

FOR THOSE  
SERIOUSLY INTERESTED  
IN RECORDING . . .

*Reflectograph*

**PROFESSIONAL RECORDERS  
FOR THE HOME AND INDUSTRY**

**STEREOPHONIC • MONOPHONIC  
2 CHANNEL**



# Reflectograph

## PROFESSIONAL RECORDERS FOR THE HOME



**MODEL 500 Price: 94 GNS**

The *Reflectograph* single channel tape recorder and reproducer, providing high quality recordings on two tracks, has won favour among Broadcasting Authorities, Recording Studios, Government Departments and Industrial Laboratories.

Increased production of the Model 500 has enabled the serious recording enthusiast to enjoy the advantages of this simple professional recorder. With the introduction of the *Reflectograph* Stereocorder Model 570 the advantage of high quality stereophonic recording and reproduction is available as well as single channel recording on two tracks and two channel recording.

All *Reflectograph* instruments incorporate the unique and exclusive *Reflectograph* variable speed tape deck.

THE REFLECTOGRAPH IS THE ONLY RECORDER IN THE WORLD POSSESSING ALL THESE FEATURES

- Tape deck finished in "hammered gold" and cream.
- Fitted with 3 heads, separate record and replay amplifiers, enabling instant comparison to be made between signal recorded on tape, and the input signal.
- Variable speed between 8 and  $3\frac{1}{2}$  i.p.s. Stroboscope, lit by neon lamp, shows precise speeds of  $7\frac{1}{2}$  and  $3\frac{1}{2}$  i.p.s.
- Easy tape threading into a straight slot.
- Lever deck controls, providing variable speed wind forward and back from extra fast to inching for editing; sound available for editing if required; instant stop and start.
- Push-button record-playback controls with record safety latch; Clock-type tape position indicator; 3 Garrard motors; Accommodates up to 6 1/2" reels.
- Plays total of 2 hours 8 minutes on two tracks at  $7\frac{1}{2}$  i.p.s. or 4 hours 16 minutes at  $3\frac{1}{2}$  i.p.s.

### THE REFLECTOGRAPH RECORD AND PLAYBACK AMPLIFIERS

- The separate Record and Playback amplifiers for each channel are compactly built together as one unit.
- The Record and Playback gain controls, two input sockets, two output sockets, peak level record meter with zero control and Tape/Input switch are all conveniently contained on one instrument panel.

- The bass and treble cut controls are mounted at the side of the tape deck.
- The Model 500 Monophonic recorder has the Record and Playback amplifiers incorporated in the case on the left of the tape deck.
- The Model 570 Stereophonic recorder has one set of amplifiers on the left and a duplicate set of amplifiers on the right.
- The transportable case is finished in luxan hide and pigskin colour.
- The case of the Model 500 incorporates two matched monitor speakers.
- The lid of the Model 570 divides into two sections—each section contains a Goodmans monitor speaker, 10 feet of lead and a jack plug.
- The arrangements of the circuits of the Record and Playback amplifiers provide flexibility in recording and playback. Two input sockets permit the permanent connection of either a gramophone pick-up, radio or microphone. Two output sockets allow the undistorted signal from the 3 watts amplifier to be fed to an external 15 ohm speaker or to be taken before the output stage to feed an external high fidelity amplifier.
- The Tape/Input switch enables an instant comparison to be made between the input signal and the signal recorded on the tape whilst recording is taking place.
- The record amplifier may be used as a high quality amplifier for reproduction from a gramophone pick-up, radio tuner unit or microphone, without using the tape deck.

### COMPREHENSIVE SERVICE AND MAINTENANCE GUARANTEE

Purchasers of *Reflectograph* instruments in the U.K. enjoy, without additional charge the advantages of the comprehensive service and maintenance guarantee. For one year from the date of purchase a *Reflectograph* is unconditionally guaranteed (except misuse and neglect) including valves. Service is undertaken, usually, within twenty-four hours, by trained engineers of an E.M.I. Company, Home Maintenance Ltd. After the first year upon payment of a small annual fee the *Reflectograph* dealer can arrange for the same service to be available and subject to spares and valves being available it will continue for up to twenty years.



## STEREACORDERS Models 570 and 470

**record and reproduce MONOPHONICALLY • STEREOPHONICALLY • 2 CHANNEL**

*also permit superimposition on one Channel*

### SPECIAL FEATURES OF STEREACORDER MODEL 570 :

The tape deck is fitted with separate, stacked (in line) stereo record and playback heads and a switched full tape width erase head.

