**
A high class stand-mount from Von Schweikert in the USA comes under close *HIFICRITIC* scrutiny
- 43 CLASSIC VALVE AMPLIFICATION**
Neil Goodwin discusses his enthusiasm for some of the best post-war valve amps, and suggests some likely examples



- 44 ULTIMATE CONTROLLER**
Linn's *Akurate DSM* streamer/pre-amp can handle virtually anything – analogue or digital – that's thrown at it
- 46 WHITHER HI-FI?**
Loudspeaker engineer Geoff Hill queries whether hi-fi is really progressing, or if we should be looking back at audio's history
- 48 THREE BUDGET PRICE DACS**
Martin Colloms assesses the Audioquest *DragonFly*, the Cambridge Audio *DACMagic 100*, and the Micromega *MyDAC*
- 50 INDEX FOR THE 2012 EDITIONS**
- 52 FAVOURITE THINGS**
Paul Messenger chooses ten rock/pop releases that have stood the test of time
- 54 JAZZ PICKS**
Greg Drygala unearths four new and interesting jazz releases
- 56 THE BEST OF CLASSICAL**
Colin Anderson picks up on some recent classical releases
- 58 ROCK, POP & OTHER NICE MUSIC**
Nigel Finn (The Chord Company) chooses six recent releases
- 60 SUBJECTIVE SOUNDS**
Looking back at three months of varied listening



Wilson Alexia scrutinised on page 10



Editor | Paul Messenger

Writers

Colin Anderson
Martin Colloms
Stan Curtis
Greg Drygala
Nigel Finn
Neil Goodwin
Steve Harris
Geoff Hill
Jason Kennedy
Paul Messenger
Christian Schuller

Publisher | Martin Colloms

Design | Philippa Steward

Published by

HIFICRITIC
29 Flask Walk
London
NW3 1HH
info@hificritic.com
www.hificritic.com

Printed in the UK by
Premier Print, London

HIFICRITIC is a printed publication available by subscription only.

© HIFICRITIC Ltd 2013. All rights reserved. Any unauthorised editing, copying, reselling or distribution of the whole or part of this publication is prohibited. The views expressed in any articles in this magazine should be taken as those of the author or the person quoted unless indicated to the contrary. While HIFICRITIC endeavours to ensure the accuracy of the information contained in this publication, its accuracy cannot be guaranteed and HIFICRITIC.COM accepts no liability for any use of, reliance on or the accuracy of such information.

A hot topic in the hi-fi industry today is whether or not the Compact Disc medium has much of a future. Hard it may be to believe the fact, but the CD format has actually been around now for nearly 30 years, which is an unquestionably good run by any standards, given technology's rapid rate of progress. Indeed, I started using CD players (albeit rather reluctantly) some years prior to the arrival of my first Mac, and indeed well before mobile telephones became commonplace.

The last 30 years have seen all manner of changes, in both the music software itself and the means of delivering the music. In the UK at least, sales of downloaded digital music files via the internet (to computers, tablets and smartphones) actually overtook that of other means of music distribution during the first three months of 2012.

While I don't think such a trend necessarily applies to, or has much relevance to a hi-fi listening minority, anecdotal evidence does suggest that CD player sales are currently weak. And it's certainly also true that downloaded files no longer have to be a poor MP3-encoded relation of the full uncompressed 16-bit/44.1kHz resolution that is the CD medium.

So is the CD format on the way out? Frankly, I doubt it. I for one like a solid and physical piece of software, rather than something rather nebulous called a file, sitting in a computer or cloud, especially as said computer is constantly updating itself, and will probably need upgrading in a couple of years.

Computer audio in its various forms clearly represents a threat to hi-fi's traditional component approach, partly because of its potential to deliver 'hi-res' digital music files that represent a significant improvement over CD's 16-bit/44.1kHz, but probably more significantly for its extra convenience in rapidly accessing one's music. And as far as the public at large is concerned, I'm quite certain that convenience of music access (and relatively low cost) is of vastly greater importance than the possibility of superior quality.

