

IT'S THE



A MIX of familiar yet not so familiar items makes up this spotlighted system this month. I say familiar because the product names are well-known, but only the Linn LP12, Ittok arm, and Meridian 101B have been previously featured in their present form. We've never actually reviewed Linn Isobarik DMS speakers or the Asak 'T' cartridge and this is the first time we've looked at the revised Meridian 105 power amplifiers, (and my first opportunity to hear the new 101B) of which Meridian have been claiming sonic improvements.

It's an unusual mix too, in that one would normally find a Naim NAC 32, Snaps power supply and Naim NAP 250, rather than the Meridian, with the Linn equipment to form a complete Linn/Naim system. Considering the Linn and Naim items were designed specifically to work together, this is not as outlandish as some might suggest but would be the obvious course of action for many dealers.

Indeed, Tony Revelle of Audio Excellence originally had this very Linn/Naim system in mind for this feature, since he is a Naim dealer. It was his first choice, but we'd only just reviewed virtually the same system with Linn Saras from another dealer.

We would have gone along with Tony's choice despite that, but he didn't really fancy virtually duplicating this system and felt we needed a little variety. So, mindful that the Meridian is about £550 less expensive than a NAC 32, Snaps, and NAP 250 he supplied the new Meridian equipment as a viable alternative and one which some customers have preferred to the Naim (after listening to both).

The new Meridians

The Meridian 101 pre-amplifier and 105 power amplifiers have been around for a few years now and both have undergone changes. The 101 pre-amplifier has seen many module upgrades and the power amplifier has had the 'S mod' which deals with the loudspeaker output fuse by bringing it within the feedback loop. Despite these modifications, the original circuit boards were little changed up till now, but recent discoveries at Meridian lead to changing the earthing system on the new 101B pre-amplifier board. While they were changing the board, they took the opportunity to eliminate most of the inter-stage coupling capacitors from it and build a special composite capacitor into the moving-coil IMCOS module. This removed a lot of non-linear electrolytic capacitors from the signal path at a stroke and direct-coupled much of the pre-amplifier.

For existing Meridian owners the modifi-

cations are retro-fitable, as we have reported previously, costing £57.50 if your 101 has an IMCOS module (which they modify). If you've got a pre-IMCOS pre-amplifier, you'd best get a quote from them as the cost will depend on your module complement.

Incidentally there's also the 101B *balanced* which will drive Meridian's active loudspeakers and some professional (balanced input) amplifiers *via* a twin-wire balanced line inside a single-screen outer cable. This can also be used to drive a pair of 101 power amplifiers in bridged mode for even more power — as if the 100 watts per channel of the 105s were not enough!

Latest modifications to the 105 power amplifier simply involve new earthing arrangements on the circuit boards with no actual *circuit* changes, but as with the pre-amplifier, this involves a complete new circuit board. Meridian claim this modification results in sonic improvements, and this should be the first time the new 105 has

appeared for review anywhere. For use with Linn Isobarik and Sara loudspeakers, Meridian provide a couple of 0.22-ohm series resistors fitted into male/female 4mm adaptors. These simply plug into one loudspeaker output socket on each 105, and the normal 4mm speaker plug fits into it. The idea, say Meridian is to simulate the 0.25-ohm output impedance of the Naim NAP 250, so giving the same frequency response at the Linn loudspeakers' input terminal as would a Naim NAP 250 — and hence theoretically produce the same perceived frequency balance when listening. Anyway, more about the effects of these Linn adaptors and the sound of Meridian equipment later.

Linn's contribution

If the Meridian forms the meat in the middle, then Linn Products have put the bread on the sandwich with a Linn LP12/Ittok LVII/Asak DC 2100K 'T' cartridge on one side and a pair of Isobarik loudspeakers on the other. The LP12 has been reviewed here many times in pre-Valhalla guise and in one issue previously with the Valhalla modification. For those who missed it first time round, Valhalla is fitted to all current Linn LP12s and is effectively an electronic circuit which holds the motor to an accurate speed. It does this by converting the mains to dc, forming its own ac waveform locked to accuracy of a crystal oscillator, and feeding this clean waveform to the motor. The idea is that by ridding the motor's drive voltage of spurious mains-borne rubbish and making the frequency and voltage stable, the motor's speed will be much steadier and its running will be smoother, thus transmitting less unwanted mechanical vibration into the system.

