

**a**kai's revamped GX-95 Mk II is a mammoth deck, representative of old seventies designs, with angular styling and kitsch legends. It uses a complex dual capstan transport, has three heads and all the necessary features for serious recordists for £399.99. I suppose the cynical could say "So what? Denon make cheaper dual capstan types with all these features." They do, but the Akai has a finely honed transport of a sort more commonly found on decks costing far more. It is meant to reach the very highest standards - and that is how I judged it.

The cassette compartment pales into insignificance against the great slab of a front panel. Around it are clustered a host of legends - including a gold plated 'Super GX' badge. This refers to Akai's own glass crystal ferrite head, a unique feature of Akai decks. All other manufacturers, except Nakamichi with their more expensive models, now buy in heads from outside suppliers like Canon and TDK. Making their own gives Akai the potential to pull ahead, assuming their technology is at least as good as everyone else's of course. The glass crystal ferrite head is so resistant to wear, Akai give it a ten year guarantee.

Next to the GX badge there is a legend: Discrete 3 Head. This signals that Akai are aiming to enter Nakamichi territory. As yet they have decided not to keep the record and replay heads completely separate, like Nakamichi. Unwilling to copy, they

compromise. In order to be able to use the label 'Discrete 3 Head'

(because for tape buffs that means 'Serious') the record and replay heads are therefore clustered together (siamed) in a single block, but not only do Akai put in a spacer, they leave an air gap too. The curious and suspicious can therefore see that the heads are discrete - and there will be no argument about it!

So what's the big deal? Discrete heads potentially offer the highest level of performance. They do not have to be miniaturised, because by being spaced apart they have plenty of room. Having to squeeze both units into a single, size limited location as Akai do compromises this benefit: the heads overloaded at a very low level.

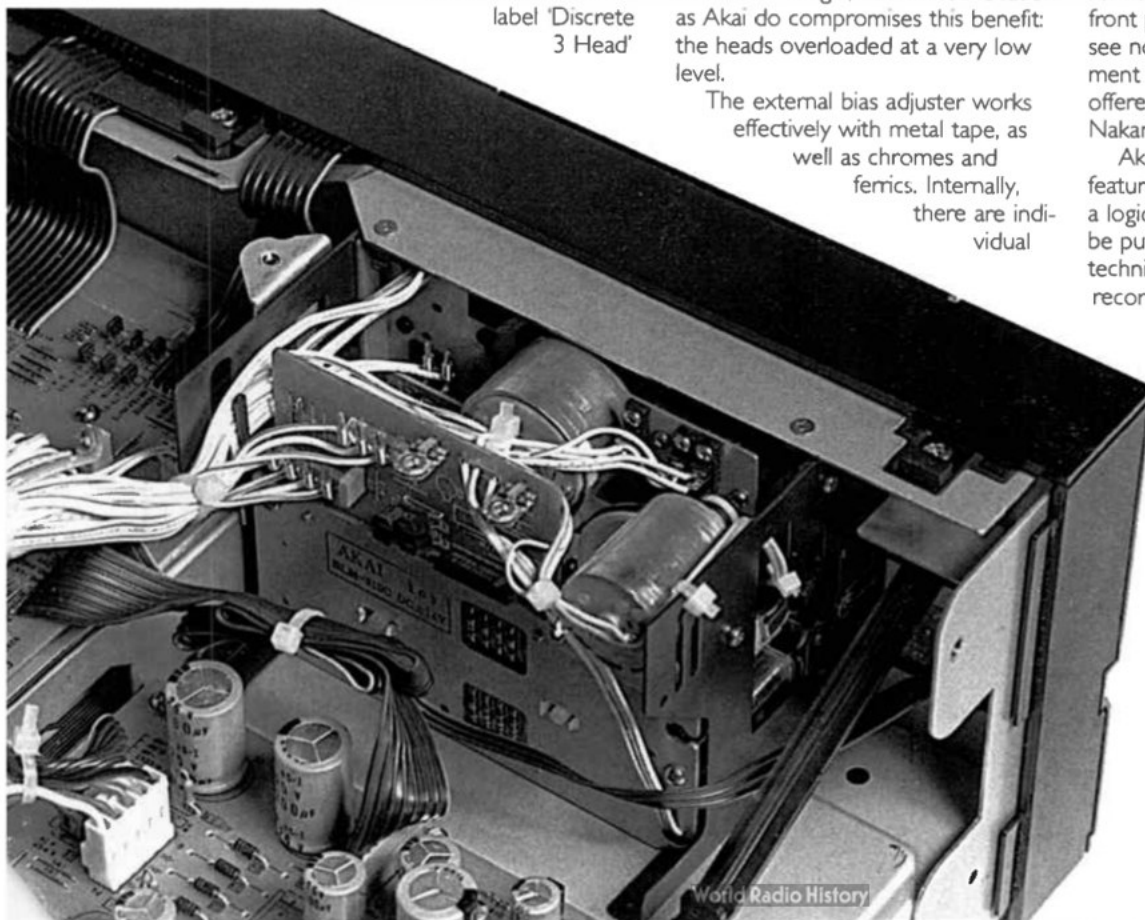
The external bias adjuster works effectively with metal tape, as well as chromes and ferrics. Internally, there are individual

left/right channel ferric adjustment potentiometers that affect chrome and metal as well, so identical results can be achieved on both channels. The review sample was perfect in this respect. Chrome and metal adjusters are fitted too, so the median (zero setting) level of the front user bias control can be altered. Dedicated tape fiends or frustrated recording engineers may be interested to know that all necessary calibration levels for 0VU, record gain, etc are available internally, and record gain (to compensate for differing tape sensitivities) is also brought out to the front panel in a user control. I could see no record equalisation adjustment though, but this is very rarely offered on any recorder - even Nakamichis.