I can't help recalling the era of the Compact Cassette, which offered 'go anywhere' convenience over the vinyl LP, especially for Walkman and in-car applications. Consumers loved it, but the music business regarded it with deep suspicion, coining and publicising the slogan: 'Home Taping is Killing Music'.

Music survived, thanks much more to the creativity of the musicians themselves than the greed of an increasingly profit-driven and accountant-led music biz. I might well have used a cassette deck to record friends' albums back in my impecunious 1970s student days, but it hasn't stopped me from subsequently accumulating an enormous quantity of paid-for music on vinyl and CD. The music biz has done very well out of me.

However, I must admit I've been struggling to find new material that I've wanted to buy and play in recent years. The music biz blames file-sharing for a 40% drop in world sales by value between 1999 and 2011, but I'm inclined to believe that a lack of creativity, the widespread use of dynamic compression, alongside a general ineptitude when it comes to spotting and fostering new talent, is equally significant.

Paul Messenger
Editor

Tube Rolling

THIS MINIMALIST JAPANESE PRE-AMPLIFIER FROM CONCERT FIDELITY HAS EASY ACCESS FOR TRYING OUT DIFFERENT VALVES

The most obvious distinguishing feature of this very refined and carefully designed Japanese thermionic pre-amplifier is that the amplifying double triode pair is located on the back plate (partly shielded by a couple of strong safety bars). Designer Masataka Tsuda believes in 'tube rolling' [the practice of swapping valves of the same type but from different manufacturers – *Ed*], and has made it really easy as no covers need be removed (though do always set the unit to 'standby' when making changes).

Our review sample was supplied by Paul Stratton, an audio enthusiast and the founder of distributor Z-Axis Audio which includes Concert Fidelity in its modest product portfolio. Incidentally, Stratton also has a significant background in bespoke furniture. He explained the basis for supplying three different sets of triodes (plus a spare *EZ81/6CA4* rectifier tube) for the review: "A pair of Toshiba made and Pinnacle branded *13D5A (12AU7/ ECC82)* were factory burnt in but not otherwise specially selected. In addition I'd suggest gold pin JJ Electronic *ECC802s* equivalents, and finally NOS Mazda (France) *6189 (ECC82)*."

The £12,900 *CF-08LSX2* is a neat looking pre-amp, fabricated from anodised aluminium plates bolted together with stainless socket head screws. The fine grain pearlescent finish is rather susceptible to fingerprint marks, so white cotton gloves are

provided for handling! It has two gain options, 6dB and 12dB (2x and 4x), individually selected for each channel on the rear panel. It normally inverts absolute phase, but this may be corrected if required by inverting the phase of the speaker cable connection. The mains power and standby switches are both located on the rear panel, so a top shelf location is advisable. Standby is operated after the mains is switched on to power it up, and is fine long term to keep the supplies well tuned, and also for swapping valves (but wait a couple of minutes for the glass to cool down!). The fitted feet are for transit and handling only, and the use of suitable audiophile supports is recommended by the designer. A 'ground lift' switch should help sort out any hum issues.

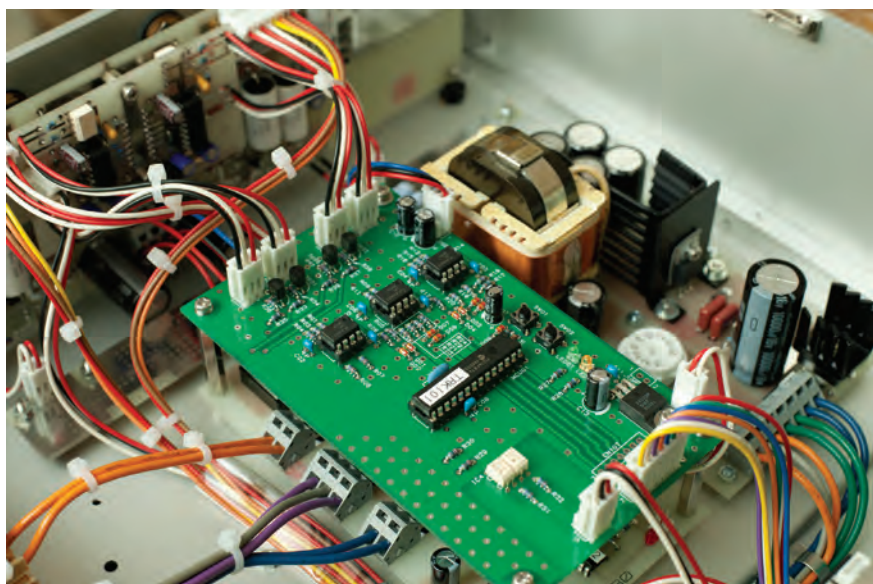
The remote handset controls only volume, not input selection. It's a hefty, part aluminium affair with just two buttons for up and down, and these have to be pressed successively to move up or down a rather coarse scale, predominantly made up from 2dB steps.