The separation between the tracks of the stereo heads is guaranteed to be not less than 45 dB, thus allowing one track of a two-track Monophonic tape to be reproduced without interference from the second track.

This arrangement, together with the pairs of separate Record and Playback amplifiers, enables tapes to be recorded and reproduced.

1. *Monophonically.* Tapes are recorded or played back in the same way as on a Model 500, i.e. on one track in turn from left to right. The full-track erase head is used when recording the first track and is switched off when recording the second.

2. *Stereophonically.* Tapes are recorded or played back on both tracks at the same time from left to right. Each track can be independently monitored during recording. Full track erase is provided.

The characteristics of the amplifiers are to C.C.I.R. recommended specifications and thus permit the playing of commercially or "pre" recorded stereo tapes.

3. *Two-channel.* Both channels are recorded and reproduced from left to right, but recordings on each channel need not be made at the same time. For example, a recording of music can be made on the right channel and subsequently—whilst this is being heard—a speech commentary may be recorded on the left channel. Both channels may be played back at the same time.

Alternatively, at the same time, a monophonic recording of one radio programme can be made on one channel and a recording of another radio programme on the other channel.

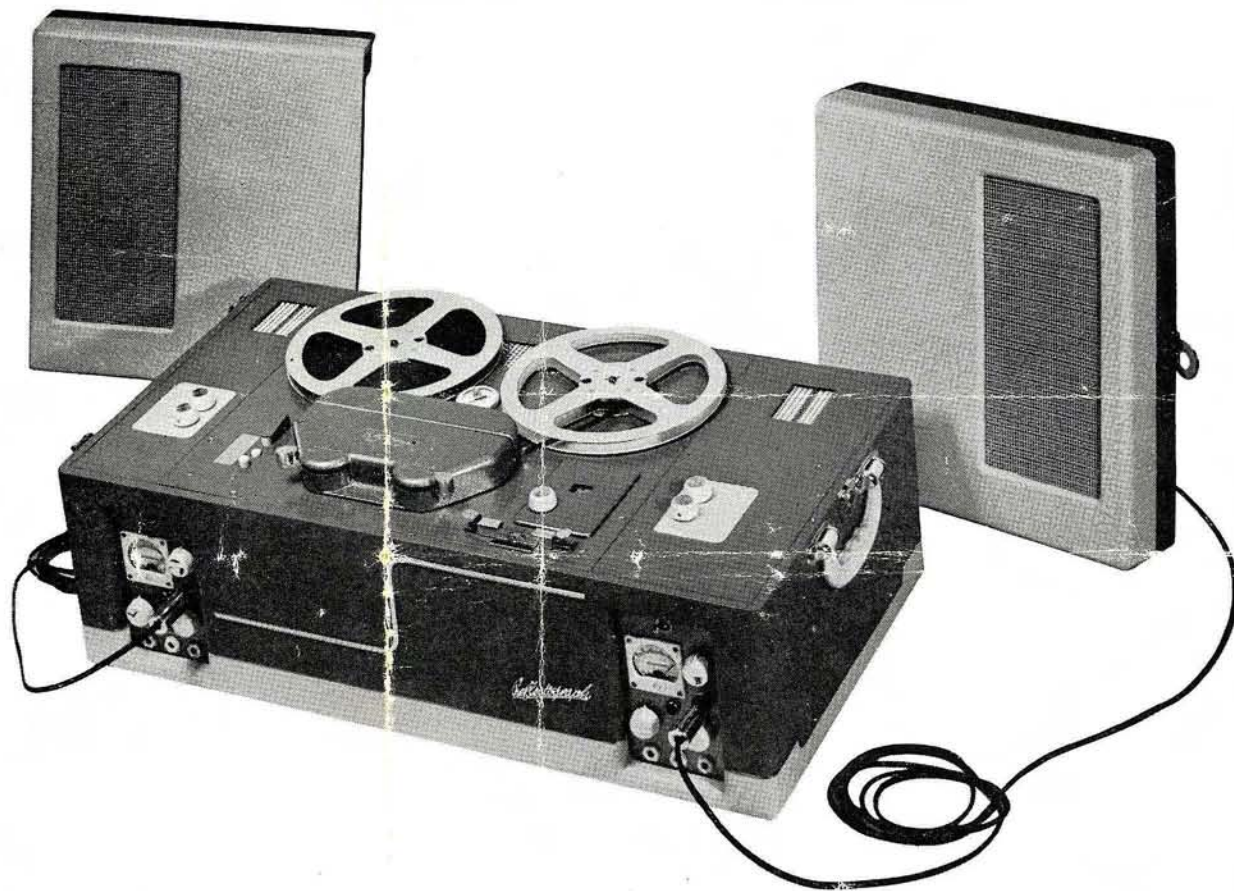
The left hand channel (with the erase head switched off) may be used for superimposing any number of recordings over one another.

