

Random Selection Slide Projection

By NORMAN A. SAUPPE

A random selection feature incorporated into the slide projector eliminates the necessity for keying magazines. The random access mechanisms (patent pending) are explained. Three projector models and various accessories are described.

THE RANDOM SELECTION FEATURE of the Spindler & Sauppe Selectroslide SL Series projectors permits random access to slides and eliminates the necessity for keying magazines. Moreover, maintenance is facilitated since the selections system is easily accessible for cleaning.

The Standard Selectroslide projector introduced in 1939 was the forerunner of both the 48-slide model SLS-750 introduced last year and the new 96-slide model SLX-750 to be described. Functionally, the random access mechanisms of these two models are similar.

On the 96-slide model, two 48-slide magazines feed to a common slide gate. Selection of slides from either magazine is identical. The interchangeable magazines are of the radial type containing 48 spring-steel slide holders which accommodate any type of slide mount. The magazine rides on a ball-bearing turntable driven by its own motor.

The "brain" of the selection system, consisting of a flushed rhodium plated etched circuit system, is in the center of the turntable. It contains 15 commutator sections, 5 contacts for the "tens" and ten contacts for the "units" digits. Six sprung contacts, mounted in the center of each random access magazine, mate with the commutator and sense the desired slide position for transfer into the gate.

An adding-machine type keyboard is

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provided on the remote control panel. It consists of two rows of buttons, one for the "tens" and one for the "units" digits. In the case of the 96-slide model, an "A" and "B" button are also provided just above the "tens" row for magazine selection. The 96-slide projector will operate smoothly with only one magazine or both.

Depressing the proper buttons causes the projector to start to find the slide selected. With one operation it extinguishes the push button lamps, the projection lamp and, if used, a digital readout indicator unit. Pressing other buttons during this time will cause the projector to follow the operator's change of mind. At the instant the proper slide is found by the selection circuit, the push buttons and digital readout lights are energized, the slide moved into the gate, and the projection lamp is illuminated to full volume. Selection time for both the 48 and 96-slide models averages $2\frac{1}{2}$ sec.; maximum $4\frac{1}{2}$ sec.

Fifteen bayonet-mounting projection lenses, from $1\frac{1}{4}$ to 11 in., are available for all Selectroslide models in the SL model series. These are matched to five interchangeable plug-in field condensing lenses to intensify the lumen output of Selectroslide projectors. A special screw-mount, interchangeable with the bayonet lens mount, permits the use of Leitz Prado projection lenses.

Several accessories increase the versatility of the random access Selectroslide projectors. A sequential relay box that plugs into the projector in place of the remote control unit permits a single push-button to control the projector through a sequential series of slides. A built-in four-speed timer makes the operation completely automatic. A tape recorder with a synchronizer can also be used with this accessory.

As mentioned before, a projection-type digital readout display unit can be

plugged into either random access Selectroslide. This is supplied with mounting brackets for custom installations. This informs the audience as to which slide is on the screen so that it can ask for recall of any slide, by number, for later discussion. Also, if used in displays, the digital readout serves to identify individual slides, keying them to descriptive information.

In permanent displays such as are found in museums or in-plant exhibits, the public cannot be expected to turn off the projector after use. An automatic shut-off timer may be placed in series with the control panel of either random access Selectroslide model to place the projector in standby should any one slide be left on the screen for more than, say, one minute. The timer is adjustable from 1 to 60 sec. Timers with periods of

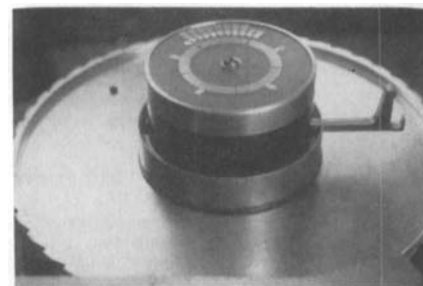


Fig. 2. Etched circuit brain of projector. Slide positioning hook is partially retracted.

