



A DIVISION OF LITTON INDUSTRIES

DATA SHEET

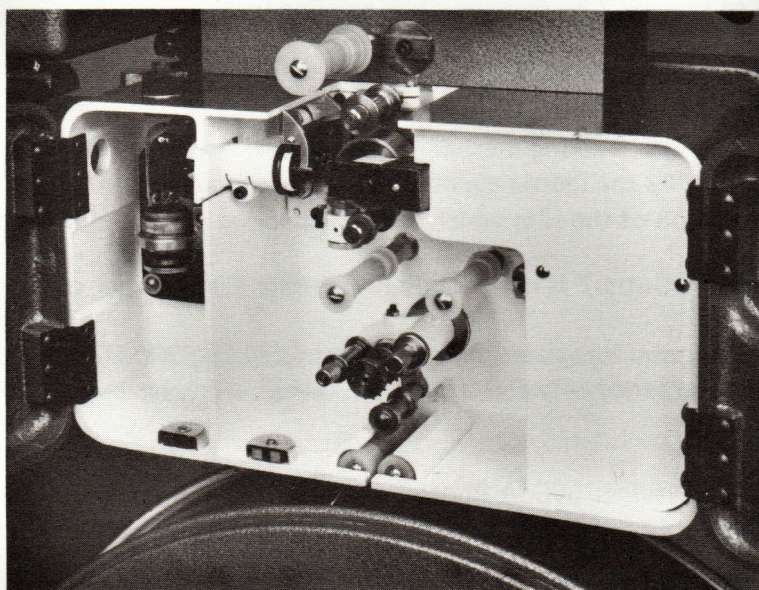
CINEMA DIVISION

5006A PHOTO SOUND REPRODUCER

INTRODUCTION

The British-made 5006A Photo-Track Sound Reproducer forms part of the Westrex 5000 series of system-engineered equipments, designed to meet the needs of all current and anticipated film formats for all types of cinema theatres.

The Westrex 5006A Photo Sound Reproducer is designed for use with 35mm single photo sound-track film and supports the Westrex 5000 Projector. It employs a photo-voltaic cell giving an exceptionally high signal to noise ratio. The film transport employs a specially designed tight loop system with a flutter-suppressor which was the subject of an award given by the Academy of Motion Picture Arts and Sciences. The 5007A drive consists of a resilient mounted



induction motor (a separate item) fitted with a double "V" pulley. Two matched "V" belts transmit the drive to the main shaft of the reproducer. Drive motors are available to cater for most power supplies. Two exciter lamp brackets are provided so that both can be adjusted for correct focus, and immediate replacement can be effected should a lamp fail. For studio or pre-view theatre purposes synchronous drive motors and electrical interlock systems can be provided to lock together two or more similarly equipped machines.

MAIN FEATURES

The 5006A Photo Sound Reproducer incorporates the following features:

- (a) Photo-voltaic cell.
- (b) Presetable exciter lamp assembly.
- (c) Toothed rubber belt drive from reproducer to 5000 type Projector.
- (d) Twin "V" belt drive from the 5007A Drive Motor Assembly.
- (e) Simple by-pass for 70mm film.

SPECIAL POINTS

1. The photo-voltaic cell, with the large output and little or no hiss, has enabled Westrex to achieve a signal to noise ratio comparable to that obtained from magnetic film reproduction.
2. The unit has few moving parts and is easy to service. It features protective doors, both for the exciter lamp and the film compartment.
3. The twin "V" belt drive from the 5007A motor follows a successful principle utilised in previous Westrex 35mm sound reproducers refined to provide adjustment for accurate film speed.

SPECIAL POINTS continued

The two belts give a factor of safety. Together they balance out any unevenness that might be experienced with one belt. Twin belts give greater flexibility.

4. The economical and reliable toothed rubber belt drive to the projector maintains accurate speed relationship between the projector and the sound reproducer.
5. The reproducer is only required to scan optically a 35mm photographic track but facilities are provided in the new 5006A unit whereby 70mm film can be by-passed through the mechanism without damage to the 5002A Lower Film Magazine.
6. The 5006A Reproducer also incorporates a shock-loop absorbtion roller assembly to prevent film damage when starting up the machine.

PERFORMANCE DATA

The film filtering mechanism consists of a solid flywheel mounted on a scanner shaft which supplies the inertia element and a damper arm assembly to filter out irregularities in the motion of the film which would otherwise produce "flutter" and "wow".

The "flutter" is remarkably low, better than 0.1 per cent.

The total integrated "flutter", from 2 HZ to 200 HZ does not exceed 0.09 per cent, while no disturbance between 2 HZ and 200 HZ is greater than ± 0.05 per cent.

MOTOR

The Westrex 5006A Photo Sound Reproducer is normally driven from a 5007A Motor Assembly which in turn drives the Westrex 5000 Projector.

STARTING EQUIPMENT

This is located in the 5003 pedestal.

DIMENSIONS AND WEIGHTS

Reproducer

Width	15¾ ins.	(40.0 cms.)
Depth	8¾ ins.	(22.2 cms.)
Height	13½ ins.	(34.3 cms.)
Weight	48 lbs.	(21.8 kgms.)

Motor (5007) with Drive Pulley.

Weight	28 lbs.	(12.7 kgms.)
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NOTE. The Westrex 5006A Photo Sound Reproducer is British-made throughout. It can be installed as part of the 5000 series of up-to-the-minute, integrated installations, ensuring that every conceivable facility is available now and in the foreseeable future.