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INSTRUCTION MANUAL

DeJUR TWIN-LENS ReFLEX

DeJUR USA

the equipment you need for the pictures you want

MANUAL OF

INSTRUCTION

for the

DeJUR TWIN-LENS ReFLEX

Models

DR-10

DR-20

DR-40

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by

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Technical Director

DeJUR-Amsco Corporation, L. I. City, N. Y.

Fig. 1
You see your picture while you shoot it.

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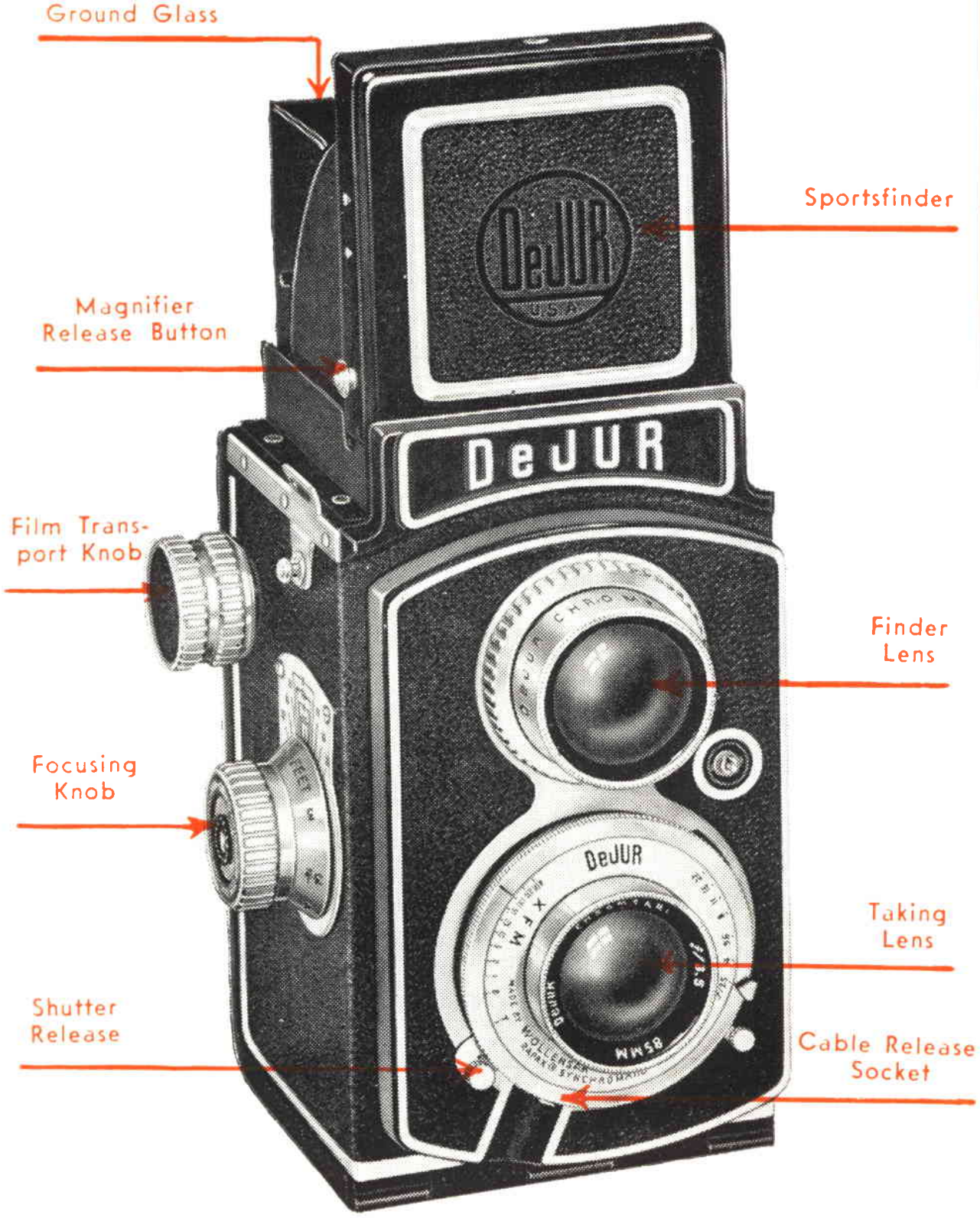


Fig. 2—DeJUR ReFLEX MODEL DR-20

DeJUR ReFLEX MANUAL

The DeJUR Reflex is a modern twin-lens reflex taking 12 pictures 2¼ x 2¼ inches in size. It is precision engineered by expert camera designers and manufactured in an up-to-date camera factory. Its smooth and accurate operation is the result of care in manufacturing each part, rigid inspection during fabrication, and precise testing after assembly.

