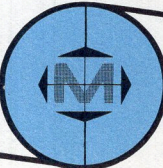
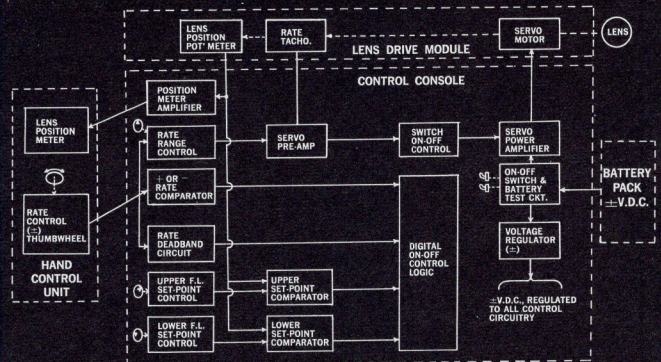
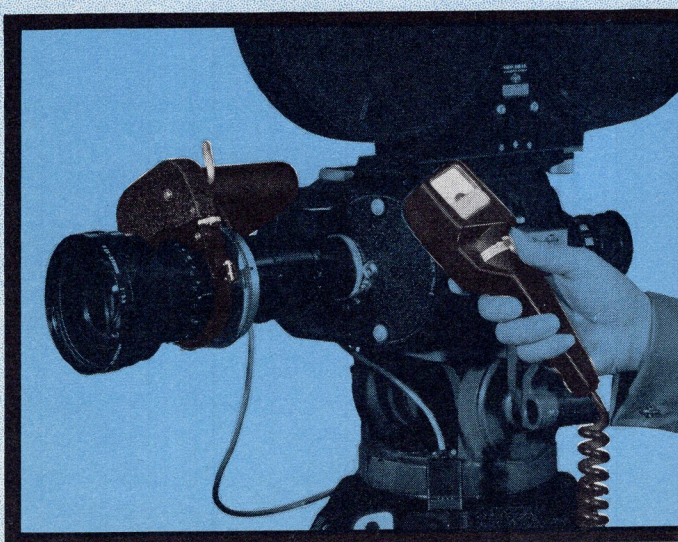
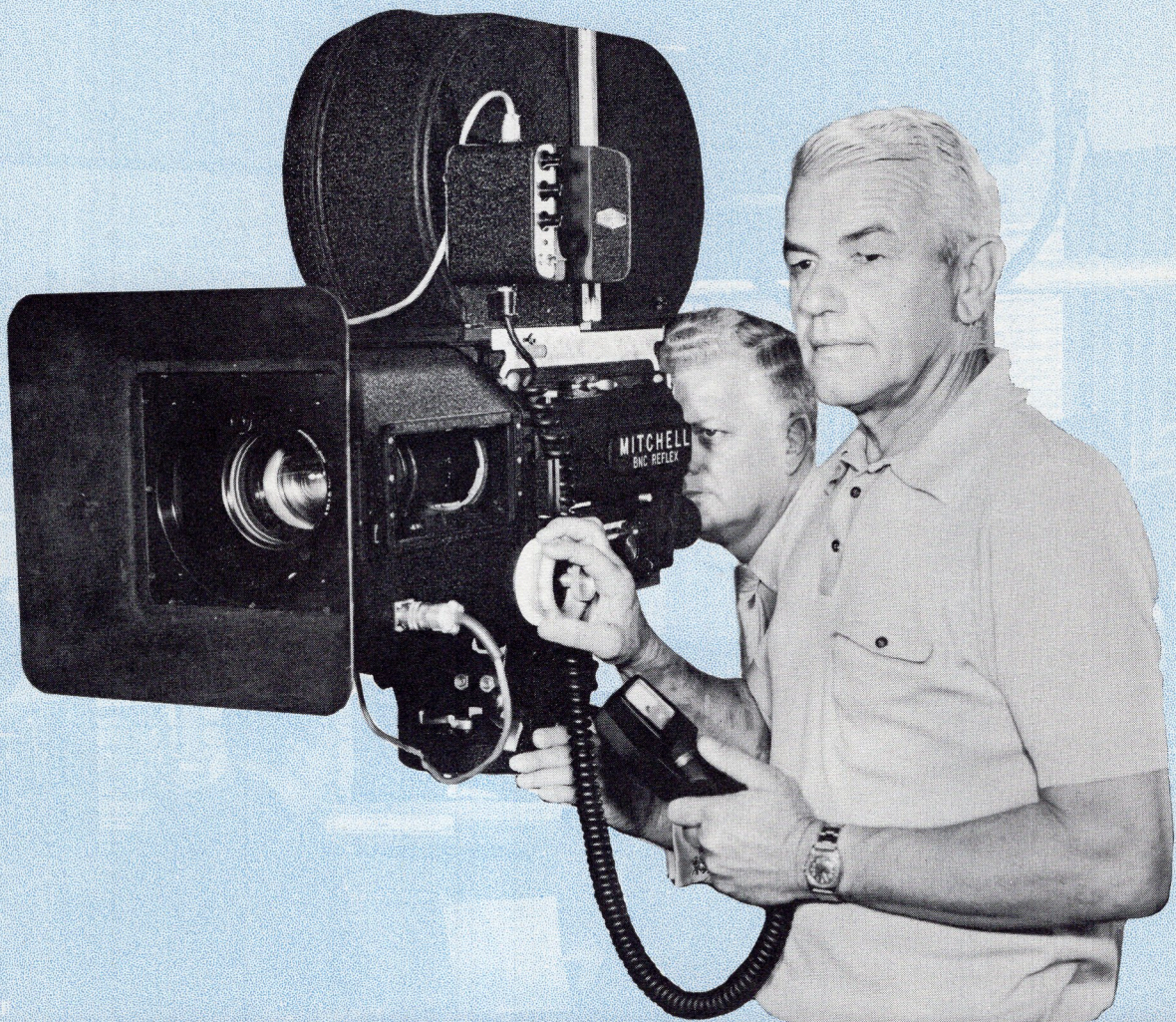


