

**RECENT ADDITIONS  
TO THE  
PERMAREC  
SOUND RECORDING  
APPARATUS**



**MUSIKON LTD., 19 LISLE STREET, LONDON, W.C.2.**



**I**N presenting the following apparatus we are confident that we are offering the only satisfactory medium for the production of talking pictures in the home.

We have in fact produced a perfect lip synchronised talking picture using only apparatus described in this leaflet coupled to a standard 16 m/m Camera, and without any further expensive equipment. It is new, first class workmanship, and years of experience in sound recording and reproducing have combined to give you instruments which will make it possible for you to **PRODUCE YOUR OWN TALKIES.**

This apparatus does undoubtedly offer exceptional scope for recording on discs and can be applied to many forms of education and instruction.

Its faithfulness, and high quality of reproduction, coupled with the fact that the Record can be played with steel needles on any type of gramophone electric or acoustic, is unbreakable and has a playing life of more than twice that of any other record, puts the **PERMAREC** on a plane unattainable by any other system of Home Recording.

The entire apparatus is designed and constructed to give results equal to any obtained on this type of recording, and requires only the smallest amount of technical knowledge to obtain really first class records both Cine and Gramophone.

Teachers of Singing, Music, Elocution and Dramatic Art can think of no more efficient method than by letting the students hear their mistakes.

Song writers, composers and instrumentalists are afforded a unique opportunity for rehearsal for the detection of any slight faults.

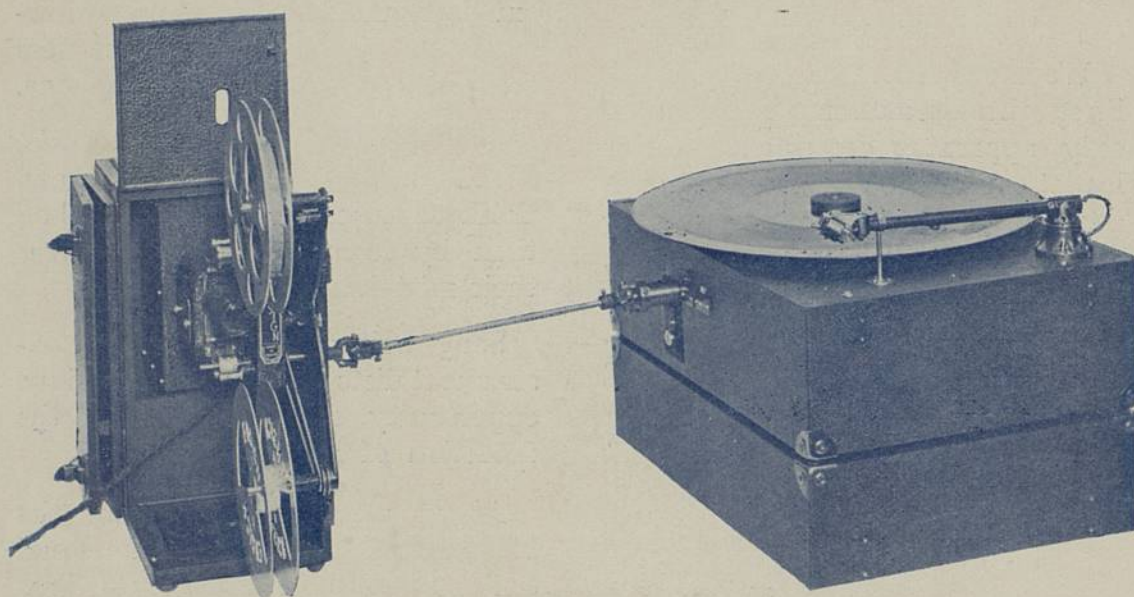
As an advertising medium the **PERMAREC** apparatus has no equal either as applied to 16 or 9.5 m/m films or for gramophone records. No matter how old the film may be, a good sales or publicity talk can be synchronised to it, thus greatly enhancing its value.

For home recording it is impossible to find any system on which results equal to **PERMAREC** can be accomplished, so begin now to make records with personal, as well as musical charm. Friends and relations are always with you when on **PERMAREC** records.