It seems to work, too, from tests I've made, (albeit with different arms and cartridges) providing a more 'believable' sound stage with instruments more stable and solid in position and pitch with an almost unconsciously detected freedom of non-musical noise. The result is more relaxed listening — presumably because the ear is dealing with less unwanted background hash. Gone, too, seems to be a degree of bass end warmth and lumpiness which was often the Linn LP12s hallmark. In Valhalla form it would seem that the LP12 is now quite an improvement and a strong competitor to other contenders for the title of top turntable.

The Ittok LVII pickup arm has also been featured a few times, but it's well to point out Linn's aim of making a rigid arm: right through from the cast aluminium alloy head-shell, large diameter thin-walled aluminium alloy arm tube, rigid bearings in a stainless-steel housing to the solid large-diameter base pillar and closely fitted counterweight. Tracking force and bias compensation are both applied by springs to preserve dynamic balance and the arm is beautifully finished to a high standard.

While on the subject of finish, the review sample was in black (which looks really smart on the black deck). Early LVII 'Black' arms were made in Glasgow, I'm told, to try out new ideas and were available at quite a premium over the 'silver' finished arms. All new arms are made in Japan and regardless

CONVERSION THAT COUNTS

review by Dave Berriman

of finish now incorporate features of these early 'blacks'. The 'Black' title now merely signifies an alternative finish — it also costs you 15 per cent extra if you're interested.

Never tested before by us is the Asak 'T'. This is a standard Asak which has been dismantled and re-assembled with great care by Linn Products. Details of the modifications made are scanty, but it involves fixing the assembly together inside using stronger bolts, among other things, and costs an additional £90. Even the standard Asaks are inspected, dismantled and re-assembled I was told by Martin Dalglish of Linn. The best ones are turned into Asak 'T's. Unfortunately, I wasn't able to compare the 'T' to a standard Asak, so any claims to an improved sonic performance must go unchallenged. However, it must be said that the LP12/Ittok/Asak T turned in a superb performance which did wonders for this equipment and other items it was tried with. The overall sound needs no introduction to Linn owners, but to the uninitiated its best described as solid, stable, believable and with excellent separation between instruments if a touch aggressive. It also tracked well for a moving-coil during complex passages — and tracking has not always been a strong point with the Asak. Of course it's not a cheap set-up but is not as expensive as some. From memory, the Asak on the Linn LP12/Ittok shares many qualities with the similarly-priced Koetsu Black on the Oracle with the Sumiko arm, a much dearer set-up overall which I heard some time ago, — though direct comparisons were not possible.

Isobariks

Finally we come to the Isobariks. It's the first time we've actually had a pair for review, though they've been written about a few times before. They are rather unusual in construction and driver layout and derive their name from the form of bass loading used. This is a form of double infinite-baffle in which there is a front-mounted KEFB139 bass drive unit working into a sealed enclosure which has a *second* bass unit in one of its panels, exhausting into a second chamber. The name Isobarik is derived from what happens to the air pressure in the first chamber, because the rear unit sucks air *out* of the chamber as the front unit squashes air *into* it, the net pressure change should be zero (if both drive units move the same distance — which they may not do exactly). Hence, the name: iso meaning constant and barik from bar — the unit of air pressure. Claimed benefits from this loading include a more extended bass performance for the box size and an effective reduction of bass resonance among other things.

Also unusual in the Isobariks are the two sets of midrange and tweeter units — one mid and tweeter firing forwards and the other firing upwards. This does mean that there will be a degree of direct and reflected sound and since the upward-facing units seem to radiate as much sound as the front units the reflected energy could be appreciable. This is bound to influence the perception of stereo images due to wall and ceiling reflections from the top units — but more on that later.

A further by-product of doubling up drive units from bass to treble is that the impedance curve of the Isobariks drops very low at some frequencies and consequently they must only be used with amplifiers capable of driving a lot of current into speakers. The impedance curve is also quite bumpy and this points to the importance of any partnering amplifier having a similar output impedance, or frequency response errors will occur in addition to affecting the bass damping.

The Isobarik bms is a very well-made loudspeaker with solid, rigid, cabinets braced by steel bolts and careful attention to sealing.

