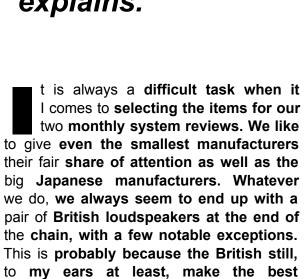
A HAPPY ENDING!

At just over £1,400, this system is nothing if not expensive. Although individually, the items chosen seemed unspectacular, as a system it went together well. Chris Frankland explains.



speakers overall. All the rest of this system though hails front the more easterly climes of Japan. The amplifier takes the form of the big Sansui AU11000A which weighs in with a beefy 110 w per channel and a host of useful facilities. The turntable, arm and cartridge are from Denon, who make a splendid range of top quality equipment. Featured deck is the Denon DP2500. There are four basic variations on the DP2000 which is just the bare turntable unit or chassis. Next is the DP2500 which we look at here, which consists of the DP2000 deck with special plinth and tonearm; then we have the DP2550 which is basically the same thing but with a replaceable tonearm mounting board, and finally there is the DP2800 which



has a natural marble board on thick press board cabinet plus Denon tonearm. The DP2500 sells for the princely sum of £318.

Speakers finally chosen were the Keesonic KBM, which is the top of that manufacturer's range, and sells for about £430 per pair. When you add these two sums to the £490 that the Sansui amplifier currently sells for, you realise this is not a cheap system! The cartridge chosen was Denon's top of the range model the DL103D which has only recently become available on the UK market. This is of course a moving coil type cartridge, and being a low output device requires a step up transformer or moving coil pre-amplifier. Denon's own AU-320 transformer was unavailable, so we opted instead for the tried and trusted Lentek head amplifier which combines good quality with reasonable price, i.e. £50. Add that to the £175 for the cartridge and the record playing package totals a staggering £500 plus I

The DP2550 deck is of direct drive design. But this is a direct drive with a difference. Most are of the DC type, which has the disadvantage that small amounts of rumble can be caused by the

pulse surges in DC, which are inevitably linked directly to the platter. Denon have chosen to overcome this by the use of an AC motor which provides a more linear flow, by going for extra field coils and a clean AC supply.

The other unique feature of Denon direct drives has always been the servo mechanism used. Most record decks sample speed variations about 100 times per second, but the Denon does it 500 times using their unique magnetic pulse system. Removing the platter gives a vital clue about how this works, and our picture should reveal the answer. That's right, they use a cassette tape head to monitor a magnetic coating of 1000 pulses on the inside rim of the platter. This information is fed back and compared to the signal given off by a quartz crystal and any deviation from the desired speed dealt with immediately.

Being a sceptical and rather bloodyminded individual when it comes to technology like this, I decided to really put the system to the test. I put on a record of female voice that I knew very well, playing through my reference system, and also using the Michell record clamp to ensure good disc-mat interface. I then placed my index finger on the clamp rim whilst the record was still playing and gradually increased the pressure. Much to my surprise and consternation, the thing actually fought back, and there was no audible wowing until I pressed hard enough to stop the thing. Now, I think that is quite an achievement. The Denon must certainly be the best direct drive mechanism that I have ever encountered.

Now, having said that, it is rather a pity that the deck is let down by two rather silly, but elementary errors of design. Firstly, the platter rings like the proverbial bell. Not only does it ring, but it drones on in a varying pitch for about half a minute after it is struck. This is because there are a series of wells at the periphery of the platter which act rather like tuning ports, this is likely to degrade sonic performance and thus is a Bad Thing!

My second grumble, and a more important one is that the arm fitted is located in a rubber mounting ring, which is so compliant that you can actually grab the arm and move it significantly from side to side as the rubber flexes. Anyone who has ever removed the rubber grommets from an SME arm will attest to the startling improvement that this makes. Rubber rings and grommets decouple the arm from the platter and there by the record, thus losing information, it is as simple as that. Time unfortunately did not permit me to remove the rubber ring, and although a fiddly job, it is not that difficult and is to be recommended very strongly to any owner or potential purchaser of the DP2550.

The fitted tonearm is the usual fairly high mass S-shaped arm. It is called a dynamically damped arm, but all that means as far as I can see, is that the counterweight is decoupled from the rest of the arm, which does usually help lose frequency definition and control. A variety of cartridges were tried in the arm, including a Shure V15/III with parabolic stylus. Ortofon VMS20E/II, Grado F1 + and of course the Denon DL103D.

