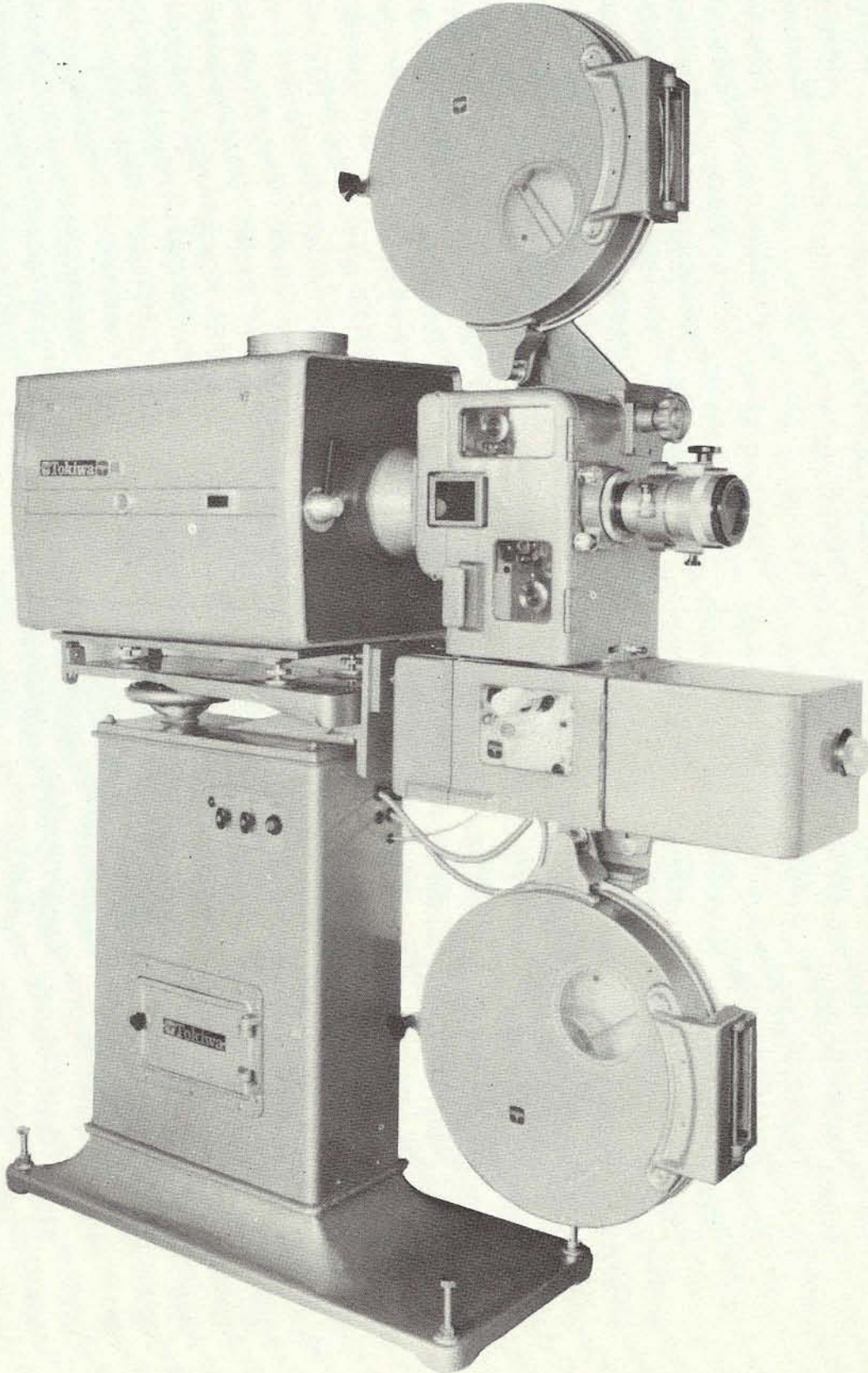


Tokiwa

TSS ————— 35mm SOUND PROJECTOR

■ TSS-X



Tokiwa TSS

35mm SOUND PROJECTOR

TOKIWA TSS 35mm Soud Projector

One complete set consists of:

