

COLLARO

THREE SPEED
GRAMOPHONE
EQUIPMENT

Model 2010 **TRANSCRIPTION UNIT**

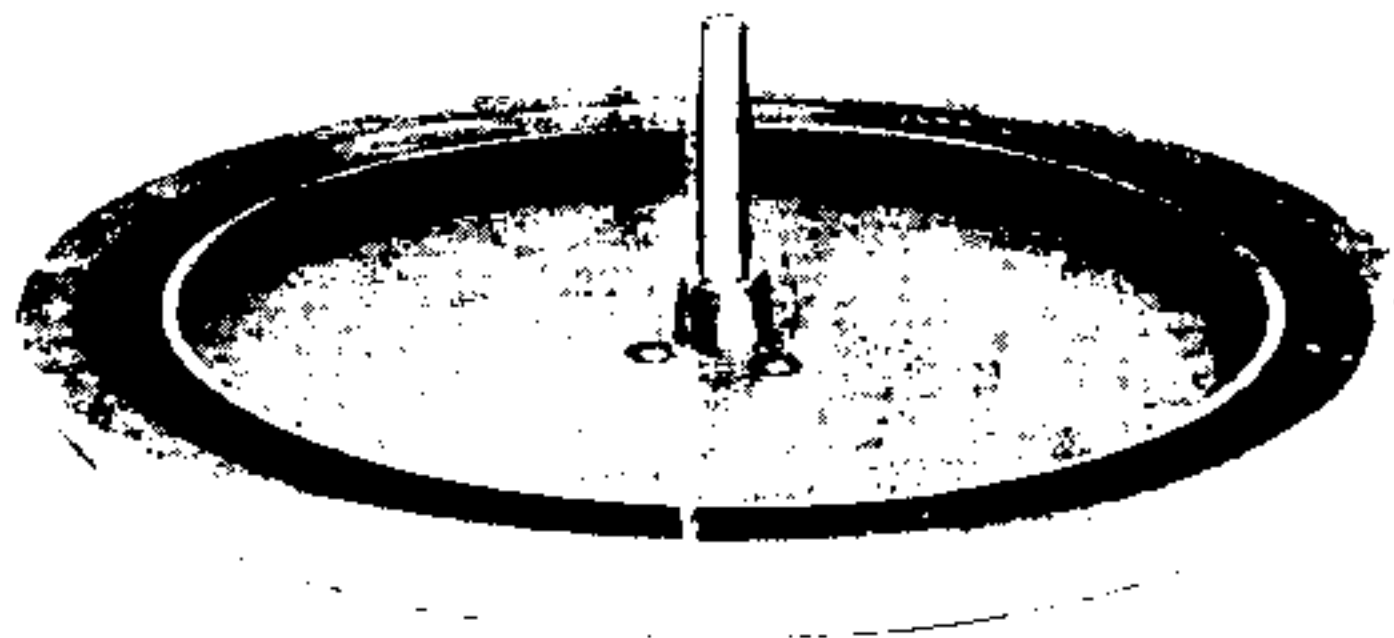
Complete with pickup
or without pickup



PERFECT RECORD REPRODUCTION FOR THE CRITIC

COLLARO TRANSCRIPTION

MODEL 2010 The Model 2010 is mounted on a rectangular unit plate and is equipped with the STUDIO Transcription High Fidelity pickup head comprising a special low resonance arm and special bearing. STUDIO "P" or "O" head can be supplied at a slightly lower cost.



TURNTABLE

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 $\frac{7}{16}$ 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".

MOTOR

This is available for AC voltages of from 100/125 or 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. The motor is mounted resiliently by means of three tension springs parallel to the unit plate. This method of mounting removes all traces of rumble from the unit. However, to protect the motor in transit, three special hexagon headed transit screws are located on the unit plate and these screws are provided

to secure the motor to the unit plate during transit. *IT IS ESSENTIAL* to remove these screws before the unit is put in operation. Care should be taken to see that the transit screws are refitted if the unit is at any time transported.

THREE SPEED GEAR

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 on a long self-oiling bearing of small diameter, to give lateral stability 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 $1\frac{1}{2}$ 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 way all possibility of damage is avoided should the change-speed control be operated 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

The pickup supplied with Model 2010 as standard is the Studio Transcription Head. Studio "P" or "O" heads can be supplied if specified on order. 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 the Unit Plate. An adjusting screw is fitted to the unit plate adjacent to the pickup base to give free suspension of the pickup support.

SPEED CHANGE AND "OFF" SWITCH

This is conveniently situated on the right-hand side of the unit plate. 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.

Ned. Ver. v. Historie v/d Radio



TRANSCRIPTION

GRAMOPHONE UNIT

NOISE SUPPRESSOR

A special suppressor consisting of a resistor and a capacitor is connected across the switch to eliminate objectionable noise when the switch is operated.

