THREE SPEED GRAMOPHONE EQUIPMENT

> FULLY PATENTED

Model 2000 TRANSCRIPTION MOTOR AND TURNTABLE Model 2010 TRANSCRIPTION UNIT

BRITISH THROUGHOUT

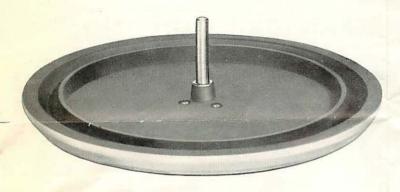
PERFECT RECORD REPRODUCTION FOR THE CRITIC

LAURA

COLLARO TRANSCRIPTION

MODEL 2000 This comprises Transcription Motor and Turntable complete with 3 speed gear and switch mounted on a banjo type unit plate.

MODEL 2010 This has the same specification as the Model 2000 except that it is mounted on a rectangular unit plate and is equipped with a STUDIO "P" High Fidelity pickup head comprising a special low resonance arm and special bearing.



TURNTABLE (common to both models)

This is a specially balanced non-magnetic turntable with a weight of approximately $8\frac{1}{2}$ lbs. and is fitted with a rubber turntable mat. The weight of the turntable is so disposed that the majority of the weight is at the periphery thus giving a flywheel effect. The turntable is fitted with a ground and lapped steel shaft approximately 3 inches long and with a diameter of $\frac{1}{16}$ inches. This shaft runs in a self-lubricating bearing of the same length with a steel ball pressed into its lower end. This ball takes the total thrust of the turntable and results in correct turntable speed with no detectable "wow" or "rumble."

Definitely NO sumble or Wow.

MOTOR (common to both models)

This is available for AC voltages of from 100/125 and 200/250 volts at 50 cycles per second. Special pulleys for 40 or 60 cycle supplies are available on request. The rotor of the motor is specially manufactured and after grinding is dynamically balanced to zero. The stator tunnel is honed and with the specially prepared rotor gives a uniform air gap between rotor and stator consistent with adequate power and silent running. This ensures absolutely "wow"-free performance.

THREE SPEED GEAR (common to both models)

An entirely new type of 3-speed mechanism has been designed to give absolutely uniform turntable speed, while improved technique in the construction and assembly of the motor ensures reproduction free from rumble and frequency modulation. The drive from a 3-stepped pulley on the motor spindle is transmitted to the rim of a deep and heavy turntable through the medium of a single large diameter moulded rubber idler wheel, running of 27.3 ng self-oiling bearing of small diameter, to give lateral stable with minimum frictional drag. The periphery of this wheel is ground concentric to its bearing within very close limits. The idler wheel spindle, of hardened and ground carbon steel is carried on a pair of diecast elbow levers mounted on ground steel pins with an effective bearing length of 11 inches. The change speed control knob has a very light movement, and operates a unique cam action which retracts the idler pulley to a position clear of both the turntable and the motor pulley whilst changing its level to engage with one or other of the 3 steps of the motor pulley. In this yay all possibility of damage is avoided should the changespeed control be sperated while the machine is running. The idler wheel mounting brackets and the change-speed mechanism are built as a rigid unit integral with the motor suspension frame.

PICKUP (Model 2010 Only)

The pickup supplied with Model 2010 is a special version of the STUDIO "P". It is fitted with a tubular metal arm which has a very low resonance and the arm is so designed as to be capable of playing 16 inch records. The pickup insert is housed in a new attractive head moulding which is fitted with finger tip control to enable the pickup to be placed accurately and carefully on the record. The pickup base is an oil retaining bearing in which a ground and lapped spindle rotates. The pickup base is fitted to a separate wooden support the opposite end of which is secured to th Unit Plate. An adjusting screw is fitted to the unit plate adjacent to the pickup base to give free suspension of the pickup support.

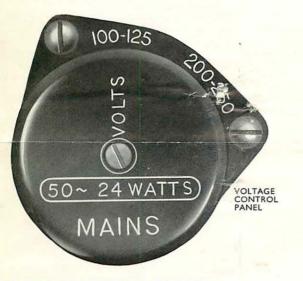
COLLARO TRANSCRIPTION

GRAMOPHONE UNITS

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SPEED CHANGE AND "OFF" SWITCH

common to both models) This is conveniently situated on the righthand side of the unit plate on Model 2010 and on the left-hand side of the unit plate on Model 2000. There is an "OFF" position between each speed. Switching the unit from one speed to another automatically switches off the motor during the speed change. Switching to any speed automatically starts the motor.



AUTOMATIC STOP (common to both models)

In view of the heavy weight of the turntable no automatic stop is fitted or recommended.

45 R.P.M. ADAPTOR (common to both models)

This adaptor is permanently spring-loaded on the turntable and no other fittings are required for playing 7 inch 45 R.P.M. records with large centre holes. These records can be played by putting the centre hole of the records on the outside edge of the adaptor. When normal 78 R.P.M. or $33\frac{1}{3}$ R.P.M. records are played, the adaptor is depressed by the weight of the record on to the turntable and the records then fit over the normal turntable spindle. The use of a separate and loose adaptor is therefore eliminated.

UNIT MOUNTING (common to both models)

Both models should be screwed down hard to a wooden mounting board in accordance with the instructions shown on the template.

FINISH (common to both models)

The whole unit is finished in hard scratchproof enamel and the standard colour is cream.

VOLTAGE CONTROL PANEL (common to both

models) This is attached to the motor and protection is afforded by a specially moulded cover. Machines are normally supplied for 200/250 olt operation but if the mains supply is 100/125 volts the alteration can a effected by removing the screw holding the protection cover, rotating the cover until the arrow on the cover points to the voltage required, and then securing the cover with the locking screw.

ACCESSORIES (common to both models)

All necessary accessories are packed in a small envelope and will be found in the carton together with a mounting board template giving details for mounting the unit. In addition a rubber mounting bead is supplied and this should be fitted in accordance with the instructions shown on the mounting template.

ASSEMBLY INSTRUCTIONS (common to both models)

The unit should be very carefully unpacked and the unit plate assembled to its motor board with the rubber mounting bead. Care should be taken to see that the switch is in the "45" position. The turntable spindle should be very lightly oiled and the turntable carefully fitted to its bearing. The turntable should then be slowly rotated by hand with the switch in the "OFF" position to ensure that it is perfectly free. If the model supplied is the Model 2010 the pickup should then be fitted. The pickup

> lead should be carefully threaded through the small hole immediately at the rear of the pickup base. The pickup spindle should be lightly oiled and then gently pushed into its bearing. Care should be taken to see that the pickup lead is not pulled through its hole too tightly as

> > this will restrict pickup movement. Connections should then be made to the amplifier and the motor connection made to the mains supply whereupon the unit will be ready for use. Remember to use the correct stylus for the type of record that is to be played.

Switching on and speed changes are explained under the heading "SPEED CHANGE AND 'OFF' SWITCH."

Model 2000

No. 3491.

(viewed from above with turntable removed)

Codes : BENTLEY'S and PRIVATE

Model 2000 (viewed from below)

EARTH

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