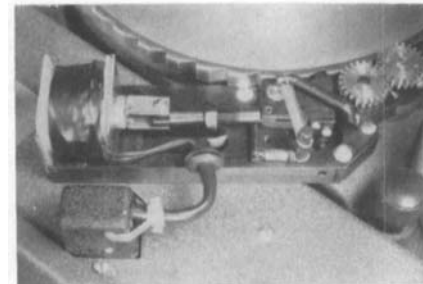


Fig. 3. Solenoid and pawl assembly with magazine rotation drive system at upper right.

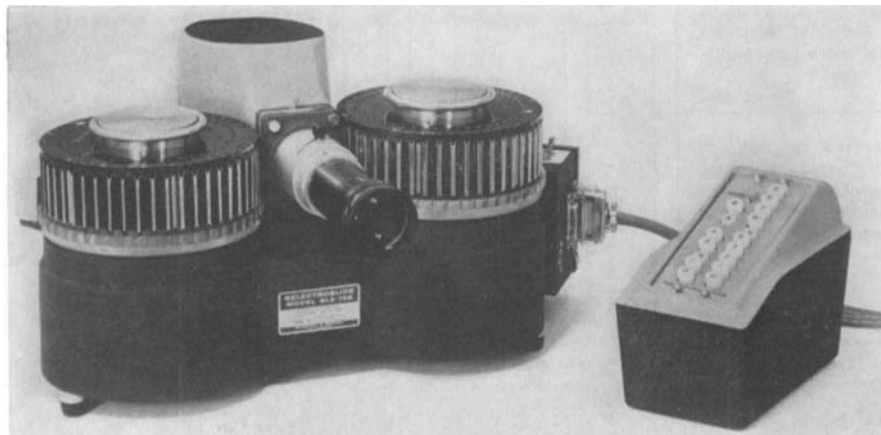
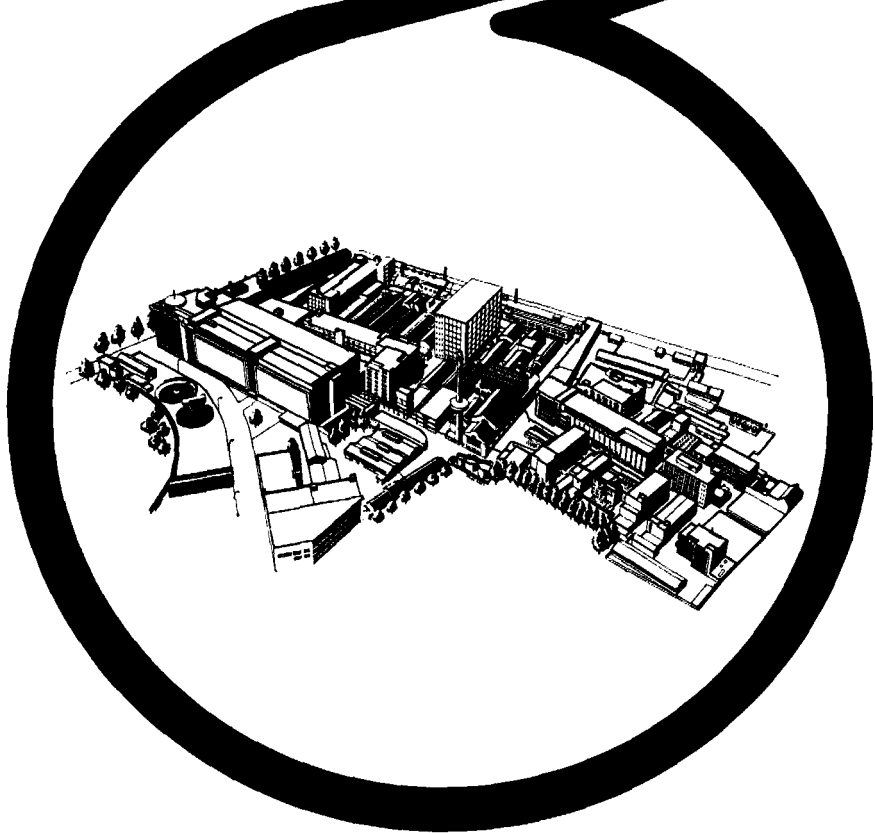
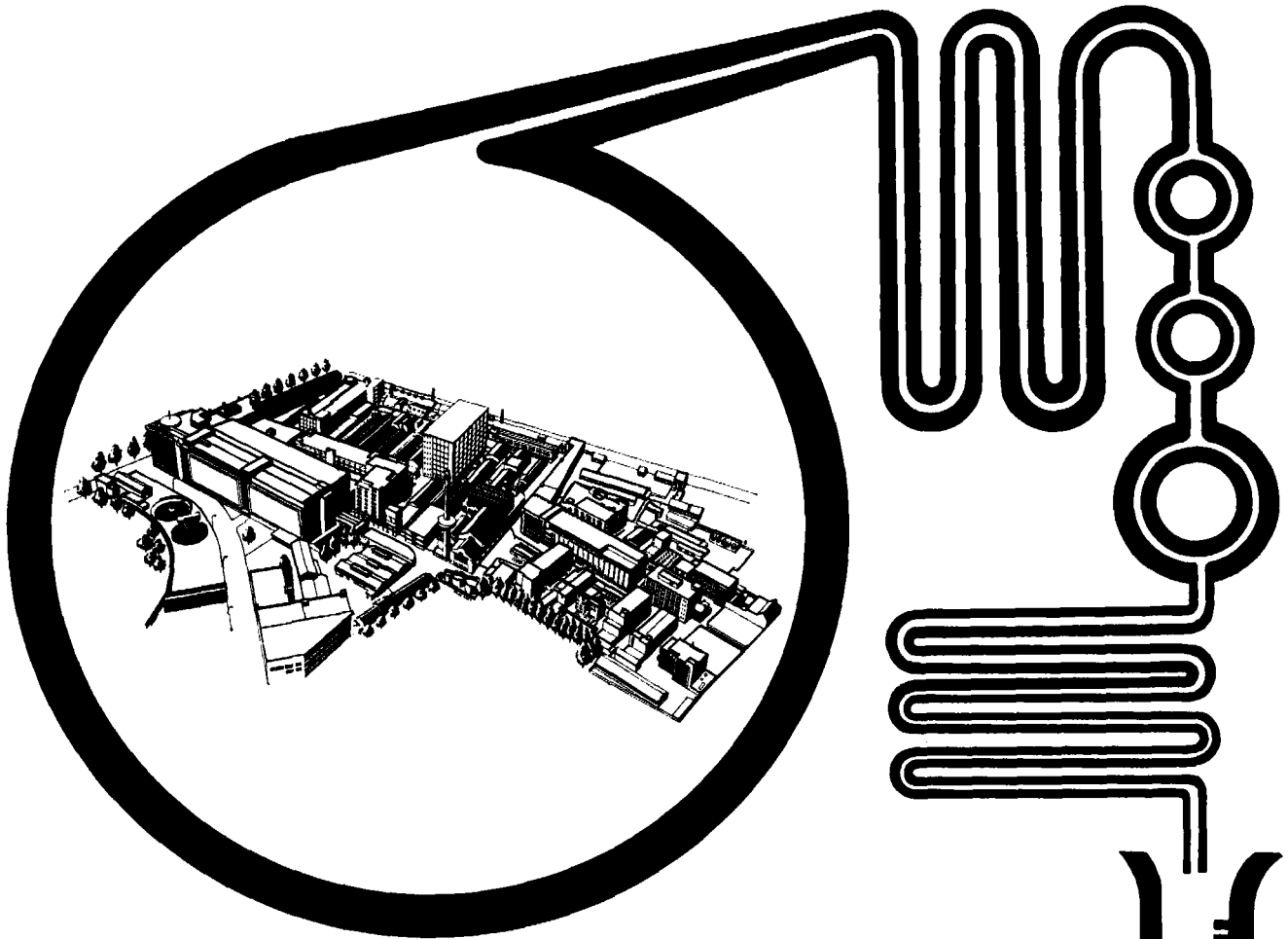