- 2-TSS projection head-machines
- 2-Upper magazines & spools
- 2-Lower magazines & spools
- 2-Projection lenses
- 2-Cinemascope lens-holders
- 1-Film rewinder
- 2-TSS optical soundheads
- 2-TSS Pedestals
- 2-Lamphouses with mirrors & change over switch
- 2-Rectifiers

(TSS Sound System:)

- 1-Power amplifier
- 1-Exciter power supply
- 1-Cross over network
- 1-High frequency speaker system
- 1-Low frequency speaker system
- 1-Monitor speaker
- 1-Low frequency speaker cabinet

- TSS 35mm SOUND PROJECTOR is standard type for stationary use at theatres.
- TSS 35mm SOUND PROJECTOR is well designed with various merits after making improvement by long experience and is surely effective for perfect projection.

HEAD-MACHINE

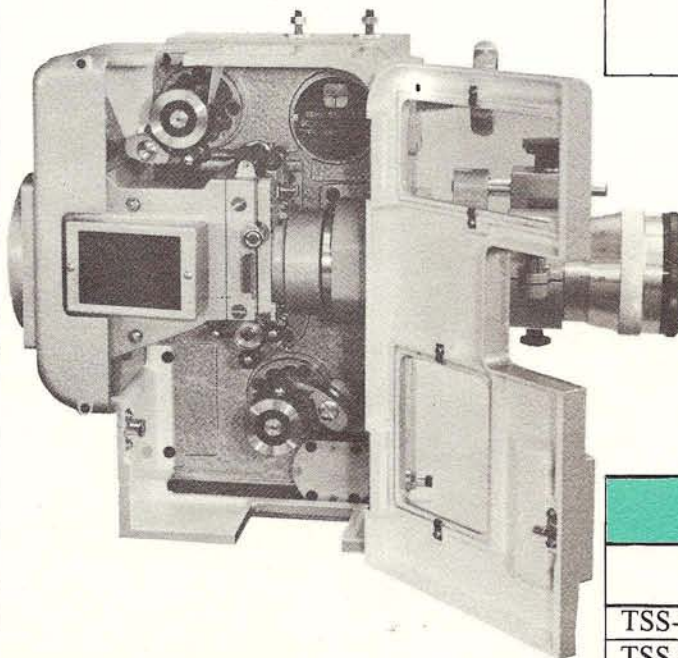
- (1) The Head-machine of this TSS 35mm Sound Projector is fully covered and is dust-proofed by which it is always kept clean from the splash or leakage of oil. The lubricating oil in the bottom reservoir is automatically circulated as soon as the machine starts, through all the revolving parts of the head-machine by gear pump.
- (2) The transmission mechanism is made by well-selected steel after proper heat-treatment and precise works. Thus, together with the above automatic oil supply device, the long life and noiseless operation are guaranteed.
- (3) The aperture gate slides forward and backward horizontally by specially designed mechanism. By pulling the knob, the gate opens automatically and it is not necessary to move projection lens while threading the film.
- (4) The aperture-frame is water-cooled to protect the films from over-heating. It has a separate aperture mask and a plate. The aperture mask can be inserted or fixed

easily and speedily. Framing can be made easily by framing lamp (pilot lamp.)

- (5) The intermittent device, which is the most important part of the projector, is made with well-selected material, by our precise works and careful inspection.
- (6) The knob for framing device is well arranged to handle easily and for smooth movement.
- (7) The speed of connection shaft (to connect with the Soundhead) is 360 r.p.m. (The same r.p.m. as 16-T constant speed sprocket.)