Viewing Lens is a coated and corrected anastigmat designed to produce a sharp, brilliant and easily focused image. It is matched to the photographic lens to insure error-free focus.

The Photographic Lens is a fully color-corrected, anti-reflection coated anastigmat. Embodying the highest corrections and optical precision, the lens will produce needle-sharp negatives and brilliant color transparencies.

The Shutter is precision built for highest accuracy and long life. It is fully synchronized for all the popular types of flash lamps, making indoor flash pictures simple and dependable.

Ground-Glass Focusing Screen is a fine-grain, high transmission glass made to give the brightest image. A Fresnel-type field-lens under the ground glass brightens the corners of the image for ease in viewing. In the center, the ground glass is pattern-free to make precise focus quick and fool proof.

Sports Finder is designed accurately to frame rapidly moving subjects. It is also useful under very dim light conditions when the ground-glass image may be too faint to permit proper viewing.

Focusing Knob is large and easy to operate. A depth-of-field indicator shows the range of sharp focus for every distance setting.

Fig. 3—Correct way to operate the DeJUR ReFLEX

Winding Knob which advances the film for the next exposure has large and comfortable milled edges. When camera is closed, this knob locks into film spool. It cannot be accidentally disengaged.

Film Indicator in center of winding knob may be turned to show what type of film has been loaded in the camera. Turn small projection until it is located opposite the proper film description. Here is a constant reminder to tell you even months later that you have, say, color film in your camera.

Reflex Mirror is front-surfaced and floating in a special cradle to make it shock proof. It is precisely adjustable in all directions to assure absolute accuracy in alignment after assembly.

Film Frame against which the pressure plate presses the film for exposure is also completely adjustable and is set perfectly square with the optical axis of the lens. The lens stage itself is die-cast to assure positive and life-long lens alignment.

All these refinements assure the owner of the DeJUR Reflex of crystal-clear photographs without distortion or optical errors.

MODEL DR-10

The shutter on this model is a DeJUR self-cocking, single-control mechanism. To set the speed, turn outer ring until the line is opposite the desired speed. For 1/100 second, set ring to 100 (the fraction line has been omitted for the sake of clarity).

To take the photograph, press shutter lever slowly and smoothly until shutter operates. Try to do this so smoothly that camera is not jarred. Slight camera movement during exposure will blur the picture, so jarring should be avoided. A cable release screwed into the socket under the release lever and used to trip the shutter will aid in achieving smooth operation.

Fig. 4—The matched lenses and lens stage of the DeJUR ReFLEX Model DR-10

As the shutter lever or cable release is pressed slowly, a faint click is heard, but the shutter has not operated yet. Continue pressure beyond this faint click until the shutter operates. (If finger pressure is relaxed after the faint click but before shutter operates, picture will be spoiled.)

For moving subjects, set shutter speed to 200. This will stop only moderate action, so try to catch action at peak when movement comes momentarily to rest.

For light conditions that require a 1-to-5-second time exposure, set shutter to line B (Bulb). At this setting, shutter opens when lever is depressed and closes when lever is released. Camera must be on tripod or table to avoid the slightest movement during period shutter is open.

To make longer time exposures, set shutter line to T (Time). When operating lever is depressed and released, shutter opens and stays open until lever is pressed a second time and released. Camera must remain immovable during the exposure period.

FLASH PHOTOGRAPHY

The DeJUR shutter is internally synchronized for flash. The colors of the shutter speeds indicate proper settings for the various flash bulbs. (See page 23 for more details).

M type bulbs are filled with wire. They will synchronize properly when shutter is set to red numbers: i. e., 10, 25, T, B.

F type bulbs are clear with two electrodes inside and will synchronize properly when shutter is set to green numbers: i. e., 50, 100 (also at 10 and 25).

Strobe type repeating flash bulbs synchronize properly when shutter is set at 200 or any other speed.

MODEL DR-20

The shutter on this model is a Rapax set-and-release type shutter of high precision. To set the speed, turn outer ring until index line is opposite desired speed. For 1/100 second, set ring to 100 (the fraction line is omitted for sake of clarity).

Fig. 5—Correct way to use the Sportsfinder

To set to 400 requires a little extra pressure to overcome booster spring tension.