Fig. 1. Selectroslide Model SLX-750 for 96 slides and remote control keyboard.



Fig. 4. Digital readout.



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up to 5 min are available. Selecting slides during the time period resets the timer. A receptacle on the unit provides power for a "make your selection" light when the projector is in standby.

An economy random access Selectroslide projector has been designed for those who normally show a sequential series of slides, but would like to have the capability of some random selection. This model, the SLT-750 Digital Readout Selectroslide, combines the features of a reversible and a random access projector. Using the same etched circuit commutator and magazine of its older brothers, the SLT utilizes the selection system to read out the number of the slide in the gate.

A portable remote control panel houses a digital readout indicator, similar to the accessory used with the SLS and SLX models, along with a forward and reverse push-button and a standby switch. As long as either button is depressed the projection lamp remains extinguished so that slides can be skipped without showing intermediate ones. The model can also be used with a permanently mountable digital readout and conventional 2-button (forward/reverse) remote control cord to inform the audience as to the slide number being shown.

Selection time is an average of 15 sec, since each slide must be inserted and retracted from the gate as the magazine rotates to the slide desired. Selection can be either in the "on" or the "standby" mode.

There are twelve Selectroslide models covering the 35mm slide projection field. Ranging from 16 to 96 slides and from 150 w (for television uniplexing or multiplexing) to 1200 w, the units are designed for either forward, forward/reverse, random access, or television uniplex or multiplex operation. A new speed-dissolve system couples two 48-slide 1200-w projectors into a team for dissolve effects and endless (to the audience) slide capacity. Selectroslide accessories include manual and remote film-strip attachments, radio remote control with 150-ft range, and fifteen stock lenses from 1½ to 11 in.

The random access Selectroslide projectors have been used in a variety of ways, usually by the rear projection technique. Utility companies as well as firms with office building air conditioning control problems, formerly compelled to tolerate vast control boards, are now using slides, randomly selected, to present wiring diagrams and graphs for trouble-shooting and control. Many have been used in conference and chart room applications to facilitate rapid access to large quantities of data. Even computers use Selectroslide to provide background or simulation information where electronically produced overlays are frequently employed.

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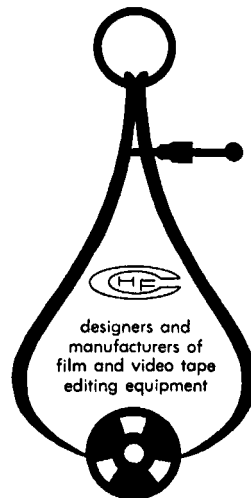
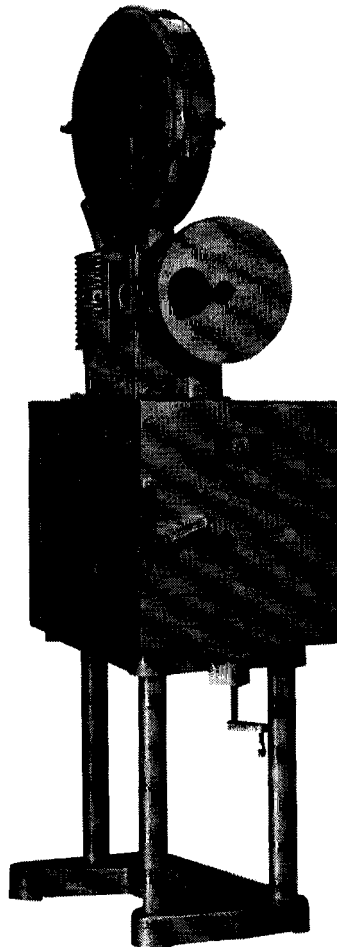
The projector is a converted front shutter Simplex with a two pin intermittent. 16mm or 35/32 film runs at a speed of 144 ft. per minute while 35mm film runs at a speed of 165 ft. per minute.