### HIGH QUALITY STEREO AMPLIFIERS :

The connection of a stereo pick-up to the Record amplifiers enables the Stereacorder to be used for listening to stereo records or for any other purpose where a pair of high quality amplifiers are required for reproduction.

### MODEL 470 STEREACORDER :

Model 470 Stereacorder, supplied to special order only, has exactly the same technical specification as Model 570 except that it is supplied in four units for building into furniture and thus no speakers are provided. Scale drawings are available showing the dimensions for the tape deck on stand; each pair of Record and Playback amplifiers and the power pack. The amplifiers and deck must be used in approximately the same positions as they are incorporated in Model 570.



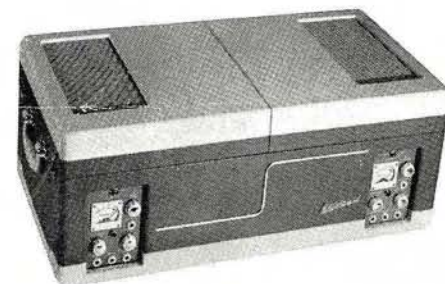
### ACCESSORIES :

Each Reflectograph is fitted with a Bib Tape Splicer and is supplied complete with a reel of tape, splicing tape, spare reel and two screened jack plugs. The reel of tape supplied with Model 570 and 470 is an E.M.I. Stereasonic demonstration tape featuring different items, including a stereo balancing signal. Microphones, plugs, tape and reels are available as additional accessories.

### STEREO CONVERSION OF MODEL 500 :

A Model 500 in good condition may be converted at the factory to have the same performance and facilities as a Model 570. Please ask details of procedure and price.

**MODEL 570**  
**Price: 149 GNS**





## FOR THE TECHNICAL MAN

### DIMENSIONS

Model 500 21" long × 14½" wide × 10¼" high : Weight 50 lbs.

Model 570 31" long × 14½" wide × 11½" high : Weight 70 lbs.

Model 470 Deck on stand 17½" long × 13½" wide, height above deck 1½", below deck 7½".  
Instrument panel, each amplifier, 4¾" wide, 7" high. Aperture for chassis 3¾" wide, 6¾" high. Depth of chassis 13¼".

NOTE: 8½" reels overlap deck by ¾" at back and ¼" at sides.

### FREQUENCY RESPONSE

± 2 dB. 50—10,000 cycles.

± 3 dB. 45—12,000 cycles.

### OVERALL RESPONSE

Strictly to C.C.I.R. recommended specifications.

### SIGNAL TO NOISE RATIO

Better than — 45 dB.  
(unweighted, including hum)

### OUTPUT FROM PLAYBACK PREAMPLIFIER:

200 mV. R.M.S.