Mention of Isobariks without their matching stands would not be complete. These are designed for rigidity — with a central front pillar and four pointed feet to push deep into the carpet and make a firm base for the speakers. The rigidity of the speakers on their stands proved to be very important and carefully positioning a penny under one leg or wedging a loo roll behind each speaker brings about audible improvements — not just to these but to many other speakers!

How did it all sound?

The system was first installed and set up without the 0.22-ohm adaptors and the sound overall, though very impressive, punchy and detailed, was noticeably on the bright side. Inserting the 0.22-ohm resistors filled out the middle and tamed the top end, producing a much less bright tonal balance and one which was vastly preferable to my ears. In fact, when playing several rock records such as: *Steely Dan*, *Gaucha* and

our *Rickie-Lee Jones*, 'Supercut' there were musical contributions and details audible which I'd never before heard from these records. The overall sound was amazingly dynamic with a very clean, positive and well-controlled performance particularly in the bass, which really enable one to hear how instruments were being played.

Even so, there was still a touch of glare and coloration — a shouty, bright and hard effect which was particularly noticeable on classical music of various types. It was also noticeable on many rock tracks, for instance Rickie-Lee Jones sounded almost megaphonic and chrome plated. With the speakers positioned either side of the fireplace (not an ideal position said Tony) stereo image was, to say the least, wayward and confusing as if the speakers were out of phase. Pulling the speakers out well clear of the fireplace didn't improve the stereo image, the bright razor-sharp top end or the nasal coloration. Tony felt that the Isobariks work best firing down the long dimension of a large room, whereas my positioning — due to domestic constraints — meant they fired down the narrow dimension. Talking to users of Isobariks revealed that it is possible to get stereo from these loudspeakers, but only after considerable experimentation — apparently the taller the ceiling, the farther away you need to sit. Obviously if you love the Isobariks, the experiment is worth it, but as one user said 'It took about a year!'

Changing the amplifier to others, including the Musical Fidelity Preamp and Crimson Elektrik power amplifier reduced a touch of the system's sharpness but didn't solve the other problems. Using the Meri-

Linn Products' LP12 turntable with Ittok LV II arm and Asak DC 2100 K 'T' cartridge





The new Meridians — the 101B pre-amp and the 105 power amplifiers

dian 101B and 105 with a few other speakers (without the 'Linn' resistors, of course), produced some excellent sounds devoid of the bright, sharp glare audible *via* the Isobariks.

Indeed listening to the new Meridian 101B and 105s with other loudspeakers impressed on me just how far these products have come. Gone is the sense of the sound hardening up during loud passages and getting messy as a result. Comparing the new 101B with an earlier pre-amplifier revealed stark contrasts. The old 101 sounded to me somewhat sterile, hard and mechanical and seemed often to sap the emotion from the music. The new 101B by comparison is mellow and smooth rather than brash and harsh and is much easier on the ear. I find it a much more listenable sound now and quite an improvement, but the 101B still doesn't quite achieve the transparency and low-level detail of the Musical Fidelity.

The 105 power amplifiers, like the 101B seem not to have the same hardening up characteristic during loud passages as the previous 105s, being quite tidy in presentation — at least I didn't notice any problems — and so there appears to be a genuine sonic improvement here as well. Looking at the Meridians as a good-looking good-sounding package, they seem to offer better value now than ever before as a universal amplification system.

Going back to the context of the Audio Excellence system it would appear that the Meridian and Isobariks when used together produced some sharpness, brightness and coloration, but with a phenomenal dynamic range, detail and remarkable control — particularly in the bass where many systems fall down. It's a very exciting sound on rock music, if not tonally quite as accurate as I'd like and this was more obvious when listening to classical orchestral works. An alternative amplifier system blunted the razor edge just a touch but since this was not audible from the Meridian on any other speaker tried I can't blame the Meridian. It could be the Isobariks reproducing something the Meridian does only into Isobariks, in other words an interface problem.

Of course this begs the 1,000-dollar question as to whether the system would have sounded better with a Naim? — Tony

Ravell's first choice and £500 extra on the bill. I don't know the answer. I do know that I've heard Isobariks sounding good in the past using Naim amplification, but when I think back I've only ever heard them playing rock music — and that's something the Meridian manages well with the 'bariks'.