SOUNDHEAD

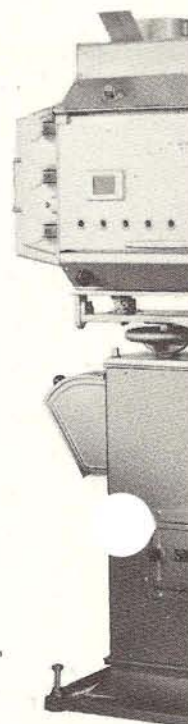
- (1) By the rotary oil damped stabilizer of TSS Optical Soundhead, it prevents from minute tremor, it keeps the film speed constantly and also it avoids sound flutter entirely.
- (2) Drive motor is Induction-motor in vibration-proof type and is connected directly with the Soundhead Mechanism by the flexible coupling.
- (3) Exciter lamp holder is double system which enable the replacement of lamp speedily whenever it is broken.
- (4) Silicon photo diode is used instead of photo electric cell which guarantee the longer life and superior special features.



TSS PROJECTION HEAD-MACHINE

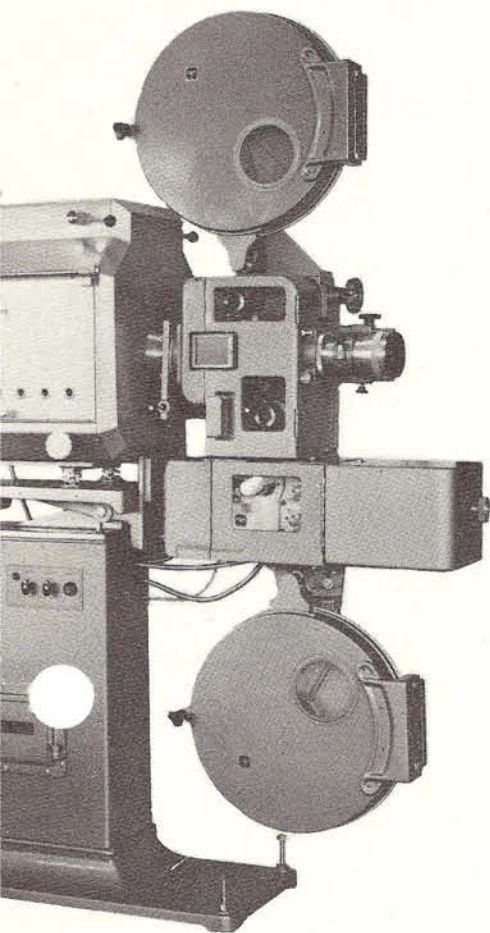
Type:	Fully enclosed
Lubrication:	Self-automatic
Shutter:	Cylindrical shutter
Cooling system:	Water cooling
Framing:	Intermittent framing
Magazine:	3,000 FT or 6,000 FT
Reel:	Wire reel
Sprocket:	Upper-32 teeth Lower-32 teeth Intermittent-16 teeth
Net weight:	104 kgs.

