friction in this arm on a par with the Decca International (or the new S M E 3009/2 improved, which uses a more conventional pivot system, of a very high standard of workmanship). The arm mass was of an extremely low order. The cueing device proved simple and effective in use, and very accurate in its positioning of the stylus in the correct groove. We would have preferred a more massive counterweight, with a reduced back to front aspect, to have been fitted nearer to the pivots to get the effective mass down to the SME levels, and take advantage of the vestigial arm tube.

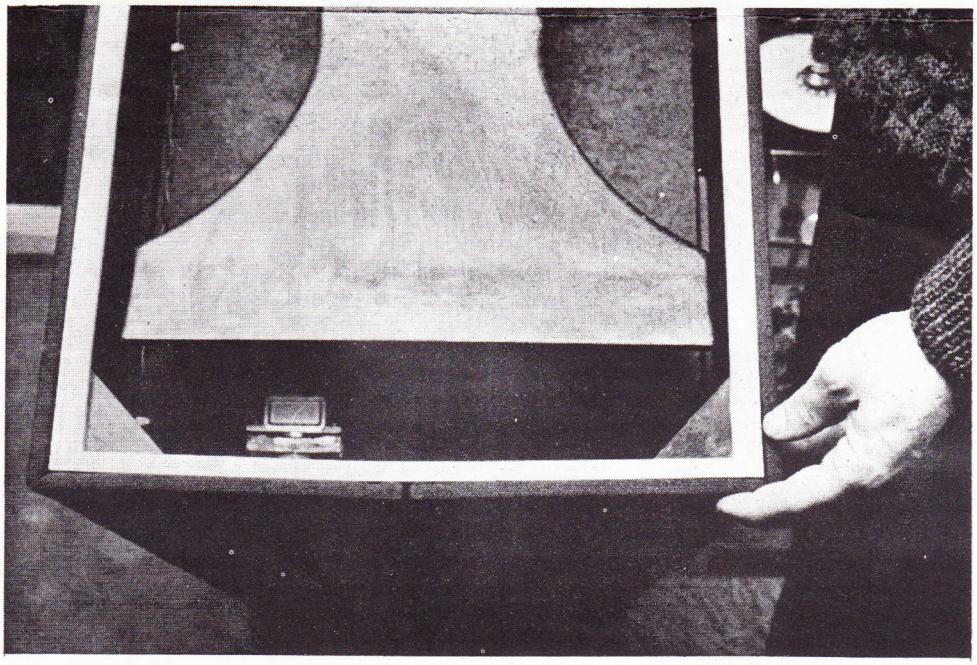
An interesting experiment in minimising this effective mass led us to fit a ADC 26 glued into place on a severely cut away headshell assembly (or better still, the XLM), so that no screws and fittings were necessary and this gave us quite a unique combination, but we digress! Certainly, this unit even as it stands, is one of the best turntables it has been our pleasure to use, and can be strongly recommended, with the bonus point of its superb looks!

Detailed performer

The Empire cartridge chosen proved a smooth and detailed performer. We compared it with the original 1000 ZE/X and noted a considerably more detailed and extended treble response and even better tracking capabilities. A quick visual comparison of the two stylus assemblies soon suggested a reason. The latest version employs a cantelever and stylus at least 60 per cent less massive than its predecessor and comparable with the Bang and Olufsen SP15 and ADC 26/XLM range at least! This has obviously been altered to cope with the extended range (and consequently higher tip mass resonance) required when reproducing discreet 4 channel recordings, for which the cartridge is stated now to be suitable and also to remove the earlier criticism of both it, and the 999 UE/X of a considerable droop in the treble response. We felt, on a direct comparison, that the cartridge still did not possess quite the sense of ease and very low intermodulation distortion exhibited by the ADC at the treble end, but it was now certainly worthy of such comparison, and can be included amongst our top four favourites (ADC 26 ADC XLM, selected samples of the Ortofon M 15E Super and the Shure V15 III). Tracking weight in this arm was determined as 0.90grm and no improvement was observed over this, which was highly commendable.

The chosen amplifier was the Lecson Audio API and companion control unit. This has reverted to the Quad former of separate pre- and power-amplifiers which we reasonably prefer, and consequently, one can choose from two power outputs of 35 watts or 70 watts per channel, with identical performance. Our particular API was rated at 35 watts and actually delivered 59 watts per channel at clipping into 8 ohms. The Preamplifier was constructed in an extremely thin format with all controls on the flat, horizontal top surface. It was thus suitable for vertical wall mounting if required. All plugs and sockets were recessed under the rear, and the case was similar to the Transcriptor, in black mica. The usual facilities were available and included two pickup inputs (2mV sensitivity but very high overload margin), radio input and two auxiliary inputs. High frequency filters with ultimate slope of 18dB per octave were supplied at three frequencies and there were rumble filters of comparable slope at 80 Hz and 32Hz. A 'cancel' facility removed the tone controls from circuit and also all filters, leaving the bass and treble spectra open to wide bandwidth if required. Facilities were available to interconnect a four channel decoder, or remote volume and/or input selection facilities on the rear panel.

The companion power unit was cylindrical in shape, with the whole surface of the cylinder fluted in such a way as to provide a large heat sink for the power transistors. In use, this barely warmed to the touch. On the bottom of this unit, there was switched outputs to either or both of two sets of speakers and the protecting fuses. This unit also remotely feeds a 2 watt output back along its signal connecting lead to feed the headphone socket on the pre-amp.



Part of the horn assembly in the Lecson HLI—it can be swivelled for best effect

SYSTEM PROBLEMS

The subjective overall performance proved eminently satisfactory and places this amplifier in the same category, on listening tests, with the Luxman 202 and Crown. We could not, however, carry out the measurements we would have liked as our particular unit had been taken at short notice from a dealer's order and was required for return. We hope to follow these up as soon as possible, in an attempt to confirm our expectations.

The last major obstacle was our choice of speakers. These finally proved to be the Lecson HLI units, and certainly complemented the rest of the system in appearance, as they were finished in a black cloth with rosewood inset top. This unit uses two 13in x 8in Audax units of 15 ohms impedance connected in parallel and installed in a derivative of the Klipschom enclosure, with the final flare of the horn being provided by the boundary walls of a room corner.

The bass crossover occurs at 375 HZ and at this point, a 5in plastic surround Audax in a glass-fibre horn takes the response to 5KHz. Extreme treble frequencies are catered for by a small dural diaphragm unit in an aluminium horn mounted on the front panel. The bass units have free air resonances of 37Hz and employ a flared pulp cone and plasticised cloth surround with a 1in voice coil in a magnet field of 10,000 gauss. The mid range unit also has a low resonance and ¾in voice coil in 12,000 gauss. All coils have high heat dissipation characteristics. Early units were criticised for a somewhat lacking treble response and coloured mid range.

The current production has modified the crossover to provide a higher energy input to the top unit, and this is now satisfactory. We were puzzled by the coloration and buzzing in the midrange of our initial pair of speakers, particularly as this was accompanied by fuse blowing in the amplifier. A hurried telephone call to Lecson provided the answer, and another pair of units. One bass unit coil in our first set had become open circuit and this coupled with an intermittent contact in the crossover, had presented an unusually low impedance in the low midrange, to the amplifier. The situation was further complicated by a batch of Audax mid-