AUTOMATIC STOP

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

45 R.P.M. ADAPTOR

A separate plastic moulding is now supplied. This should be fitted over the turntable spindle when 45 R.P.M. records, with the large centre hole are used.

UNIT MOUNTING

The unit plate should be screwed down hard to a wooden mounting board in accordance with the instructions shown on the template.

FINISH

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

ACCESSORIES

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

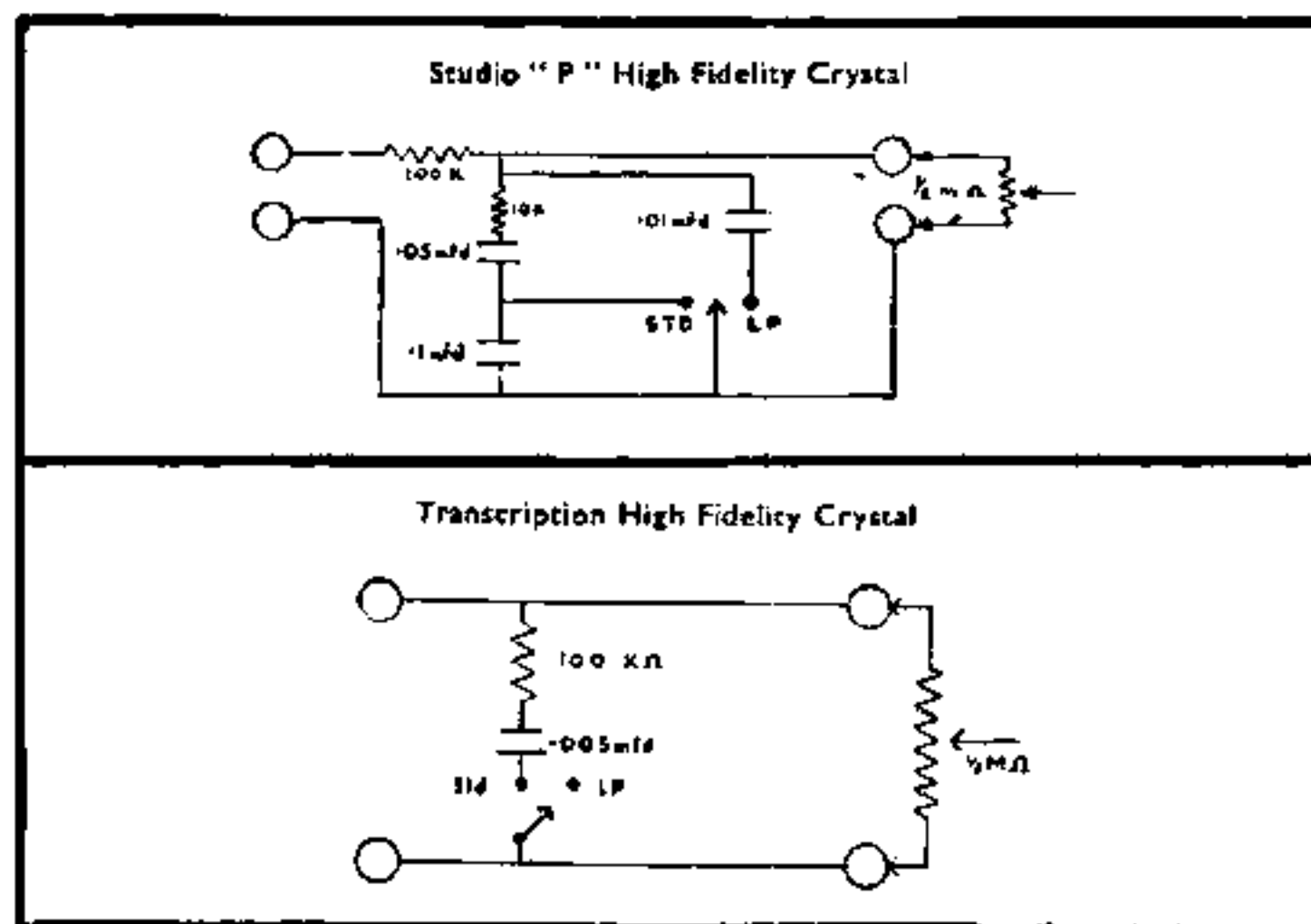
The unit should be very carefully unpacked and the unit plate assembled to its motor board with the rubber mounting bead. Care should be taken to see that the switch is in the "45" position. Remove transit screws detailed under paragraph "MOTOR". The turntable spindle should be very lightly oiled with the tube of oil provided 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. 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"