New |SERV  ZOOM|

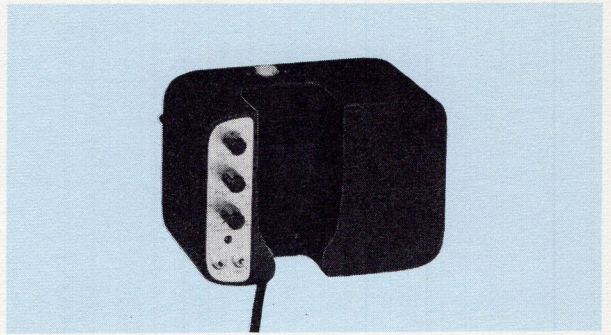
A quiet servo-electric lens drive system with precision pre-programming capability for remote one-hand operation... from Mitchell, of course!



SERVOZOOM: FUNCTIONAL BLOCK DIAGRAM

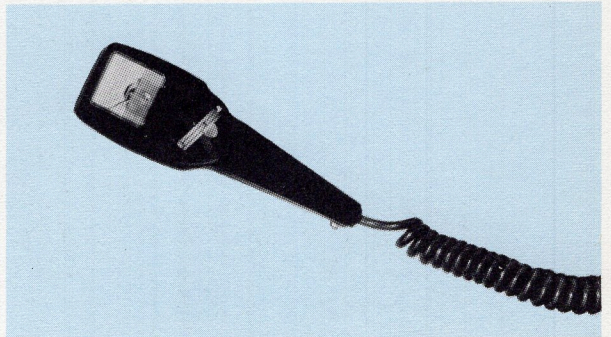
### MASTER CONTROL CONSOLE

Contains solid state electronic servo system and rechargeable NiCad battery pack. Front panel displays programming controls for zoom rate and upper/lower focal length set points, also on-off switch plus battery test switch and indicator light. Quick release bracket permits mounting on camera or dolly. Built-in socket holds Hand Control safely when not in use.



### HAND CONTROL

Holds lens position display meter with double scale to match focal length calibrations of Angenieux 6 x 20 mm and 10 x 25 mm lenses. Spring-loaded thumb control and adjustable stops permit instant, smooth attainment of pre-established zoom rate and range. This unit is "human engineered" to fit either hand comfortably and is equipped with 6-foot coil cord for remote actuation.



### ZOOM MOTOR

Closed loop servo feedback operates through reliable solid state circuitry to assure precise torque control of the DC motor with integral tach-generator. Maintains unvarying adherence to preset speed on zoom-out and zoom-in. Quiet toothed belt drive and removable shroud fulfill sound stage acoustic requirements. Universal mount with removable inserts fits different lenses and also allows for mounting of optional follow-focus drive shaft assembly.



Now...Forget Lens Watching  
and Concentrate on Your Artistry  
with Pre-Programmed Remote Zoom Control...

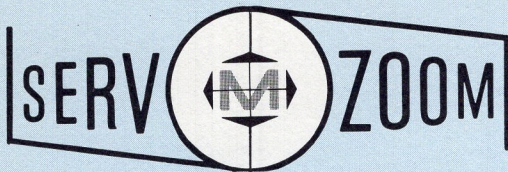
Mitchell's Smooth and Silent **SERVOZOOM** Lens Drive!

Set your zoom rate and range with simple electronic programming, then operate the lens with servo-control precision...with one hand...from up to six feet away! Your pre-programmed settings are constant and repeatable...or you can change set-ups and adjustments to suit the creative director without touching the lens, even on high crane shots. All settings are made entirely on the Master Control Console or Hand Control, not on the lens.

**SERVOZOOM** ends lens watching, mental calculations, erratic zoom speeds and jolting stops...allows maximum attention to follow-focusing and other critical details of professional cinematography. It frees your "other" hand, often allows one less helper on the camera, gives you freedom for a whole new dimension in the art of making motion pictures.