One listener, without an axe to grind, likened the sound of the orchestra with this system to being 'down a tunnel' and that is roughly the sonic effect, due to the amorphous imagery and a bit of tubey coloration. One could argue that on rock music these things don't matter and it's more important to hear the notes starting and stopping, the pitch of the notes and the 'tune'. Well, the Isobariks enable you to hear these things remarkably well, better, perhaps than any other loudspeaker I've heard, bar the Linn Sara, but any potential buyer should weigh up the benefits this definite ability against their weak points, which would not endear them to all listeners. Love 'em or hate 'em

systems spotlighted

would, I think, be an apt response and while I started out very impressed with their very real and positive abilities I ended up finding it hard to enjoy the classical music that I love. I find myself torn between appreciation of their very real positive attributes and a dislike of their coloration and tonal alterations. In truth I would really like the best of both words, but, unless the Naim transforms the Isbariks, Linn Products appear to have made the compromises in one direction in order to excell in another.

Perhaps the disappointment is the more acute after hearing Linn Saras on the end of the Linn/Naim system — surely one of the very best sounds I have heard — playing both some of my favourite classical works and rock music with natural stereo presentation and seemingly good balance and low coloration.

Have Linn made a rod for their own back with the Sara, or would a Naim NAC 32, Snaps and NAP 250 transform this system by a subtle symbiosis? I don't know, but Tony Revell could easily demonstrate any differences and let you make up your own mind at his shop in Cardiff. Why not visit him there and be your own reviewer?

STOP PRESS

AS SOON as Tony Revell heard my criticisms of the set up as supplied, he sent his assistant Mark Tucker armed with a Naim 32 pre-amplifier, SNAPS power supply and Naim Nap 250 power amplifier. They would, of course, have done the same for a customer in the same predicament. Soon he had the Isobariks firing down the long dimension as he had originally suggested, so that they



The Linn Isobarik loudspeakers with Linn stands

could be heard from a greater distance (a pre-requisite for the 'bricks' to produce stereo images, I learned from Isobarik owners). The Naim amplifier was also wired in at the same time to make up a complete Linn/Naim system which was actually Tony's original choice.

There were consequently two simultaneous changes to the system: substitution of the Naim and a change of loudspeaker position.

So, in answer to that thousand dollar question, it seems that a somewhat more than subtle symbiosis is indeed at work in Wiltshire and Glasgow, because the improvements could only be described as astonishing! A fundamental and significant transformation occurred to the sound of the system. There were instruments, effects, parts of the mix (and consequently parts of the music, of course) which were previously not audible! There was, with the Naim, also a significant improvement to the reproduction of classical records played, there was a greater sense of depth and realism: it was less harsh, less edgy and now with improved stereo image. In fact the improvements ran parallel with rock and classical reproduction alike: there was now a greater authority to the bass, and more of it too. But to talk of quantitative parameters is misleading. Perhaps it's more meaningful just to say that I now wanted to keep playing records and hearing more of what's recorded on them, rather than avoiding playing the system unless I really *had* to.

This is not meant as a criticism of the Meridian, which gave excellent results with all the other loudspeakers tried, as reported above, but, to my ears and to others who heard it, the Meridian and Isobariks don't seem the best sonic match. Of course, changing the speaker position has brought about a change, and it's not possible to apportion things without further experiment (precluded due to deadlines). The new room position is, I'm sure, largely responsible for the improved stereo image and possibly some of the extra bass power. However, the other changes are so fundamental and radical that I can only conclude that the Isobariks work best with the Naim — and really it's no surprise. Whether the Naim would bring similar benefits to other loudspeakers is not a question I can answer here.

The resulting sound of the complete system with the Naim in it could now be described as astonishingly 'alive' and very enjoyable, but with a touch of aggression probably, I feel, due to some aspects of the disc player — possibly the Asak 'T'. The Isobariks are still coloured and imagery is not pin-point, but due to what seems to be a psycho-acoustic effect, the ear/brain can filter out and ignore coloration if presented with enough other clues — at least that is the effect within this system. In addition, the Isobarik's bright balance seems ideally matched sonically to the Naim which compensates the overall tonal balance to something much more neutral. Incidentally, the system also sounded excellent when fed from my Pioneer 9500 Mk I tuner picking up a BBC pre-recorded classical concert — not a result I expected!