CHARACTERISTICS OF COLLARO PICKUP

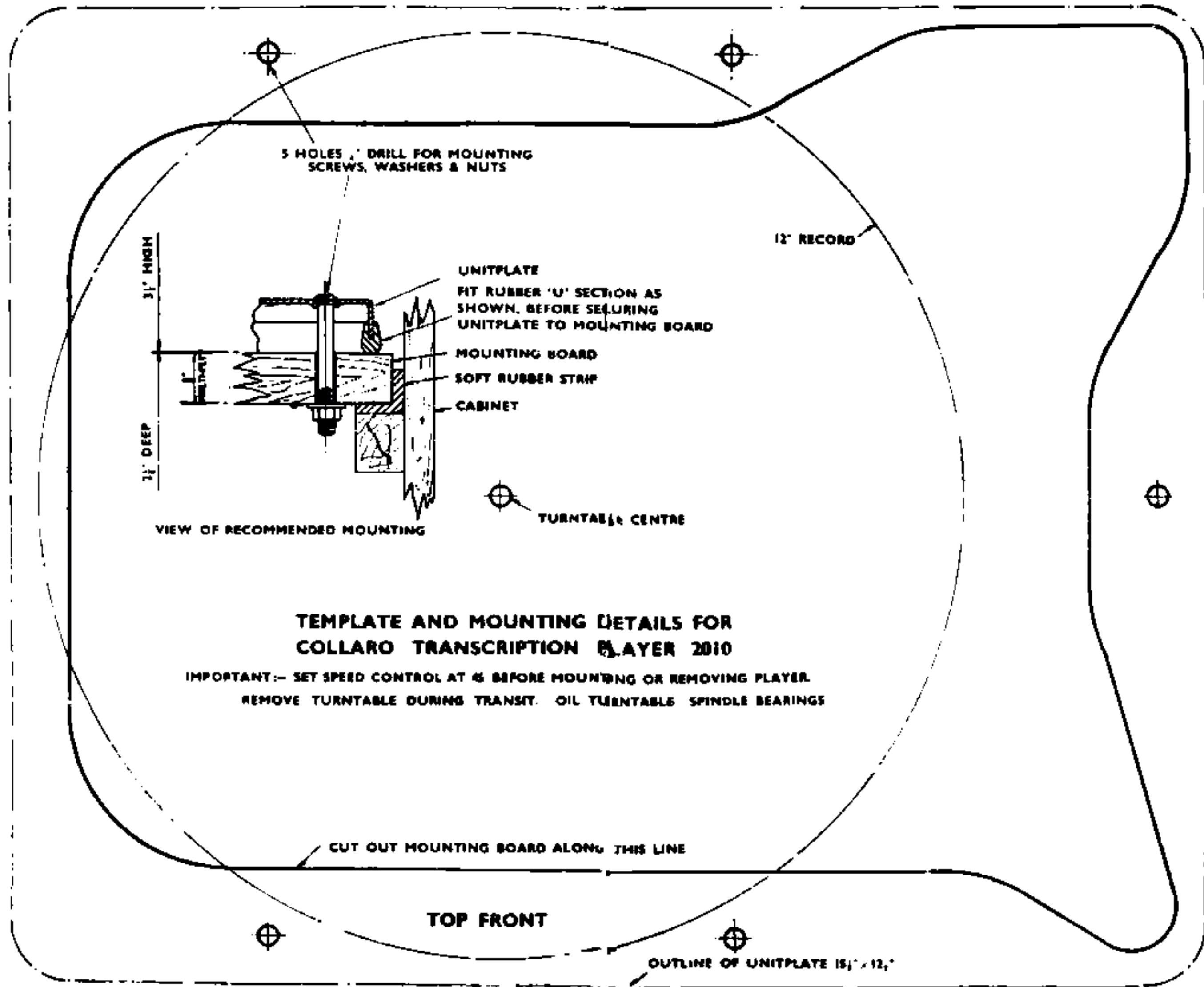
Type	Type of Record	Recommended Needle	Impedance at 1,000 cps.	Output Volts RMS	Test Record
Studio Transcription ...	78 R.P.M.	Sapphire stylus	Equiv. to 1,800 p.f.	.12 at 1,000 cps.	K 1804
Studio Transcription ...	L.P.	Sapphire stylus	Equiv. to 1,800 p.f.	.04 at 1,000 cps.	LXT 2695
Studio 'P' ...	78 R.P.M.	Sapphire stylus	Equiv. to 1,800 p.f.	.15 at 1,000 cps.	K 1804
Studio 'P' ...	L.P.	Sapphire stylus	Equiv. to 1,800 p.f.	.05 at 1,000 cps.	LXT 2695
Studio 'O' ...	78 R.P.M.	Sapphire stylus	Equiv. to 1,800 p.f.	.6 at 1,000 cps.	K 1804
Studio 'O' ...	L.P.	Sapphire stylus	Equiv. to 1,800 p.f.	.2 at 1,000 cps.	LXT 2695

RECOMMENDED INPUT NET WORKS



Studio "O" requires no compensating input network

GRAMOPHONE UNIT



COLLARO LIMITED, RIPPLE WORKS

Telephone: RIPPLEWAY 5533 8 Lines

Telegram: "KORLLARO BARKING"
PRINTED IN ENGLAND

BY-PASS ROAD, BARKING, ESSEX

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