TSS-74K

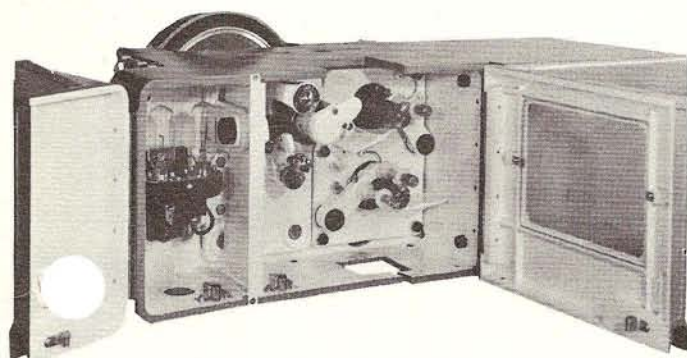
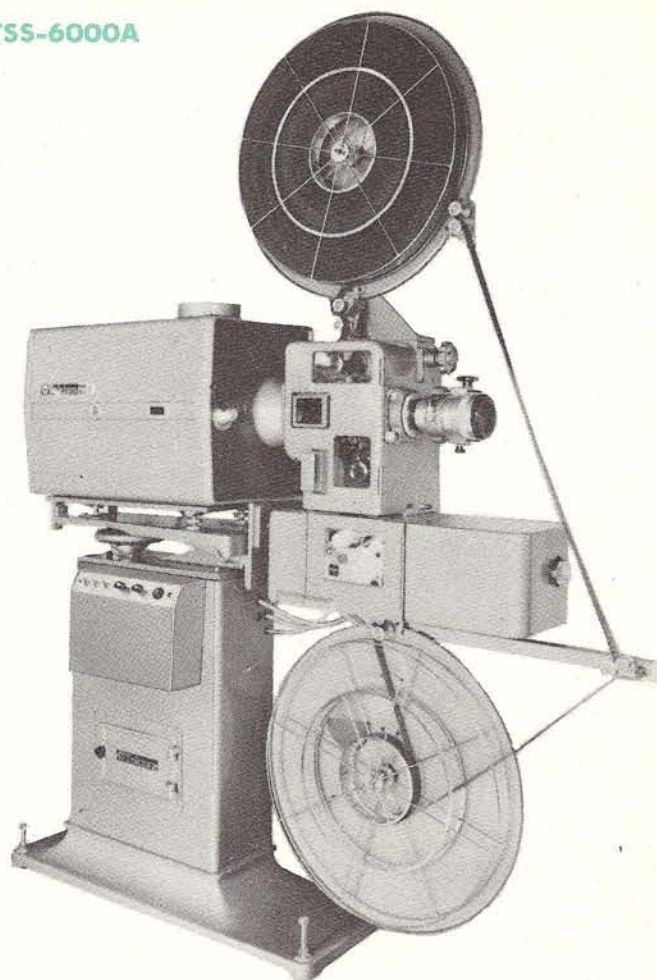


Model

TSS-74K
TSS-X (XENON 2KW)
TSS-X (XENON 3KW)
TSS-X (XENON 4KW)
TSS-6000A-74K
TSS-6000A-2X
TSS-6000A-3X
TSS-6000A-4X
TSS-6000B-74K
TSS-6000B-2X
TSS-6000B-3X
TSS-6000B-4X



■ TSS-6000A



■ TSS OPTICAL SOUNDHEAD

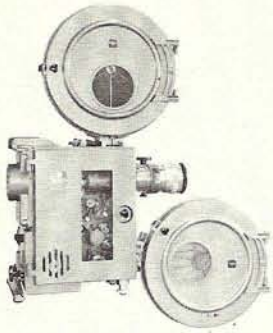
Type: Rotary oil damped stabilizer
 Motor: 200W, Vibration proof type Induction motor, Direct coupled
 Exciter lamp holder: Double system 10V-5A
 Photo detector: Silicon photo diode
 Sprocket: Constant speed — 16 teeth
 Take-up — 16 teeth
 Tension pad roller: Rubber
 Wow and flutter: Less than 0.2%
 Net weight: 94 kgs.