To take photograph, first move left-hand lever all the way up to cock shutter. To release, press right-hand lever slowly without jarring camera. A cable release may be used to produce a smoother, jar-free exposure.

For light conditions that require short time exposures, set shutter to B (Bulb). At this setting, cock shutter with left-hand lever. When release is pressed, shutter will open. Upon releasing lever, shutter will close.

To make longer time exposures, set shutter to T (Time). Cock shutter and press and release to open. To close shutter, press release lever again.

WARNING: Do not turn shutter setting ring *while lens is open* for Time exposure. It may damage mechanism.

FLASH PHOTOGRAPHY

See Model DR-10 and use same instructions. (200 and 400 may be used for strobe lights.)

MODEL DR-40

Operation is same as for DR-20.

FLASH PHOTOGRAPHY

This Rapax shutter is fully synchronized for all bulbs at all speeds. Before cocking shutter, set synchronizer according to flash bulb being used with small knob opposite flash connector.

Bulb	Speed Setting	Set Synchronizer to
Wire filled flash bulbs (M type)	400, 200, 100 (black)	Black M
	50, 25, 10, 5, 2, 1 B and T (Red)	Red M
Strobe lights	All speeds	Black X
Clear bulbs with two electrodes (F type)	50, 25, 10, 5, 2, 1 B and T (Red)	Red F

Keep synchronizer at OFF except for flash pictures.