### INPUTS TO RECORD AMPLIFIER (High Impedance)

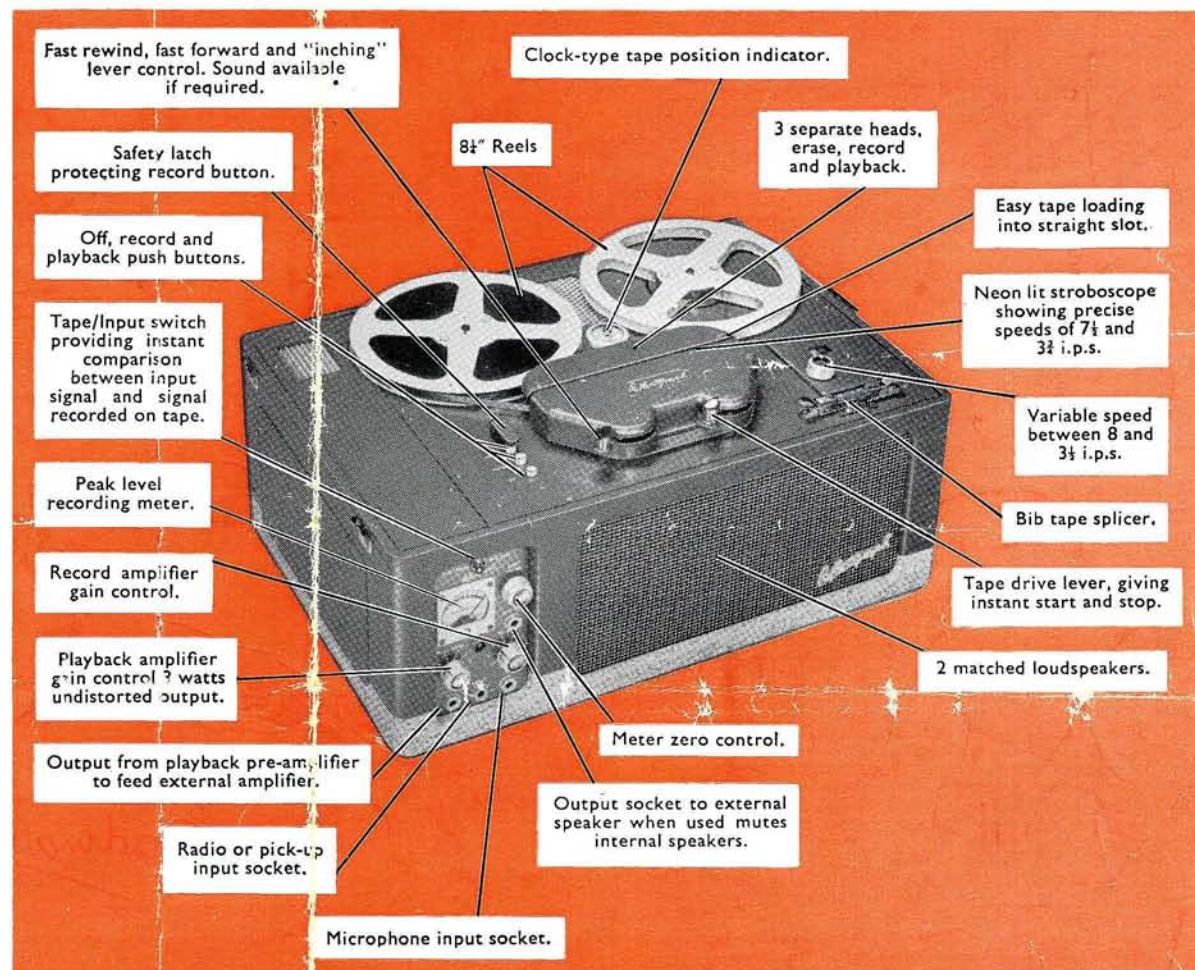
Microphone	1 mV	} for maximum record level
Radio or pick-up	50-200 mV	

### "WOW" AND "FLUTTER"

Better than 0.2% R.M.S.

As measured on the G.B.-Kalee Flutter Meter.

# Unique features of the MODEL 500



## THE TECHNICAL EXPERTS' OPINION OF THE REFLECTOGRAPH MODEL 500

P. Wilson, M.A.  
"The Gramophone"

This is without doubt the most versatile domestic tape recorder that I have had the pleasure of trying out, and the quality, both of its recording and its playback, is of exceptionally high standard. For quality of performance, then, I give the instrument full marks: I know of no better. For the construction I have nothing but praise. There is nothing flimsy about it either as a piece of mechanism or on the electronic side. It is a fine piece of engineering up to the highest British standards.

D. W. Aldous,  
M.Inst.E., M.B.K.S.

### "The Gramophone Record Review"

The separate record and replay amplifiers make possible the direct monitoring from the tape during the actual recording and this facility is certainly a boon. There is no doubt whatever that when one has used this type of recorder one never wishes to return to the combined record/playback type of instrument. I have never heard better quality at 7½ i.p.s. from any tape recorder that has passed through my hands. The "Reflectograph"

is a pedigree tape recorder of immaculate construction and impeccable performance.

James Moir, "Hi-Fi News"

Separate motors are used for capstan drive and both spools, all three motors being of Garrard manufacture. The overall impression after some months of use is that the machine is convenient and pleasant to handle while the extra facilities make it very suitable for professional use.

Details and a demonstration of the Reflectograph Models 570 and 500 are obtainable at your Reflectograph appointed dealer.

To provide for changes in economical conditions and developments in design, prices and specifications in this folder are subject to change without notice. Reflectograph instruments are covered by British and foreign patent and trade marks including Nos. 696610 and 881964.

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REFLECTOGRAPH DIVISION MULTIMUSIC LTD

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