TSS SERIES

Head-Machine	Soundhead	Pedestal	Lamphouse	Magazine	Rectifier	Sound System
TSS	TSS	TSS	TSS-74K (ARC CARBON)	3000FT.	TSS-85A	TSS
TSS	TSS	TSS	TX (2K XENON)	3000FT.	KRX-80	TSS
TSS	TSS	TSS	TXH (3K XENON)	3000FT.	KRX-100	TSS
TSS	TSS	TSS	TXH (4K XENON)	3000FT.	KRX-140	TSS
TSS-6000	TSS	TSS	TSS-74K (ARC CARBON)	6000FT. (A) (FILM RE-WIND SYSTEM)	TSS-85A	TSS
TSS-6000	TSS	TSS	TXH (2K XENON)	6000FT. (A) (FILM RE-WIND SYSTEM)	KRX-80	TSS
TSS-6000	TSS	TSS	TXH (3K XENON)	6000FT. (A) (FILM RE-WIND SYSTEM)	KRX-100	TSS
TSS-6000	TSS	TSS	TXH (4K XENON)	6000FT. (A) (FILM RE-WIND SYSTEM)	KRX-140	TSS
TSS-6000	TSS	TSS	TSS-74K (ARC CARBON)	6000FT. (B)	TSS-85A	TSS
TSS-6000	TSS	TSS	TXH (2K XENON)	6000FT. (B)	KRX-80	TSS
TSS-6000	TSS	TSS	TXH (3K XENON)	6000FT. (B)	KRX-100	TSS
TSS-6000	TSS	TSS	TXH (4K XENON)	6000FT. (B)	KRX-140	TSS

Subject to change without notice.

Tokiwa PROJECTORS & PARTS



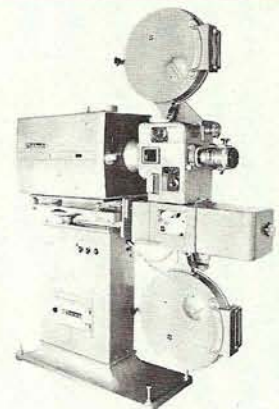
T-54
35mm PORTABLE
SOUND PROJECTOR



T60-HALOGEN
35mm PORTABLE
SOUND PROJECTOR



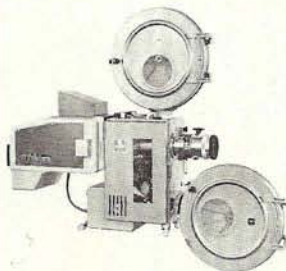
T-60X
35mm PROJECTOR
WITH XENON LAMPHOUSE



TSS-X
35mm SOUND PROJECTOR
WITH XENON LAMPHOUSE



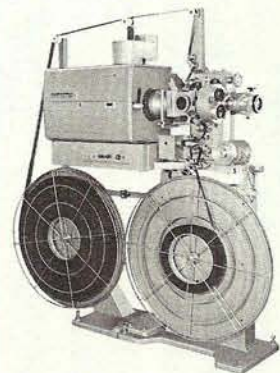
T-60
35mm PORTABLE
SOUND PROJECTOR



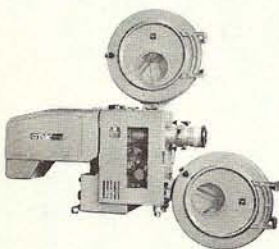
T60-1000X
35mm SOUND PROJECTOR



TP-HALOGEN
35mm SOUND PROJECTOR



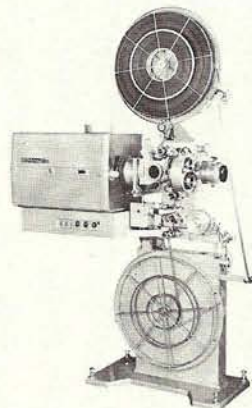
TSR-12000
35mm SOUND PROJECTOR



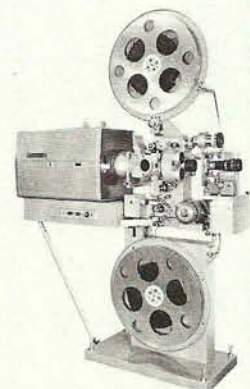
T60-500X
35mm PORTABLE
SOUND PROJECTOR



T6000-HALOGEN
35mm SOUND PROJECTOR
(6000 ft.)



TSR-6000A
35mm SOUND PROJECTOR
(6000 ft.)



TSR-6000-B
16/35mm SOUND PROJECTOR



TOKIWA CO., LTD.
Tokyo, Japan