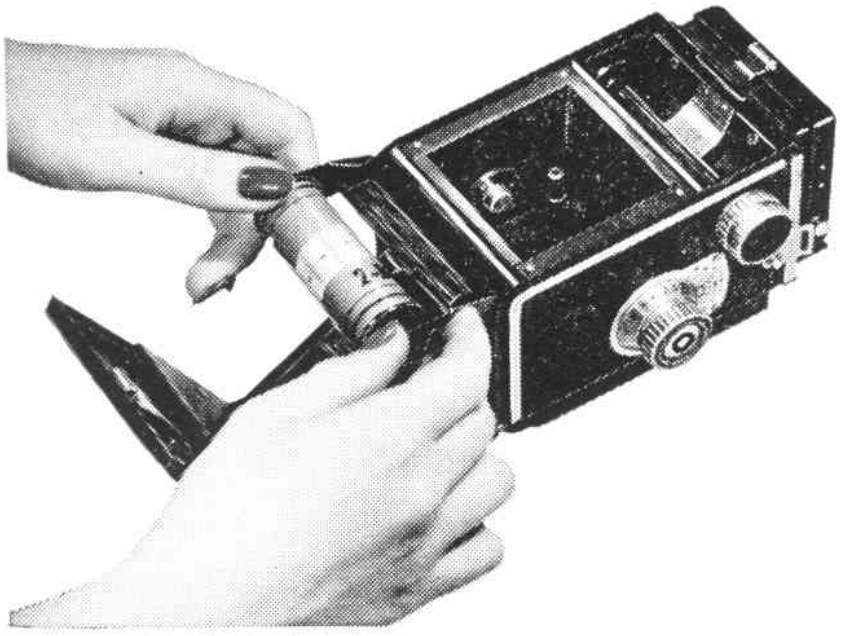


Fig. 6—Slipping film into spool cage

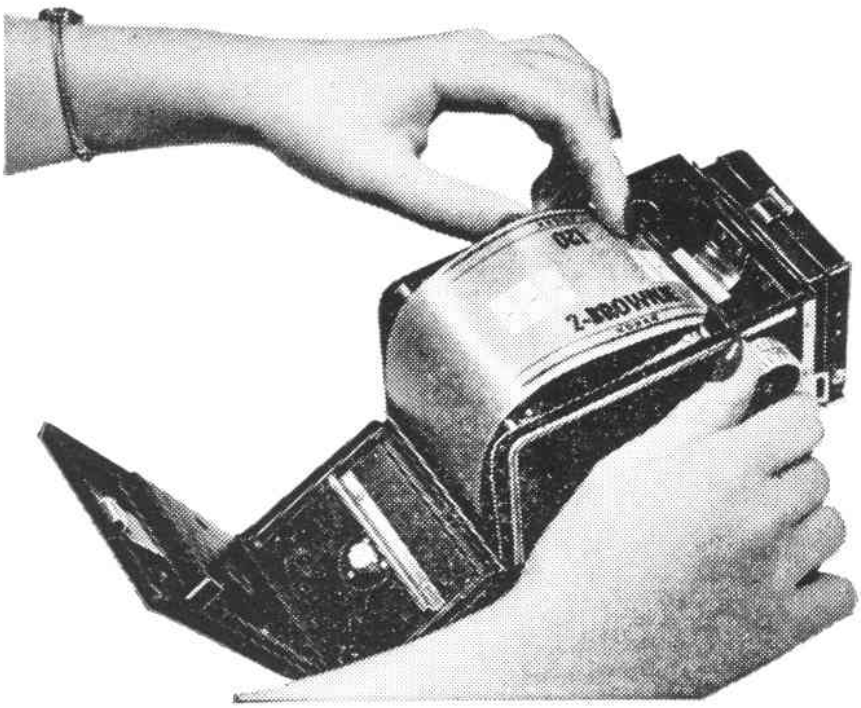


Fig. 7—Threading end tab into take-up spool

HOW TO OPERATE DeJUR ReFLEX

To open hood, pull out latch at back of camera near top. Hood snaps open revealing ground glass.

To close hood, press top of hood down and toward rear. Hood will fold down and snap into closed position. (Both magnifier and sports finder must be in their out-of-use position.)

To raise magnifier, open hood, then push button on right side of front panel. Magnifier will spring into position for use. The eye must be brought close to the lens for best view. To return magnifier to closed position, press down on magnifier panel until it catches.

To open sports finder, raise hood, raise magnifier, and press in center panel of hood front until it catches. Hold eye close to square hole in back of hood and look through square aperture in front. Everything seen in this square will appear in the picture except when very close to subject. For closeups, always use ground glass. To close sports finder, pull back on left corner of hood. Hood panel will snap up and close.

LOADING

Use No. 120 (2¼ x 3¼) roll film only

To open back for loading, set camera back up on a smooth, clean surface in a shady spot. With finger, pull down on upper button and swing back open. Take roll of film out of its carton and remove all wrapping. Swing out lower roll holder and insert roll end with round hole to right. Press holder with roll back into camera.

Empty take-up spool should be engaged with winding knob. To insert spool, pull winding knob out, and let spool drop into position. End of spool with slotted hole should be toward winding knob. Flat end of winding knob spindle should enter slot.

Fig. 8—Correct way to use magnifier

Cut seal on film and draw off enough paper to pass over both rollers and up to take-up spool. Insert end of film into longer of the two slots in take-up spool and turn knob until paper is caught securely. Close camera back and with thumb press the back near catch until it snaps closed.

To open film number window, step into a shady spot and with finger slide lower button up. (Open window in shade only.) Now turn film winding knob until number 1 appears in window. Now close window.

NOTE: Never permit sunlight to fall on window when it is open or film will be fogged.

Turn film indicator on outside of winding knob to remind you what kind of film is in camera.

To unload camera after all pictures have been made, keep turning knob until all film is on upper spool. Open camera back. Seal film with gummed paper at its end. Pull out winding knob to remove film.

Focusing

The viewing lens and photographic lens move together on the same panel. These lenses have been closely matched so when the image on the ground-glass is sharp, the image on the film is also in sharp focus.

For distant scenery and objects more than 50 feet away, it is not necessary to focus carefully. The focusing knob is turned back as far as possible so the indicator is at infinity (∞).

For closer subjects, the focusing knob is turned slowly until the image of the principal subject in the viewing screen becomes sharp. By moving the focusing knob so the image

