

This Japanese-made moving-coil cartridge is a low resistance type, but with an output which needs only $\times 8$ or $\times 10$ step up for most amplifiers. Of low body weight, the cartridge uses silver coil windings and a tapered aluminium alloy cantilever, and while the Lentek head amp is its usual partner, the Entré will in fact suit almost any step up device or moving-coil input. With a compliance measured at 14cu, arms in the 8-15g range are recommended although damping would not appear to be essential.

Lab testing revealed a highly capable performance, its only weakness concerning the mid frequency trackability, although the 2.5g equipment for 'Supertrack' is in fact fairly typical of this type of cartridge. Distortion levels were low even on the 1/3-octave noise bands, and the high frequency waveform was better than for most moving coils, with channel balance and separation both excellent; the latter recorded an astonishing 34dB at 10kHz, and 26dB at 20kHz! The frequency response showed a slight 1.5dB recess in the upper range, but the imbalance noted above 20kHz was inconsequential. Two separation traces were recorded, to show the effect of 1) a 2° vertical tilt and 2) the lower trace as recorded with the cartridge truly square.

On sound quality grounds the Entré was classed as being in the top group. Its qualities included stable precise stereo imaging up to the highest frequencies with excellent depth; the balance was neutral if very slightly 'dulled'. Detail, distortion and surface noise were all very good, but occasionally some hardening on complex passages was detected together with an infrequent trace of sibilance and slight HF 'grit', these effects often associated with moving-coil models.

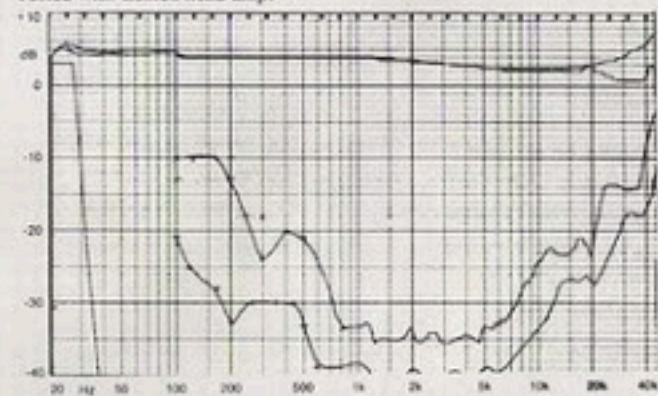
Upon examination, a superb $150\mu\text{m}$ square rod naked elliptical diamond with 55° cone angle was found to be fitted; the well-formed radii were to specification, with fine polish and alignment.

Clearly this model is a front rank contender. In the trade it has established a reputation for consistency, and this, taken together with the high sound quality rating, goes a long way towards justifying the total price. The latter would of course prove more attractive if a mc compatible pre-amp were used, and as an added bonus, relatively inexpensive stylus replacement has also been arranged in the UK.

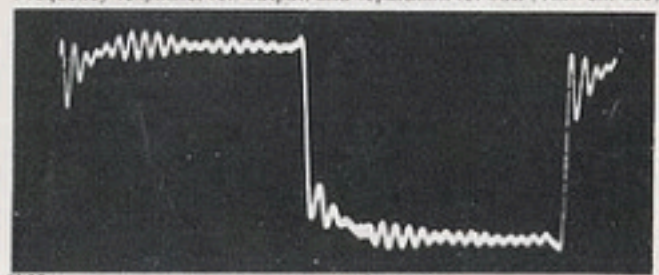
GENERAL DATA

Cartridge type and mass.....	Moving-coil, 5.8g
Estimated dynamic compliance at 10Hz.....	14cu ($\times 10^{-6}$ cm/dyne)
Specified downforce: range 1.5g to 2.1g.....	tested at 1.9g
LF resonance in test arm (SME 111, 6g me + cart).....	+10dB at 12.5Hz
Sensitivity at 1kHz.....	(alone 0.045mV/cm/sec) 1.6mV/cm/sec
Relative output (0dB = 1mV/cm/sec).....	(alone -27dB) +4dB
Subjective sound quality.....	Excellent
Recommended loading.....	10 to 500ohms
Recommended arm mass and damping.....	8-15g, moderate
Cartridge coil resistance/inductance.....	3ohms
Induced hum level.....	Good
Stylus type and spec.....	fixed, naked, elliptical, $7.5 \times 20\mu\text{m}$
Finish and alignment.....	Both very good
Tip geometry.....	$7.5 \times 20\mu\text{m}$
HF resonance (tip mass/vinyl).....	indicated at 27kHz
Frequency response 20Hz-20kHz.....	+1, -2dB
Frequency response 100Hz-5kHz.....	+0, -1.5dB
Stereo separation, 100Hz, 1kHz, 10kHz.....	21dB, 38dB, 33dB
Channel difference at 1kHz, 10kHz.....	0.1dB, 0.2dB
Trackability 300Hz lateral +15dB, +18dB ('Supertrack').....	1.6g, 2.5g
Trackability 300Hz vertical +12dB.....	1.0g
Distortion 300Hz lateral +9dB.....	0.4%
Distortion 300Hz vertical +6dB.....	1.8%
High frequency waveform quality.....	Fair
Mid band intermodulation (1kHz + 1.5kHz).....	3.3%
H.F. intermodulation pulsed 10kHz, 24cm/sec peak.....	0.2%
Pink Noise intermodulation, 12kHz, 16kHz, 20kHz.....	2.6%, 4.5%, 6.3%
Typical selling price inc VAT (inc step-up).....	£95 (£145)
Stylus replacement cost inc VAT.....	estimated £30

Tested with Lentek head amp.



Frequency response, rel. output, and separation ref 0dB (1mV/cm/sec)



1kHz squarewave, note ultrasonic cutter 'ringing'