The only cartridge which was not altogether happy in the Denon arm was the high compliance VMS20E/II which failed to pass Band C of the HFS75 even at its maximum tracking force of 1-£g, indicating an intrinsic mismatch. All the other cartridges mentioned performed happily and without distress of any kind. This would indicate that the Denon tonearm is well suited for cartridges of low to medium compliance, setting a top value of about 30 cu for absolute long term safety. The chosen cartridge, the Denon DL103D passed Band C of the HFS75 at 1.9g with bias set to maximum (3 g). It is capable of better

tracking, and I have had it through Band C at 1.75 g in my SAEC WE308SX arm, but nevertheless it performed reasona y in the DP2550 arm. For my listening tests I decided to go down to 1.8 gms.

Inevitably with a deck of this price, comparisons had to be drawn between Denon/Denon/Denon (sorry!) combination and my TD124/SAEC/SPU-TE reference set-up. I should say from the start that I have used and lived with the Denon cartridge for a long time and know it very well outside of this context. I find it has a very clean, neutral tonal balance with excellent transient attack. Its bass is firmer and more detailed than the Supex SD900, and it lacks the midband coloration of the latter, although which you prefer is probably down to personal preference.

Transient A ttack

For me though, the Denon DL103D and EMT XSD15 are the nearest cartridges to match the detail, sweetness, neutrality and transient attack of my reference Ortofon SPU-TE despite its age. Although the Denon I think ultimately deserves a better arm than that fitted to the DP2550, and anyone contemplating buying one would be well advised to consider using it either in a Grace G707, Mission 774, SAEC WE308SX or Dynavector DV505. I still would say though that both the Linn Sondek and the Thorens TD124 are better in terms of getting the last ounce of musical enjoyment from the disc.

Moving now onto the powerhouse of our system, the Sansui AU1 1000A, the first thing that impressed me while I was carrying it upstairs to my listening room was its weight. It is a heavy beast, and quite bulky, measuring 46 cmx41 cmx 18 cm. The layout of controls is neat and all the facilities one would expect to find on a Japanese amplifier at this price are to be found in abundance on the AU11000A.

I liked in particular the very comprehensive tone controls, offering a wide range of turnover frequencies from treble, through the midband to the bass end. High and low filters also have two turnover frequencies, and both can be defeated independently.

There are the usual variety of inputs, with full tape dubbing and monitoring provided. Ergonomically speaking, what I really like about the AU11000A is the fact that all input connections are at the side, in a recessed well running to the rear to keep cables tidy and yet easily accessible. Input connections are on the left side, and output connections, in the form of speaker terminals and pre-power split on the right.

The amplifier was first auditionod through my reference system. The adjustable sensitivity and impedance on Phono 1 input also make the connection of my SPU-TE easy without any risk of overload. My first reaction after listening to my Rappaport/TVA-1 X was a lack of life The AU11000A seemed to compress the dynamic range of the music, making crescendoes rather an anticlimax after the explosive power of the TVA. You must bear in mind though that the TVA power amp on its own will set you back £650!

The tonal quality of the AU11000A was neutral, if verging on flat at times. Bass quality was solid and well controlled. Top end was rather down by comparison with the TVA and lacking sparkle, but still pretty detailed. Having said that though, despite its claimed 110 w on paper into an 8 ohm speaker, I did manage twice at not too catastrophic a listening level to induce clipping from the amplifier on high level bass transients which really took me unawares.

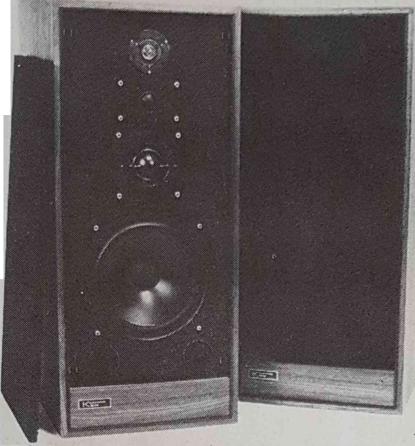
I have driven my reference speakers, the Stewart Dynaribbons, with a Naim NAP1 60 flat out at higher listening levels without clipping, so why does the Sansui break up? That's life, I suppose. Of course, into the KBMs which are a far easier load, the Sansui was perfectly happy and I failed to get it to clip audibly. On the whole, then the Sansui proved a very good amplifier indeed, with the slight reservation of power delivery into difficult loads, and a rather lifeless sound at times.