W.D.  
8°  
249  
BR



## THE PERMAREC SYNCHRONISING TURNTABLE—REPRODUCING ONLY. SERIAL S.T.



**Price Complete £18**

This unit is designed for reproducing library films and discs at 24 frames per second, or discs of clients desirous of having records made at our Studios, or those of our agents, on Permarec discs to films which they have taken at 16 frames per second.

Can be coupled to any type of projector and is fitted with the Permarec Patented design floating spring drive motor, 12 inch turntable, and 16 in. pick-up. Two separate projector connections 120 and 180 r.p.m. and rigid drive with universal couplings. In black leatherette case 18 ins.  $\times$  13 ins.  $\times$  8 ins. with clips and handle.

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## THE PERMAREC SYNCHRONISING TURNTABLE RECORDING OR REPRODUCING SERIAL S.T.R.



**Price Complete £27**

In designing this unit it has been our aim to meet the requirements of the individual whose desire is for a complete outfit, but who wishes to limit his initial expenditure.

The unit is constructed on robust lines and is supplied with an 8 inch telescopic drive with universal couplings at each end which can be adapted to any type or make of projector.

The complete equipment is in a black leatherette covered case with two clips at each side, also handles, and with the lid on measures 22 ins.  $\times$  20 ins.  $\times$  9 ins.

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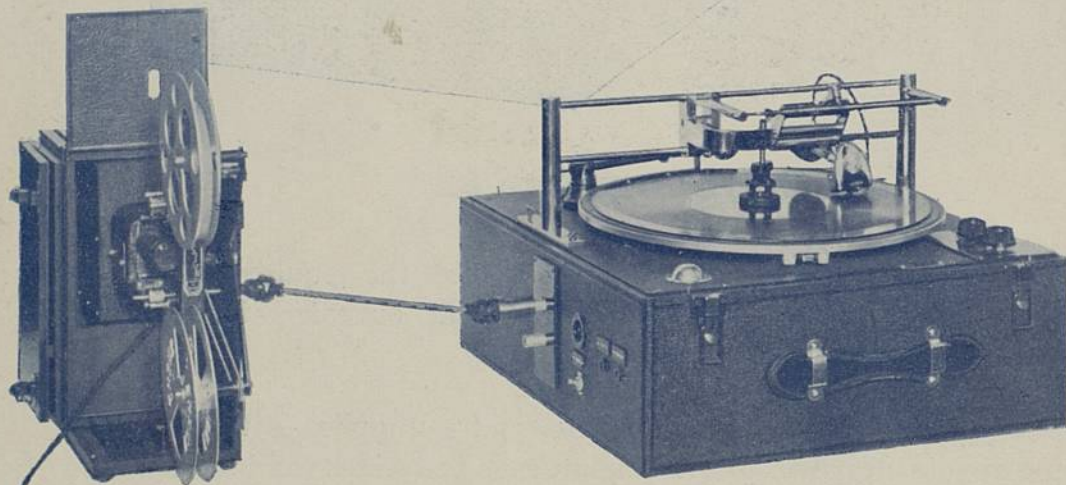


Two drives are fitted for connecting to the projector, one for 120, which is silent speed, and one for 180, talkie speed. It will be seen at once therefore that any library films can be used on this apparatus, besides being able to reproduce talks or music which you may record to films taken at 16 f.p.s.