The front panel's numeric display indicates the volume setting. The volume knob has the same steps but a more continuous action, and in operation sometimes 'clicks' electrically. Simple lever switches provide muting and choose between the four inputs. Selection is at the input sockets to minimise signal path length, and this short signal path design has no tape loop, mono or balance facility.

Technology

Some features will help illuminate the interior build and circuitry of this deeply purist design. Like the original classic Sony *ES* series pre-amp, the signal path is symmetrical for each channel and also very short (about 4in), paying scrupulous attention to the central grounding. Interestingly, a maximum input level of 2V is suggested, as the input goes directly to custom designed 'solid state' resistors and an FET-selected volume control, with the resistor array mostly coded for 2dB steps; this arrangement also defines the input overload margin.

The signal then goes direct to an inverting triode amplifier configured in the familiar cascode configuration, using one pair of triodes per channel and providing a wide 100kHz bandwidth without the need for an additional cathode follower. The output is AC-coupled by selected 0.44uF capacitors,



and a load impedance of 100kohm or more is recommended for best signal dynamics and low frequency extension.

Special monolithic DC-to-DC converters in the low level power supply provide very high levels of input/output isolation; the regulated lines are therefore extremely quiet in respect of mains noise. The valve-rectified high voltage supply to the triodes has substantial C-core choke smoothing, and the main transformers are also massive C-core affairs. Parts selection has clearly involved a critical process, and it's clear where the money has been spent. The primary objective has been to minimise loss of signal information while using technology and components known for their highly natural sound. Finally it is clearly designed for easy 'triode rolling'.

Sound Quality

From the off, this pre-amp established fine credentials, delivering neutral transparency with a firm commitment to the musical message. On some familiar material I initially felt there was a slight lack of bass weight and power, but after correcting for absolute phase the bass quality was restored, reminding me of a similar earlier experience with an inverting Conrad Johnson triode pre-amp.

I allowed the 'LSX2' to settle in for a few days prior to formal listening, remembering to try support options, various feet and domes, as instructed. Feeding the relatively 'kind' 200kohm input impedance of the D'Agostino *Momentum Stereo*, this Concert Fidelity pre-amp seemed right at home, and was distinguished by its apparent near absence from the chain, more like very good audio cable than a piece of powered control and amplification electronics. Essentially neutral, it was also plain that transparency and clarity, were fundamental attributes and the stereo image depth was most rewarding.

Interestingly, timing was a strong point, alongside a feeling of intimacy and involvement, of being calmly drawn into a musical event, rather than having it thrown at the listener. Dynamics were natural and unexaggerated, almost to the point of mild restraint, conveying a sense of calmness, with a measured pace and stability. Focus was very good, with the image presented on a natural scale.

On the factory transit feet there some loss of excitement and clarity, but with Harmonix *TU210* or Alto Extremo *FBII* the sound was more open, with better expression and improved lower midrange detail separation. Hitherto I had been using the Mazda valves, but then tried the factory supplied triodes. Results were still very good, but I did notice mild losses in several areas. It was not as tactile, had 'greyer' contrasts, sounded a little 'slower' in the



bass and had less of that subtle clarity, particularly in the treble; perhaps an 8% loss in quality. The JJ tubes then took things more than half way back to the Mazdas. That sense of clean illumination was back, though now with slightly bright treble: it's not quite as neutrally balanced, which is one of this pre-amplifier's inherent strengths.