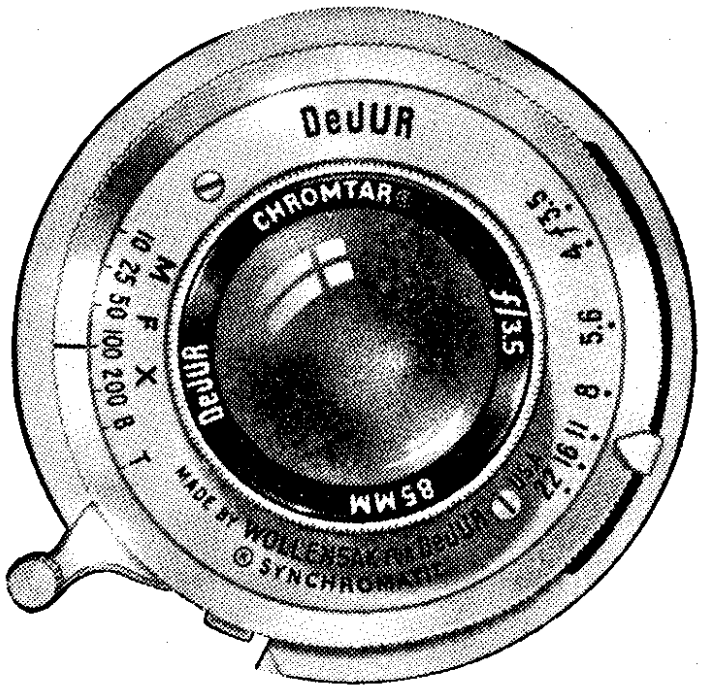


Fig. 9
Shutter on
Model DR-10

passes through its clearest appearance and then turning it the other way, the point of sharpest focus is quickly found.

Focusing with Magnifier

Only the sharpest focus makes it possible to achieve negatives that will stand considerable enlargement. To attain the best focus, the magnifier must be used to watch the image on the ground glass to pin-point the sharpest focus. Place the eye close to the magnifier.

Setting the Shutter

Before the picture is taken, the shutter speed must be set. First, it is necessary to decide what shutter speed is required. For most subjects without movement, 1/100th of a second is the preferred speed when the camera is held in the hand.

Move the shutter speed indicator to 100 (which is easier to read than 1/100, so the fraction line has been omitted).

To take the photograph, trip the shutter with the shutter release lever or with a cable release screwed into the shutter socket. The cable release is to be preferred for sharpest pictures because operating it does not jar the camera.

For moving subjects, the shutter speed is usually set fast enough to stop the action.

Setting the Diaphragm (f/number)

Exposure is a combination of how fast the shutter operates and how much light the lens admits. The amount of light is adjusted by the iris diaphragm, which controls the size of the aperture through which the light passes. The *larger* the aperture (the more light admitted), the *lower* the f/number. Thus f/8 admits more light than f/11.

f/3.5 f/8 f/22

Fig. 10—Aperture at three settings

DAYLIGHT EXPOSURE CHART

Key Number	Subject	Key Number	Light
1	In shade or Indoors near window	1	Dark day Heavy clouds
2	Dark subjects Street scenes People 5 to 10 feet distant	2	Bright overcast No sharp shadows
3	Open landscapes with no important shadows People 15 or more feet distant	3	Hazy sun Sharp but dim shadows
4	Distant Landscapes Beach Snow Water Mountains	4	Clear Sun

Find appropriate descriptions of SUBJECT and LIGHT. Multiply corresponding numbers together. Product (answer to this multiplication) is correct setting for aperture (f/number). Set shutter to 1/100 second.

The table above is for use at 1/100 second with the following films:

Verichrome **Plus X**

Plenachrome **Supreme**

Use same f/number as found from table but set shutter to 1/200 for the following films:

Super XX **Superpan Press**

Example:

Subject: Open landscape = No. 3
Light: Hazy Sun = No. 3
Multiplying 3 x 3 = 9
Set to f/number nearest 9, which is 8.
Set shutter to 1/100 second (camera loaded with Verichrome — if camera were loaded with Super XX, f/stop is kept at 8 but shutter is set for 200).

Note: If the product of the two numbers multiplied together equals 4 or lower, the picture will probably be acceptable if f/number is set to f/3.5 and shutter set to 1/25.

Other Shutter Speeds:

If you wish to use a shutter speed other than that suggested, change the f/number according to the table below:

Shutter	*Change f/number to*
1/10	three numbers higher
1/25	two numbers higher
1/50	next number higher
1/100	no change
1/200	next number lower

Example:

Subject: Beach scene = No. 4
Light: Hazy sun = No. 3
Multiplying 4 x 3 = 12
Nearest f/number on lens f/11
This is for 1/100 second shutter speed
Suppose we wish to use 1/200 second to stop action.
Table above shows that you must use next number lower. 11 to 8 is one number lower. Set lens to 8.