Akai offer users a variety of serious features on the GX-95 II. It does have a logic controlled transport. This can be put into record whilst playing, a technique known as 'punch-in recording'. User adjustable sensitivity is fitted, together with a calibration system that is very easy to use. This applies to the user adjustable bias system as well. Dolby B and C noise reduction systems are fitted, and Dolby HX PRO overload headroom extension. For some curious reason, Akai make this switchable and a warning flag has been added to the fluorescent display to inform onlookers. HX PRO is rarely made switchable like this, because there is little point. It raises treble overload by a small but useful degree, but



**Akai make their own dual capstan transport mechanism, shown here. At top is the reel motor and to its right, the actuator motor. The direct drive motor is not visible.**



record so high onto premium grade metals like TDK MA-XG (+10) for example, that Dolby is not really needed; hiss is barely audible. This was far from the case with the Akai. All I can say in Akai's mitigation is that the GX head on their lesser GX-52, now discontinued, managed +5.5dB - a very high figure. I suspect that the discrete arrangement of the GX-95 II introduces problems.

The transport is also one of Akai's own, a dual capstan type with direct drive to the main capstan. The back-tension capstan is belt driven from the main capstan flywheel, a common arrangement that is usually successful. In addition to the capstan motor there is a separate reel motor and a servo motor to pull and push levers around. The whole works smoothly enough, if not as silkily as a Nakamichi. I was surprised to see that the usual access holes for azimuth and head height on the cassette lid were actually marked as such, possibly tempting users to experiment.

the old Japanese standard, which did roll off in such a manner instead of the IEC Standard, so that they would play our prerecorded tapes without dullness. It may just be that the GX-95 II is made in such small quantities that Akai are not prepared to Europeanise its replay characteristics. Other facilities I have not yet mentioned are a switchable MPX filter, a volume control for headphones and automatic switching from tape to source and back, which is very convenient. While we're totting up a score for the convenience factor, the GX-95 MkII comes with one of the best infra-red remote controls I've seen. This duplicates most of the control functions.

Another great convenience pioneered by Akai is the powered cassette lid, also operable from the remote. It closes automatically when any transport function is selected. The cassette has only to be dropped in and a command made. The door will close by itself and the machine will then start, as commanded. **NK**

### Sound Quality

The listening session began with pre-recorded tapes. The immediate impression of a recording of Martin Best and his medieval ensemble was that a good part of the music sounded decidedly muffled. By and large, pre-recorded tapes sounded, in terms of depth, precision of imagery, space around the instruments and tonality, almost up with the best - but with a serious reservation. The flute in a Vivaldi sonata lacked the absolute clarity and purity of sound it ought to have had, as though it had become a relative of the clarinet, albeit several times removed. While the plucked cello and double-bass strings were well positioned, and quite realistic, the ambience of the studio appeared to sound a little hollower than normal.

When it came to other recordings, it was obvious that the treble response on pre-recorded tapes fell markedly. Brass in Mussorgsky's 'Pictures at an Exhibition' lacked edge and bite, with the upper strings sounding resinous. This DG tape is an exciting performance, but on this Akai it fell rather flat; yet the soundstage was definitely three-dimensional. The very subtle Chandos recording of Vaughan Williams' Norfolk Rhapsody showed the oboe to sound too 'round' and the GX-95 failed to bring up the glorious tuttis. The violins sounded rather muddled when the strings came in.

Voices fared worse. Tina Turner in 'Break Every Rule' sounded as though the mic had been placed in a damped cocoa tin, though, again, the studio ambience was well caught, and it was possible, which is rare with a cassette deck, to 'see into' the mix. The bass

# heading for the heights

**Akai's GX-95 Mk II cassette deck, with three heads and every facility for serious recording, should reach the height of performance. Noel Keywood checks it out and Eric Braithwaite listens.**

affects nothing else.

Talking about the display panel reminds me that it also shows tape type, an automatic sensing system being used. A long record level indicator reaches from -40 to +10, with good resolution around the zero point. However, the suggested peak record level is an unusually high figure. And this is where a serious weakness in the Akai's performance showed up. The head was surprisingly limited in the maximum level it could get onto tape, no better than a budget deck in the £100 league. We tested a second sample and it gave similar results. Record levels were also limited with ferric and chrome tapes. This is a major flaw in the performance of the GX-95 II.

Low recording levels mean reduced dynamic range and greater audibility of hiss. A top Nakamichi will

As I explain in more detail in the Measured Performance section, the transport works beautifully. It is a gem of a mechanism, almost matching the very best from Nakamichi and Revox. Unfortunately, this deck is let down by its head, as I have already explained - and by inaccurate replay equalisation which I have yet to explain.

The replay amplifiers must be correctly equalised if prerecorded tapes are to be played properly, and if standardised and, therefore, compatible recordings are to be made. Tests showed that there was insufficient high frequency gain in the replay amplifiers, resulting in dull treble from pre-recorded tapes. Head azimuth had been perfectly set, so no improvement was available here. I suspect that the GX-95 II replay equalisation has been optimised to

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