It played all music genres well, but fine classical recordings revealed just how natural it could be, showing convincing timbre on orchestral instruments like violin, viola and 'cello, with no acidity and with vibrant expressive playing. Now I could clearly hear what this very focused designer was aiming to achieve. The overall sound quality score of 150 is right up with the very best available.

Lab Report

I need not have worried about the conservatively specified input overload limit, since I measured an ample 4.68V – a nearly 20dB margin over the nominal 0.5V IHF level. Just a few high gain phono stages with a 'loud' cartridge might exceed this, but a dealer will be able to advise here. I can understand that Masataka does not wish to prejudice the sound in any way but he could easily have said: "recommended nominal input up to 2V; overload headroom 4.5V".

This pre-amp was extremely accurate, with 30Hz – 30kHz frequency response measuring +0/-0.1dB, excellent channel balance of +0, -0.13dB, 20Hz to 20kHz, and massive output headroom of up to 18V (rms). The 6dB and 12dB gain settings are correct and channel balance is accurately maintained over the whole volume range. Below the maximum scale reading of '31', the volume steps are almost 2dB; below '8' and the steps have increased to about 3.5dB down to a near inaudible -60dB gain. Step 1 is -76dB, and the indicated 'zero' is the same as mute.

The input impedance is a kind 68kohm and my precision LCR bridge read a 1kohm output impedance at 1kHz (I suspect buffered by a resistor to avoid premature overload, together with a

Reference System Components

Krell *Evo 402E* and D'Agostino *Momentum* power amps; Audio Research *REF5 SE*, Townshend *Allegrì* control units; Linn *LP12/Radikal/Keel*, Naim *Aro*, Koetsu Urushi Vermilion, Naim *Superline/Supercap* analogue source; MSB *Platinum Signature/Diamond* supply, Naim *UnitiServe* digital source; Wilson Audio *Sophia 3*, Quad *ESL63*, 15ohm BBC *LS3/5a* speakers; Finite Element *Pagode Reference* racks; Transparent *XLmm2* and Yter cables. Alto Extrema *Fat Boy II*, Harmonix and Synergistic *MIG* feet.



modest 0.44uF output capacitor). For the 100kohm nominal output load the bass response fell by only 0.8dB by 10Hz, but a small loss of bass weight may be experienced with lower (say 20 – 50kohm) power amp loading.

Audible background noise seemed silent, though measurement showed just a trace of 50Hz and 100Hz line hum at a low -95dB (ref. CD input level this is actually better than -105dB). THD (inc. noise) was stable at better than 0.08%, 100Hz – 30kHz; spectrum analysis showed harmonious intrinsic linearity, with good high frequency intermodulation down at 0.1%, and nicely decrementing distortion harmonics for 1kHz (eg -59dB for second, -82dB third, -100dB fourth, and nothing else of note). No wonder we thought it had a pleasing sound. Signal-to-noise ratios were fine with 85.7dB unweighted, 85.2dB CCIR (1kHz) and finally 93.3dB A-weighted. This is very evidently a precision design of laboratory quality. (All measurements were taken with the Mazda triodes fitted.)

Conclusions

Precise in build, design and technical performance, this preamplifier aspires to perfection through accuracy, seeking neither to add nor subtract from the music signal, and it succeeds in getting very close to this ideal. It also offers good input and output matching, albeit with rather sparse control facilities, a limited number of inputs, and only remote control of volume. The convenient triode substitution facilitates fine tuning to suit the owner and the system.

Contacts:

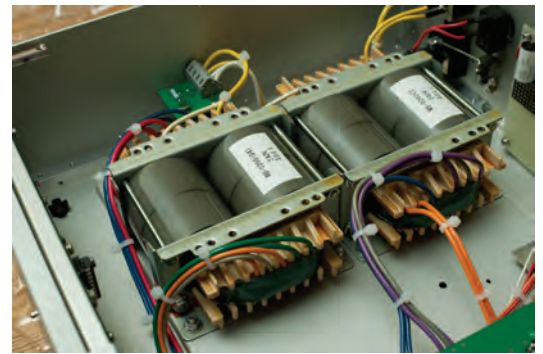
Z-Axis Audio
Tel: 07801 308982
www.z-axisaudio.com

