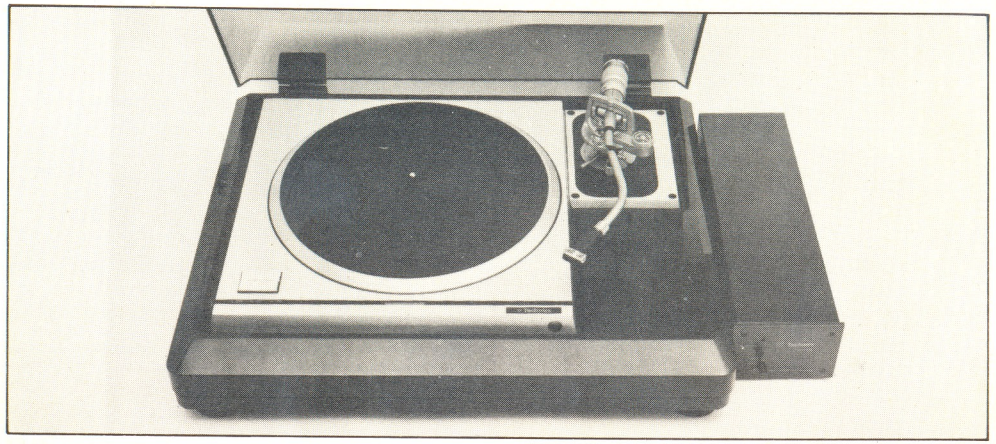
Technics SL1000 II

Technics, National Panasonic UK Ltd., 107-109 Whitby Road, Slough, Berks, SL1 3DR
0753 34522



Features facilities setting up and use

Three separate components are covered by this report, namely the *SH10B3** plinth: the *SP10 II** motor chassis plus power supply; and finally the *EPA100* pickup arm. Supplied as a complete ensemble, the whole is designated *SL1000 II,* its inclusion here representing a retest, as this system was in fact covered in the previous issue of *Choice*. Considering the price level it was a little disappointing to find some minor finish blemishes on the motor top plate as well as significant play in the vertical ruby ball race on the arm; a degree of headshell tilt was also apparent which could not be corrected. Technics were informed of these problems at an early stage in our test procedure, but in fact did not follow up our comments by the time the edition had gone to press. Fortunately at least the bearing play could be cured by adjusting the appropriate setting screws.

The quartz-locked direct drive motor was clearly built to professional standards, and in fact large numbers are in use in broadcasting and recording studios. The heavy plinth, which alone weighed 12g, consisted of a low resonance laminated structure suspended on rubber feet which offered a desirably low 5Hz resonance. The arm employed a damped headshell, with a titanium double layer tube and variable damping. Three speeds were offered, namely 78, 33$^{1}/_{3}$ and 45 rpm. The unit as a whole was superbly engineered and came provided with comprehensive instructions, although once again, cartridge alignment was by the inaccurate overhang measurement system.

Lab performance

As one should expect at this price, the motor results proved to be at the threshold of measurement, and simply consist of a list of 'excellents' for wow and flutter, rumble, stability, loading, overshoot, start up ($^{1}/_{4}$ second) and torque. However, while acoustic breakthrough was rated as above average it was not outstandiing, particularly at higher frequencies. Thanks to the separate power supply, the hum levels proved very good using all types of cartridge. Feedback was similarly rated, but vibration sensitivity was only just 'good'.

Judged to be above average the response was quite even above 1.5kHz. However early minor breaks occurred at 150Hz and 200Hz, with a further series at 350, 700 and 1200Hz. The 2° odd headshell socket list has already been mentioned and will undoubtedly have affected the subjective performance, particularly with regards to stereo depth and clarity. The other arm parameters were fine with effective mass on the heavy side; even with the damping control, compliances no higher than 20cu are indicated. Bias compensation was about 30% high.

Sound quality

The more critical standards employed in this issue have resulted in a marginal downgrading by comparison with last time; however the 'good' performance rating achieved was still well above average. The arm was considered very good allowing for the shell misalignment, the system as a whole characterised by low coloration, some 'shyness' in the low bass and a 'feathery' quality verging on 'fizz' in the high treble. Marginal stereo positioning and depth loss were also apparent.

Conclusion

The *SL1000 II* remains a top class turntable despite the odd defect or two, but on the basis of sound quality-versus-price, it does not merit a recommendation. However, used appropriately, the motor section is outstanding in terms of its technical performance.

GENERAL DATA — Integrated Player

Motor Section

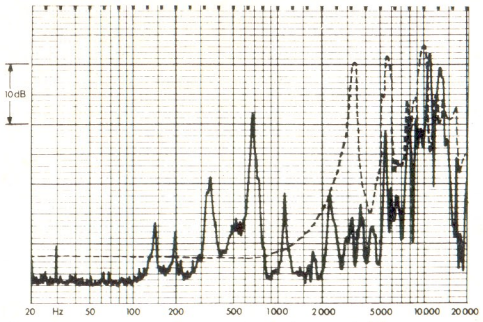
Type	manual quartz direct drive
Platter mass/damping	3.0kg/very good
Finish and engineering	very good
Type of mains/connecting leads	two core/earth + phonos
Speed options/variable?	33$^{1}/_{3}$; 45; 78rpm/no
Wow and flutter (DIN pk wtd σ2)	< 0.05%
Wow/Flutter (lin pk wtd 0.2-6Hz/6-300Hz)	0.1%/ 0.06%
Speed accuracy/drift/variation under load	quartz/0/0
Start up time to audible stabilisation	0.25secs
Rumble (av DIN B wtd L/R)	78/77dB

Arm Section

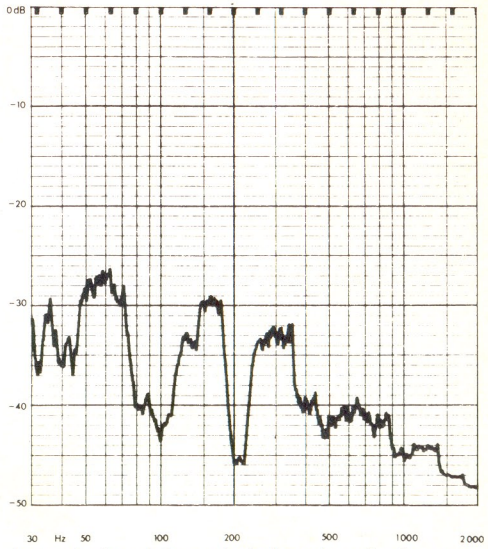
Approximate effective moving mass (excl cart, inc screws)	16g
Type of headshell	universal detachable
Headshell mass (inc screws)	11g
Geometric accuracy	good
Facilities for adjustment	damping,height,overhang
Finish and engineering	very good
Ease of assembly/setting up	good
Friction lateral/vertical (typical)	< 10mg/< 10mg
Bias comp: type/force rim/centre (1.5g ell set)	spring/200mg/280mg
Cueing: drift/8mm ascent/8mm descent	negligible/0.5secs/5secs
Downforce calibration error 1g/2g	–0.025g/–0.1g
Amount of damping	moderate

System as a whole

Size/rear clearance for lid	56(w) x 46.5(d) x 17(h)/6cm
Typical acoustic breakthrough and resonances	very good
Subjective sound quality of complete system	good
Hum level/Acoustic feedback	very good/very good
Vibration or shock sensitivity	good
Ease of use	good
Estimated typical purchase price	£1000



Arm resonances (compared to cartridge resonances, dotted).



Acoustic breakthrough (microphony) of system (0dB = approx. 10 cm/s RMS, DIN rumble level, equivalent to loud music output from turntable).