1. A variac controls the light intensity.
2. A 500 watt lamp is used for 16mm and a 1,000 watt for 35mm (a blower is used to cool the lamphouse).
3. A 2½ inch projection lens is furnished with each unit.
4. A start-stop lever controls the power to the lamp and motor.
5. The magazine and take up core takes up to 3,000 ft. of film.
6. Upper guide rollers are made to handle the film from either direction of the feed reel.
7. A free wheeling take off flange is provided in the magazine.
8. A lamp near the takeup reel permits hand inspection of the film prior to takeup.

NOUVEAU

Le projecteur contient un obturateur Simplex antérieur transformé avec deux clavettes intermittent. Les films de 16mm ou 35/32 tournent avec une vitesse de 144 pieds à la minute, tandis que les films de 35mm tournent avec une vitesse de 165 pieds à la minute.

1. Le regulateur de voltage d'intensité d'éclairage.
2. La lampe de 500 watt est nécessaire pour les films de 16mm, et de 1000 watt, pour les films de 35mm (un ventilateur est mise pour rafraichir la chambre de la lampe).
3. L'objectif de 2½ est installé.
4. La manette de mise en marche et d'arrêt controle en meme temps la lampe et le moteur.
5. La boîte de films avec noyau peut contenir 3000 pieds du films.
6. La roue supérieure est construite de manière de recevoir le film dans les deux directions, nourrie par la bobine centrale.
7. Une roue est installée pour libérer rapidement le film de la boîte.
8. La lampe se trouve pres de la bobine recepteuse, et donne toute facilité pour inspecter le film a main dans le projecteur.



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NUOVO

Questi proiettori sono Simplex trasformati, otturatore al fronte, meccanismo di scatto di due punte. La velocità di proiezione in 16 o 35/32mm e di 144 piedi per minuto, e in 35mm, di 165 piedi per minuto.

1. Controllo manuale della luminosità della lampada.
2. Lampada di 500 watt per 16mm e di 1000 watt per 35mm.
3. Obiettivo di proiezione di 2½".
4. Maniglia per controllo di motore e lampada di proiezione.
5. La cassetta porta pellicola puo contenere 3000 piedi.
6. I rulli superiori di guida sono costruiti per operare con film proveniente di amboi lati della bobina svolgitrice.
7. Disco con montatura sporgente nel magazzino.
8. Una lampadina illumina la bobina avvolgitrice, permettendo l'ispezione manuale del film prima che si avvolga nel proiettore.

NUEVO

Esta máquina es un proyector simplex convertido, obturador al frente y movimiento intermitente a doble grifa. Para 16mm o 35/32mm, la velocidad fija de proyección es de 144 pies por minuto, para 35mm es de 165 pies por minuto.

1. Un reostato controla la intensidad de la lampara de proyección.
2. Para 16mm se usa una lampara de 500 watt, y una de 1000 watt para 35mm (un chorro de aire ventila las lámparas en ambos casos).
3. Cada unidad está provista de un lente de proyección de 2 pulgadas y media.
4. Una palanca de control opera el motor y la lampara simultáneamente.
5. Capacidad de proyección: rollos de hasta 3000'.
6. Los rodillos de guía superiores operan con la película en ambas direcciones.
7. La tapa de la bobina de carga es desenroscable.
8. Una lámpara ubicada junto a la bobina de toma permite la inspección manual de la película antes que se rebobine en la bobina superior del proyector.