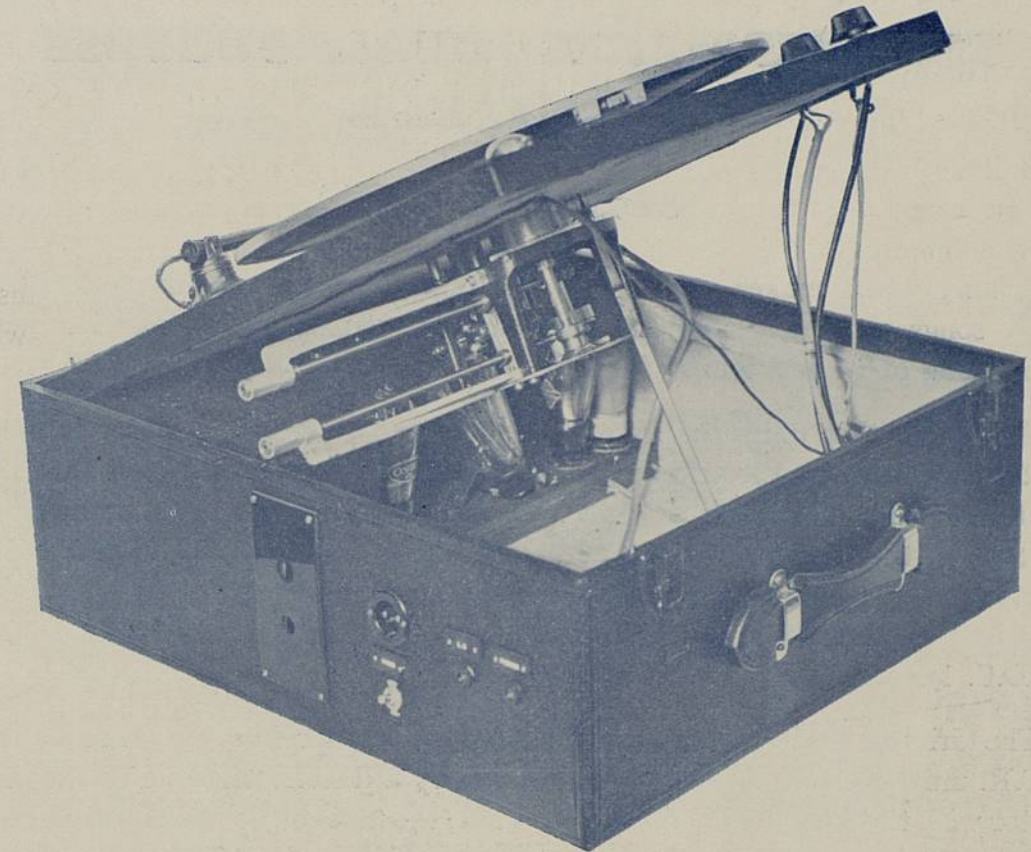
Built into the case is the Permarec Patented Design Floating Spring drive motor, which gives a constant turntable speed of  $33 \frac{1}{3}$  r.p.m. whilst the table itself is mounted on special cushion springs driving from the outside edge.

A lightweight reproducing pick-up is fitted and wired in position.

It will also be noticed from the picture on the opposite page, that jacks and sockets are fitted for amplifier input, microphone input, earth sockets, and jack for recording head connection, so that should the purchaser decide later to undertake recording, all that is necessary is to purchase and mount in the position provided the Permarec Straight Line Tracking device, which when in position converts the unit into a recording equipment as shown below.



In order to meet with the requirements of the individual who requires a unit which incorporates its own amplifier for recording and reproducing purposes, we have designed an amplifier with a speech output of 5 watts for assembly into the same case as the S.T.R. unit, and is shown on page 5.



This unit will at once appeal to commercial users, and enthusiasts. The general specification is as the S.T.R. unit, with the addition of the amplifier, which is specially matched to the D.T. 7 recording head, and is adjustable for 200, 220, 240 A/C mains. All the wiring is carried out inside the case and volume and tone controls are on top of the motor board.

The mains input plug is clearly shown together with the loudspeaker and microphone jack.

This unit, the S.T.A. without speaker or Tracking device, is listed at

**£50 Complete with Valves etc.**



## THE PERMAREC DUAL PURPOSE TURNTABLE.

### SERIAL D.S.A.

A unit which makes possible for the first time, the recording of music, songs or speech simultaneously and in perfect synchronisation with the taking of 16 or 9.5 m/m films.

As in all other units the Permarec Floating Drive Spring motor is used, but in addition an Electric motor is mounted and so constructed that the unit is capable of driving a 16 or 9.5 m/m camera at 16 or 24 frames per second, at the same time as the turntable which has two trains of gears with control lever, which in one position gives a turntable speed of 33  $\frac{1}{3}$  R.P.M., and in the other 78 R.P.M. The electric motor is of universal voltage A.C. or D.C. 1,500 R.P.M.

The driving shafts, which are mounted on similar lines to those of the S.T.R. unit, can be attached to the camera by a flexible drive, or to the projector with the 8 inch telescopic drive. Thus, the unit can be used for recording or reproducing. The unit is exactly the same size as the S.T.R. and is fitted with reproducing pick-up, needle cup, cutter jack, output jack, earth sockets and mountings for the tracking device.

With this unit you can make your dreams come true, and have for ever a sound as well as pictorial record of things which occur only once in a lifetime.

