



## SYSTEM PROBLEMS

tion with other comparably priced ancillary components on a comparative basis. It will be noted that few actual figures of the usual specifications have appeared in this review. This was quite intentional. We have frequently had the nagging doubt at the back of our minds the prospective buyers tend to compare these figures in the same manner as they do motor car performance figures in the summary pages of Autocar or Motor, almost awarding points thereon in the manner of a panel of judges on 'Come Dancing'.

However, lest the reader assumes that we are avoiding the purchase of equipment on looks alone, final choice must be made on an intelligent consideration of performance in actual use, test specifications and appearance.

The components in this recommended system are of extremely high quality. We decided to allow approximately equal amounts of about £200 each for the turntable and pickup cartridge, the amplifier, and a pair of loudspeakers. As an addition, a high quality cassette deck, and a pair of headphones have been included, but these can be added at a later date, and as the recovery from the initial financial onslaught progresses.

### Futuristic looks

The room in which the equipment was to be installed was of fairly conventional decor, with a heavy flock wallpaper, and a considerable preponderance of rosewood shelving and furnishings. We wanted the equipment that presented a very up-to-date and futuristic appearance, but with a minimal amount of compromise in the final sound quality.

The turntable we chose to fill this requirement was the Transcriptors Hydraulic Reference Standard. This unit with its extremely distinctive looks has been in basic production for several years.

The unit employs a neoprene derivative rubber belt driven from a low speed synchronous motor to rotate a platter assembly weighing some 11lb. This method of drive is not unique, but both the design of the platter and the various ancillaries that surround it are, and serve to give the unit the performance that its looks suggest. The platter itself, is a 12in aluminium alloy disc, which has been diametrically cast, on which there are six gold-plated brass weights positioned in the form of a hexagon at the disc's circumference. The weights themselves are about 2in in diameter and 1-1½in high, topped with a small, rubber support piece and serve the dual purpose of dynamically balancing the main aluminium disc to an accuracy of better than one part in a thousand, and

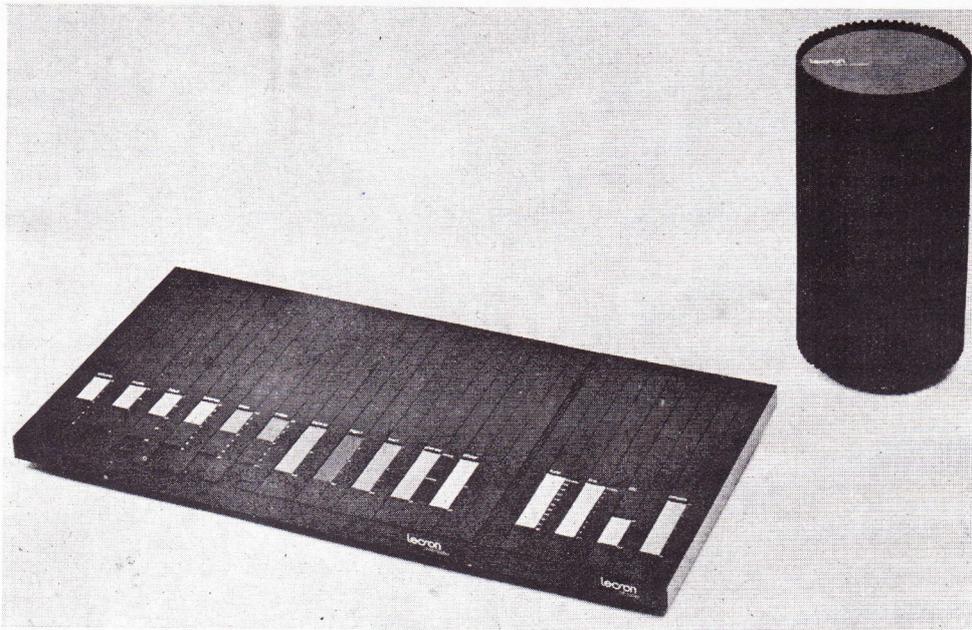
also supporting the record in such a way that there is an absolute minimum amount of contact between the side not being played and the driving parts of the turntable. Record removal is much easier than on a conventional turntable and these advantages seem to have been effected without lowering the general standard of performance.

Underneath the main driving disc is a circular well, fitted with a dense and extremely viscous oil. This well is also rotated by the turntable. A vane, permanently immersed in the oil, can be rotated from the right hand side of the turntable so that its angle of immersion can be varied and thus its drag on the oil altered to show the speed of the turntable. The motor drives this at a suitably high speed so that, when the vane is approximately half rotated, the speed of either 33½ or 45rpm is exact. This allows a variation of approximately plus or minus three per cent.

up and the instructions must be carefully followed or problems could arise.

After carefully balancing the arm, and adjusting the rotating bias assembly, the cartridge was carefully installed for the correct overhang. One of the final tasks is to adjust the levelling of the black mica base board under the main assembly and to do this, one simply screws or unscrews the three anti-feedback legs to the correct height, using the integral spirit level provided.

We can only comment on the turntable itself by stating that we have never before possessed a unit with such speed accuracy. On initial switch on, it has become routine for us to leave any new turntable on for at least two days to 'run in' the assembly. During this period, the motor gained speed by approximately 3 per cent, in a gradual and observable manner. When no further speed variation was evident from the stroboscope, we reset the vane in the



Electronic hardware department features this unusually styled amplifier from Lecson

Speed change between these two set speeds is effected by a lever at the left of the assembly which moves the belt on to the correct motor pulley.

The belt assembly passes round and drives an internally illuminated stroboscope, which is geared up in the ratio 6:1. It is thus extremely easy to see any variation from the correct speed at an early stage. The motor is actuated by a mercury contact magnetic switch, thus eliminating mechanical shock to the system, and the whole system is decoupled in a comprehensive manner and runs on PTFE bushes.

The arm chosen was the 9in version of the Transcriptor fluid arm, which is of unipivot design and heavily dampened by a well of viscous fluid. The lightweight headshell is adjustable in both lateral and vertical planes to a limited degree and we experienced little difficulty once the instructions had been thoroughly digested to set up the chosen Empire 1000 ZE/X II cartridge. This is not, however, the easiest of arms to set

oil bath and observed the unit intermittently for a period of a further three days! During this time we could not observe any movement whatever of the strobe markings.

We can only assume that, in view of this component's high gearing, in comparison with many other integral stroboscopes, the speed accuracy was of a uniquely high order, and hope at a later date to prove this by direct measurement. Rumble was virtually non-existent, and we have come across only one other unit in which the rumble could be said to be comparatively low. Obviously, there must be some point of criticism in any unit, and we did note that, on switching from 33½ to 45rpm, it was necessary for a small adjustment of speed to be made by the vane.

The arm proved extremely easy to use and performed as well as we could have expected from its design. A well assigned unipivot arm can have lower friction in either plane than is likely with any other design and we would put