

# SME

*Since 1946*



MODEL 30/12

# MODEL 30/12 PRECISION TURNTABLE

Created as a companion and to compliment the Series V-12, the Model 30/12 precision turntable enjoys all of the features associated with the Model 30/2 precision turntable. The differences are merely ones of scale.

The suspension now provides 60 purpose moulded 'O' rings supporting the sub-chassis, which has been increased in thickness by some 16%, on one hundred and twenty strands of rubber. The main chassis has received similar attention but in this case the thickness has been increased by 19%. Small differences but necessary to afford the increased rigidity required to ensure acoustic neutrality.

In common with the Model 30/2, the Model 30/12 takes special account of sonic considerations and with equipment of comparable quality can provide a listening experience that allows L.P. sound to be re-assessed. Detail, resolution, and neutrality are of a new order with a dynamic range that does justice to the original sound.

In conventional turntables metal supporting springs often contribute significantly to colouration. Sometimes even their size and nature can be identified by an experienced ear!

The unique suspension system of the Model 30/12, however has no sonic footprint, it hangs the sub-chassis on one hundred and twenty strands of rubber in the form of sixty purpose moulded 'O' rings. An ingenious method of anchorage allows them to be removed or replaced instantly, should this ever be necessary, even while a record is playing!

The illustration shows how this design also places the centre of gravity where it will give natural stability with minimal sensitivity to external influences, contrasted with a conventional arrangement.



Sub-chassis motion is disciplined by four fluid dampers, one in each of the supporting columns. These eliminate overshoot and give almost zero Q recovery, allowing the user to make record and arm placements with total confidence. The isolation needed to prevent acoustic feedback is bridged by the resistive coupling of the damping fluid through which unwanted, reacted energy is conducted away to 'ground'. This function is adjustable through trimmers which can be used in conjunction with a gauge to give recommended settings or varied to suit individual conditions.

Built-in locks one at each corner of the sub-chassis, enable the suspension to be secured and automatically sealed for transport.

The moving parts of a fine turntable are of paramount importance. The spindle of the Model 30/12 is 170.5mm (6 3/4") long and 19mm (3/4") diameter. The massive sealed housing and individually fitted sintered bronze bearings in which the spindle runs are also of the generous proportions needed to ensure that the 330mm (13") diameter platter weighing 7.5kg (17lb) is adequately supported. The Model 30/12's excellent dynamics and pitch stability are largely the result of the immense care taken in the design and execution of these components.

The platter face is machined with a fine scroll found to interface better than a plain surface. A substantial reflex clamp ensures maximum contact with the platter even when severe record warp is present.

The sub-chassis/arm mounting board interface is extensionally damped and the mounting board is reversible to allow mounting of nine inch pick-up arms when necessary.

The powerful electronically commutated motor is 'cogging-effect' free and virtually vibrationless by reason of its 2.5kg (5.5lb) weight. It is isolated on urethane mounts and adjustable for accurate belt positioning.

It can be fairly claimed that the engineering of the Model 30/12 is unique in a turntable. In the quest for perfection even the stainless steel motor pulley has received detailed attention. It is crowned to ensure belt centrality, concentric within +/- 2.5 microns (0.0001") and secured to the precision ground tungsten steel shaft with twin grub screws to maintain rotational balance. From this the drive is transmitted via a ground rubber belt to a 209mm (8 1/4") subplatter weighing 2.3kg (5lb). This is extensionally damped and incorporates four captive transit

screws allowing the main spindle's vertical thrust bearing to be pre-loaded for safe transport.

Mains voltages available are 90-110V, 105-125V and 220-240V 50/60Hz. Please specify when ordering.

The turntable is driven by a 3 phase, brushless outrunner inductance motor with 8-pole Neodymium magnets and 3 integrated Hall position sensors. The electronic controller uses a high performance microprocessor, optimised for motor control. Closed loop speed control is implemented using a proportional plus integral (PI) algorithm. Fine pitch speed adjustment allows increments/decrements of +/-0.01% of selected speed. Speed ranges: 33 1/3, 45 & 78 rpm.

The Model 30/12 is available in two formats:

## MODEL 30/12

equipped for but not including SME precision pick-up arm.

## MODEL 30/12A

with matching SME Series V-12 precision pick-up arm.

Complete with a comprehensive set of tools and equipment including Height Setting Gauge, 0300mm Stroboscopic Disc, Reflex Record Clamp, Record Spindle Washer, Soft Cover and Operating Instruction Manual.

Dimensions: 530 x 400 x 232mm.

Packing: Substantial wooden case with internal fitments.

Net weight with power supply: 53.5kg (118lb)

Shipping weight approximately: 79.5kg (175lb)

The Model 30/12 precision turntable is available in the UK from leading audio stockists. Availability overseas is made through distributors in the principal countries. Please contact our sales department for further information.

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