Silicon Arts Design & Concert Fidelity, Inc.
598-13 Nagakura
Karuzawa-machi, Nagano-ken

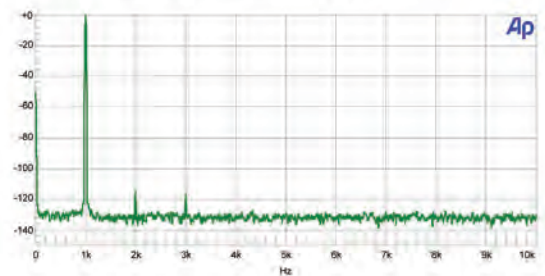
PREAMPLIFIER TEST RESULTS

Make Concert Fidelity	Date 8/1/2013		
Model CF-08LSX2	Ser. No.		
Distortion, THD inc noise L/R	20Hz	1kHz	20kHz
At IHF 0.5V out, 0.5V line in	-56.1 dB	-63.2 dB	-59.7 dB
Channel separation L/R, R/L			
IHF. 0.5V SE	91.4 dB	106 dB	82.5 dB
Frequency response			
IHF. 0.5V (100k load)	-0.25 dB	0.0 dB	-0.01 dB
Intermodulation Distortion			
19.5kHz/20.5kHz 1:1 SE	0.5V output -60.5dB	1kHz difference tone dB	
Signal to noise ratio dB	84.2	CCIR Weighted 85.7	20Hz-22kHz 93.3 A Weighted
Channel Balance over volume range			
R ch is reference at 0dB	0.13dB	0.11dB	0.10dB
at -20dB		0.11 dB	
at -40dB		0.10 dB	
at -60dB		0.12 dB	
Maximum output level (1% clip)			
100k Ohm load		18 V SE	
Output impedance Ohm	1k Ohm	SE (0.44uF in series)	
Input Data	Socket	Sensitivity	Loading
Line input single ended	Phono/RCA	250 mV	68 kohm
DC offset	Left nil mV	Right nil mV	
Size (cm)	Width 45	Height 10	Depth 31
Weight		8.5kg	
Price	£ 12,000 (plus some NOS triodes)		

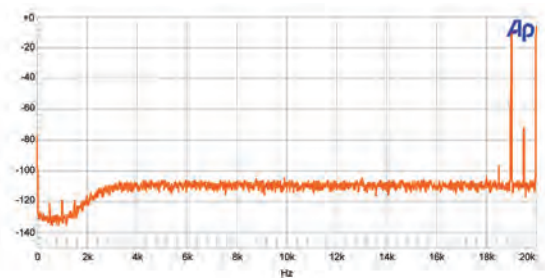
The sound is highly natural, transparent and neutral, the channels match well with very low noise and precise responses, and it delivers a musically most harmonious and involving sound that clearly belongs in the top class. Firm recommendation is assured for a design that so clearly expresses the art of high quality audio.



Concert Fidelity 2V harmonic Spectrum 1kHz



Concert Fidelity 2V I-M Spectrum 19-20kHz



Subjective Sounds

PAUL MESSENGER

HIFICRITIC

AUDIO AND MUSIC JOURNAL

BECAUSE HIFICRITIC IS FUNDED BY ITS READERS THE SUBSCRIPTION COST IS NECESSARILY HIGHER THAN FOR MAGAZINES SUBSIDISED BY ADVERTISING REVENUE, THOUGH CERTAINLY NOT AS HIGH AS PROFESSIONAL SPECIALIST JOURNALS.

Our budget is directed towards obtaining the very best research and writing from the very best freelance authors, whom we encourage to express themselves fully in print, an opportunity not always available via established publishing regimes.

Through the use of a virtual office, we aim to be exceptionally cost effective. Subscription management, production, printing, editorial, design, laboratory measurement and journalism are scattered around the world, yet are also efficiently and almost instantaneously linked at the touch of an e-mail send button.