We arrive lastly and predictably at the boxes where the sound comes out. In this case £430 worth of walnut veneered high density chipboard in the form of a fairly large cabinet, 76 cmx33 cmx34 cm, containing four drive units. The KBM uses a Coles 4001G super tweeter, Peerless dome tweeter and dome midrange, finishing off with a 10 in Dalesford bextrene bass driver. The cabinet is reflex loaded. Crossover frequencies are at 400 Hz 3 500 Hz and 9,000 Hz.

was surprised to find a rather rudimentary 10-element crossover network, and listening tests did reveal the shortcomings that this economy engendered. Efficiency is 82 dB for 1 w at 1 kHz, which meant that the Sansui amplifier had more than enough power up its sleeves to drive the KBMs, and indeed rarely was it called upon to deliver more than it could safely take in its stride. The KBMs although quite efficient also handled everything the Sansui could gi^{Ve} without undue distress.

Comparisons were made with the Stewart Dynaribbons for reference, in mono side by side in A-B fashion, which is useful for isolating colorations and their

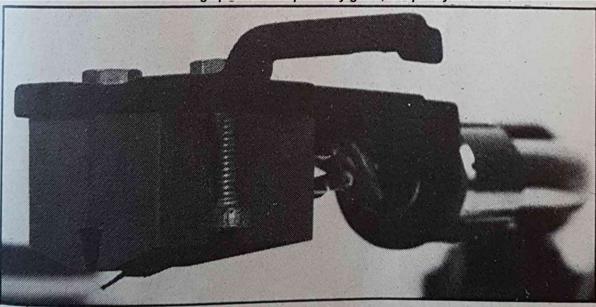
KBM is a four- way system, using a Coles super-tweeter, peerless tweeter and dome midrange, and 10" Dalesford bass unit.

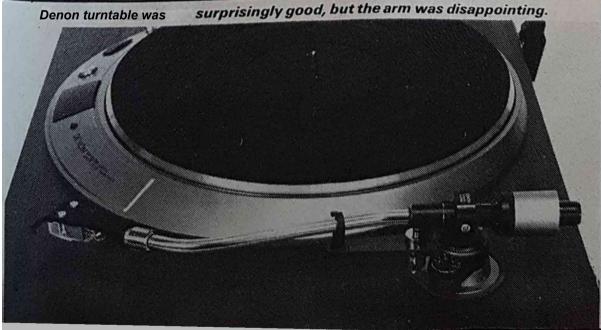


Sansui AU-11000A offers very extensive tone controls and inputs. Connections are made at the sides.



Denon DL 103D cartridge proved exceptionally good, but pricey!





causes. The first thing that struck me when switching from the Dynaribbon to the KBM was a very pronounced 'tunnelly' soOnd affecting the midrange. This was so noticeable and so strong that female vocals seemed to be coming from the end of a long tube receding back inside the cabinet. At times, I could almost locate the Peerless midrange unit precisely, indicating bad integration of drive units, due probably to inadequate care and attention to crossover network design.

Treble response actually seems to roll off quite early, at least subjectively, and tape hiss on records that I know very well is often inaudible through the KBMs. This would seem to tie up rather neatly with a rather lifeless, leaden cymbal quality that I found most disappointing after the clarity and sparkle of the ribbon unit. I put this down also to poor crossover and drive unit integration, as I know that the Coles super tweeter is capable of a far more open quality than Keesonic seem to have achieved.

Bass quality was good, but rather tubby and lacking true extension. Acoustic bass seemed rather honky, and made the KBMs sound a little boxy, cello showed up some pronounced cabinet resonances, and on viola, the KBM's performance was disappointing, making the instrument sound more like a cello, lacking its inherently tactile quality of the rosin on the bowstring.

Violin seemed to lose some of its harmonics. The sound as a whole actually appears to be forced out, especially in the midrange — and as I said before you can hear where it is being forced through, which makes them sound constricted and lacking openness when compared to the Dynaribbon. Of course, these criticisms must be taken in context. I understand that the Dynaribbon now sells for about £650. The KBM sells at about £200 less, so my critical analysis must be tempered by this consideration. But, no speaker is perfect, and these are the things wrong with the KBM as I perceive them.

As it happens, I found that in the context of the system as a whole, the shortcomings of the KBMs were not too apparent. All the individual items interfaced remarkably well to produce an open, detailed and punchy sound. In fact, the system as a whole worked better than my estimation from what I had heard of its individual components. When you are looking at a system that totals just over £1,400 you have a right to be rather critical. Although the individual parts can be bettered ultimately, as a system, it all worked rather well! In any case, I think it is safe to say that the system as a whole will please many.