Supplied complete with flexible and telescopic drives

**£40**

or with amplifier as specified in S.T.A. without loudspeaker and tracking device

**£63**

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## THE PERMAREC REPRODUCING AND RECORDING OUTFIT

**33  $\frac{1}{3}$  & 78 r.p.m.**

A complete outfit for recordings of all types at either of the above speeds.

The electric turntable motor is of universal voltage A.C. or D.C., and has a special wattage control for increasing the power of the motor for cutting purposes, thus ensuring perfectly constant speed. The motor is mounted into a black leatherette covered case 22 ins.  $\times$  20 ins.  $\times$  9 ins. into which is built our specially matched 5 watt amplifier, with the volume and tone controls on the top of the motor board.

The speed changing lever is mounted in the centre spindle of the turntable. Pulled upwards is for 78 r.p.m. and pushed down is for 33  $\frac{1}{3}$  r.p.m.

This unit supplied with reproducing pick-up, microphone, loudspeaker, mains, cutter jacks and earth sockets, valves amplifier and controls for

**£46 10s. 0d. or**

With loudspeaker, Straight Line Tracking device with D.T.7 head, Microphone table model D.R.1., and 12 inch Electric Oven for **£80 0s. 0d.**

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**REVISED PERMAREC PRICE LIST.**

Serial No.	Unit.	List Price.		
		£	s.	d.
S.T.	Synchronising Turntable—reproducing only ... ..	18	0	0
S.T.R.	„ „ recording and reproducing ... ..	27	0	0
S.T.A.	„ „ „ „ with amplifier ... ..	50	0	0
D.S.	„ „ „ „ with electric (Universal Synchronising) motor 33-1/3 and 78-180 and 120. ...	40	0	0
D.S.A.	Universal turntable — with amplifier ... ..	65	0	0
T.R.7.	Straight line tracking device D.T.7.—for 16 inch discs ... ..	15	0	0
D.U.7.	Recording pick-up with tone arm—12 inch discs ... ..	5	0	0
D.T.T.	Oil-tracking Unit for 16 inch discs... ..	4	12	0
R.Y.7.	Recording pick-up and tracker, D.T.7.—16 inch discs ... ..	9	0	0
D.T.4.	„ „ with tone arm—12 inch ... ..	4	12	6
S.G.A.	Centre grooving attachment—12 inch ... ..	1	16	0
V.I.	Volume Indicator ... ..	7	10	0
D.R.1.	Microphone with transformer—table model ... ..	5	5	0
D.R.2.	„ „ „ on stand—studio model ... ..	8	0	0
E.O.1.	Electric oven for 10 inch records—any voltage ... ..	3	12	0
E.O.2.	„ „ „ 12 „ „ „ „ „ „ „ „ „ „ „ ..	4	10	0
E.O.3.	„ „ „ 16 „ „ „ „ „ „ „ „ „ „ „ ..	5	10	0
G.O.1.	Gas Oven „ 10 „ „ „ „ „ „ „ „ „ „ ..	2	10	0
G.O.2.	„ „ „ 16 „ „ „ „ „ „ „ „ „ „ ..	4	10	0
U.R.M.	Universal voltage electric recording motor with 12 inch turntable 78 and 33-1/3 r.p.m. ... ..	10	10	0
U.R.16	Ditto —with 16 inch turntable ... ..	12	12	0
P.A.5.	Special matched 5 watt amplifier on chassis ... ..	23	0	0
P.P.S.	Special pre-stage Amplifier ... ..	6	0	0
S.R.M.	Heavy duty recording motor (spring) ... ..	3	12	6
P.D.1.	Permarec home recording discs —10 inch with cutting needle ...	3	0	
P.D.2.	„ „ „ —12 „ „ „ „ „ „ „ „ „ ..	4	6	
P.D.3.	„ „ „ —16 „ „ „ „ „ „ „ „ „ ..	15	0	
P.N.	„ reproducing needles—box of 200 ... ..	1	9	

For Export Purposes, Hermetically Sealed Containers can be Supplied for Packing Records. Extra Charges for which are as follows :—

	s.	d.
10 inch and 12 inch — For 10 Records	6	6
— „ 20 „	12	0
16 inch ... — „ 10 „	8	6
— „ 20 „	16	0

W.D  
C36/823

CF



W.D  
C36/823 (B)