Our independence from product advertising allows us to criticise and comment without fear or favour. The HIFICRITIC team scrutinises interesting and internationally important issues and equipment in depth and detail, technically and subjectively, and provides comprehensive investigations into the key issues facing high quality stereo music recording and reproduction today.

Martin Colloms, Publisher

SUBSCRIPTION DETAILS: Full details are provided on the WWW.HIFICRITIC.COM website, including foreign rates and secure electronic payment. If you prefer to pay direct for the UK please copy this page and send the filled in form, including a cheque payable to HIFICRITIC Ltd and send it to: HIFICRITIC, 29 Flask Walk, London NW3 1HH.

Our website supports the day-to-day activities, reports, archive and download material, while the Journal contains the primary contemporary output of our editorial team. The HIFICRITIC audio journal is a full colour print magazine with about 40,000 words of original editorial content per issue. To see what is in our most recent issue, see our *current issue* page.

Name

Address

.....

.....

Town.....

Post Code

Country

Email

Please give your choice of issue number for start of subscription (see above) Issue no.....

UK SUBSCRIPTION PRICES: (*mail included*)

1 Year £60, for four, quarterly issues

Since my days of editing the original A5-size *Hi-Fi Choice*, I've always rather enjoyed the extended schedule of a quarterly publication. I can cope with monthlies, but dislike the time constraints of weeklies, and the prospect of working on a daily fills me with dread. I like to be able to take my time, and to have time for second or even third thoughts.

That said, I still haven't quite adjusted to the *HIFICRITIC* schedule. One problem I've encountered concerns my own reviews. I start work at the beginning of the quarter, gathering in the components I'm planning to try, writing a couple of introductory paragraphs and carrying out some initial listening.

Then the pressure of putting together the rest of the magazine seems to take over. Articles arrive and need subbing; others need chasing; components need to be organised for other reviewers; and so on. My own writing is consigned to a Pending file, in the often vain hope that I'll get around to paying it some attention before the contents list has to be finalised.

In the end I did manage to finish the C.E.C and Linn reviews. I also wrote the first example of a planned series of music features called *Favourite Things*, the idea being to persuade at least our reviewers to share their favourite music with the *HIFICRITIC* community. Meanwhile, several items remain in the Pending file, so this column will act as something of a preview for the next edition.

I was intending to report on the Roksan *Caspian M2*. It's a relatively upmarket integrated amplifier that has been around for at least two years, so tends to be overlooked in the media. However, a friend suggested it was sufficiently exceptional that I ought to give it a try, and a brief listen has left me very impressed. I don't think it handles the extreme bass and treble quite as well as my regular Naim amplification, but it does show an exceptional ability to reproduce midrange voices with considerable poise and precision. Indeed, on some familiar discs I found myself making out lyrics and phrasing that had hitherto been obscure, so I'll have to make certain it receives full and proper treatment in the next *HIFICRITIC*.

I've also started work on my latest wallspeakers. The baffles have been cut for the latest 260mm Tannoy *Kensington* drivers, and these have been inserted into the hatch-like holes in my end wall. Crossover networks have been appropriately located and the speakers connected to the system.

The initial impression was certainly positive. It has been some years since I've actually got around to using a big Tannoy Dual Concentric flush-mounted into the wall, and I was immediately made aware of the bonus of eliminating the enclosure. However, adopting such an ad hoc approach is always unpredictable – after all, the *Kensington* is intended to be loaded by a specific volume of air in a port-loaded enclosure, and that combination unquestionably works very well indeed. Right now I'm not entirely convinced that the wall-mount arrangement works quite as well as I had anticipated. It's good, without question, but my first impressions are that it falls short of true greatness.

I've also got around to baffle-mounting the pair of vintage Goodmans *Axiom 80* drivers I've acquired, but I haven't worked out the wiring arrangements or tried them yet. I'm also a little apprehensive about damaging these ancient full range drivers, as a friend recently informed me that a pair sold on eBay for around £2,500 the other day!

Then there's my plan to write about the sound quality differences between several generations of Naim power amplifiers, temporarily held up by the need to find the old Cannon *XLR-LNE* type mains lead that original casework *NAP250s* used. Hopefully I'll have found them in time for the next issue.