**SERVOZOOM** offers exceptionally smooth starting and stopping in either direction, as pneumatically cushioned electronic stops eliminate human error. Push the thumb button to start and a servo feedback circuit maintains unvarying zoom speed. When a pre-set stop is reached, the lens halts automatically — whether programmed for full or partial travel. This automatic control requires no attention and, therefore, does not distract the operator from concentrating on his main job.

The unit is capable of actuating an Angenieux 10 x 25 mm lens throughout its complete zoom range in as little as one second or as long as two minutes... without vibration or objectionable sound generation. Write today or phone for additional details on Mitchell's new **SERVOZOOM** lens drive.



## NEW ELECTRIC LENS DRIVE

**HOW THE SERVO-CONTROL WORKS:** The unique advantage of Mitchell's SERVOZOOM over other systems is its genuinely one-handed control of fully automatic actuation based on computer-like pre-programming. This is achieved by a closed loop servo system balanced through solid state electronic feedback elements.

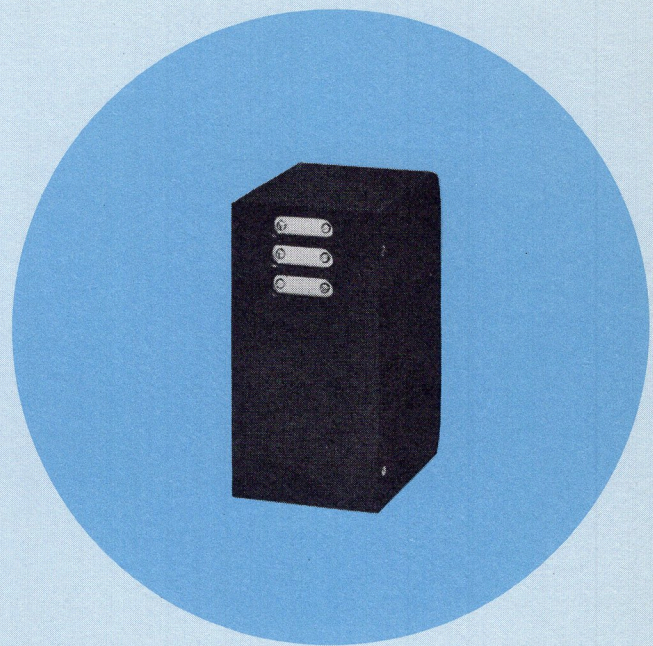
**The desired zoom rate** and upper and lower focal length set points are dialed on the Master Control Console. A lens position display meter on the Hand Control shows the precise focal length from moment to moment. The Hand Control permits stopping at intermediate points by watching the meter needle, without reference to the lens itself. Once the settings are established, actuation is commenced in either direction at a touch of the thumb on the same hand that holds the Control. Zoom is automatically terminated when a set stop is reached or when the thumb button is returned to the null "dead band" area.

**A tach-generator** built into the driving motor transmits a feedback signal which is compared with an input signal from the rate-control potentiometer. Thus, increases or decreases in lens element friction, which would otherwise slow down or speed up the motor, are offset by proportionate increases or decreases in power to the motor. Zoom speed is locked to a value dictated by the rate controller, regardless of frictional variations during movement of the lens.

**Automatic zoom termination** is controlled by position-sensing feedback loops. A signal corresponding to the desired focal length set-point is programmed into the system as a voltage level. Changing output from the position feedback potentiometer is compared with this voltage. When the two voltage levels correspond, a semiconductor switching circuit de-activates the system.

**Every component** in the SERVOZOOM lens drive is designed to promote smooth, quiet operation with little attention from the camera crew. It's new, reliable and economical!

*Write or Call Today for Complete Information*



### SERVOZOOM BATTERY PACK

Drop-in NiCad Battery Pack contained in sealed, thin-walled cast housing makes automatic contact through recessed gold plated contacts. Quarter-turn lock retains pack in console. Battery life is sufficient for one half-hour of normal zoom lens operation. Re-charge time for a flat battery is approximately 8 hours. Weight, 29 oz. **Part No. 125-G-323**



### SERVOZOOM BATTERY CHARGER

This advanced design contains solid state circuitry, automatic input voltage compensation which maintains constant charging rate, and automatic transfer from fast to trickle charge mode. Output current is voltage limited and short circuit protected. Red and green lights indicate fast or trickle charge in progress. Internally adjustable for 115 or 220 VAC line input. Weight, 24 oz. **Part No. 125-B-324**

Prices quoted are net F.O.B. Glendale, California, exclusive of applicable Federal Excise Taxes and are subject to change without notice. Prices prevailing at time of shipment apply.

Vinten Mitchell Ltd. / Bury St. Edmunds / Suffolk, England  
Tel: Bury St. Edmunds 2121

Nagase & Company, Ltd. / 2-Chome Kobunacho Nihonbashi  
Tokyo, Japan / Tel: (662) 6211



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