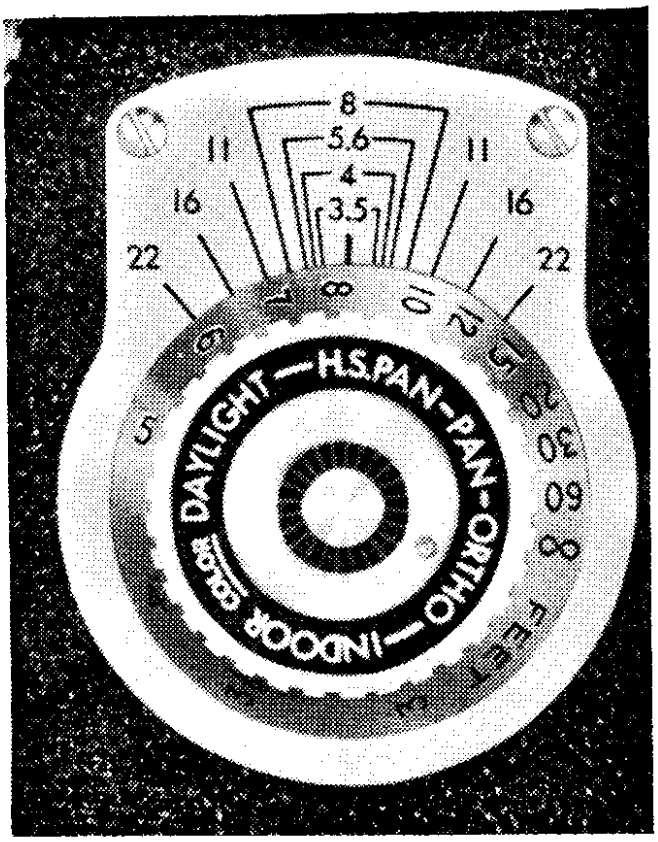


Fig. 11—Depth of Field Scale and Film Reminder

Depth of Field

The diaphragm aperture (f/number) not only controls the amount of light entering the lens, but also the extent of sharp focus.

This means, therefore, the smaller the aperture (higher the f/number), the greater is the range of sharp focus.

Depth of Field Indicator

Above the focusing knob is the depth-of-field scale which makes it easy to determine the extent of sharp focus at every lens setting.

In the illustration above, the lens has been focused for 8 feet. The 8 on the knob is under the center line. On either side of this line are two lines indicated at their top as 3.5. These lines indicate the range of sharp focus when the diaphragm aperture is set for f/3.5. As you can see, this range of sharp focus extends from 7¾ to almost 9 feet from the camera. See Fig. 12 and 13 on opposite page.

The next two lines outside the 3.5 lines indicate the range of sharp focus for f/4 which is from 7½ feet to 9 feet. At f/16, the range shown is from 6½ feet to 12 feet.

Selecting the proper shutter-speed and diaphragm-aperture combination

If the subject of your picture taking is going to be a moving subject, select the shutter speed that will stop the action. The exposure guide in the center of this book will give the diaphragm aperture (f/number) to use with the shutter speed you selected.

If the subject of your picture requires a wide range of distances to be in sharp focus, select a small aperture (high f/number) and then set the shutter according to the exposure table.

Suggested Settings

Action Subjects — Fast shutter (1/100, 1/200 or 1/400 sec.)
Indoor Subjects — High f/number (f/16 or f/22.)

Always consult the exposure guide or an exposure meter for the correct combination of shutter and diaphragm.

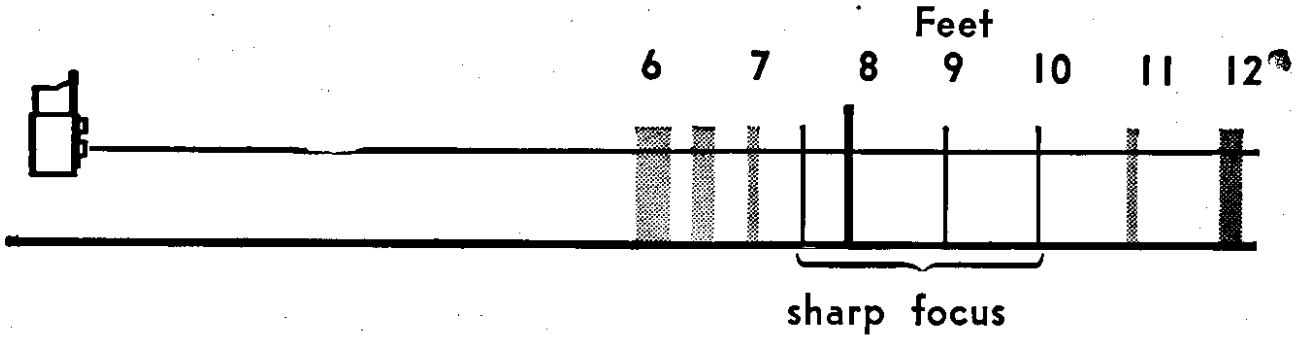


Fig. 12—Camera focused at 8 feet. Aperture at f/3.5

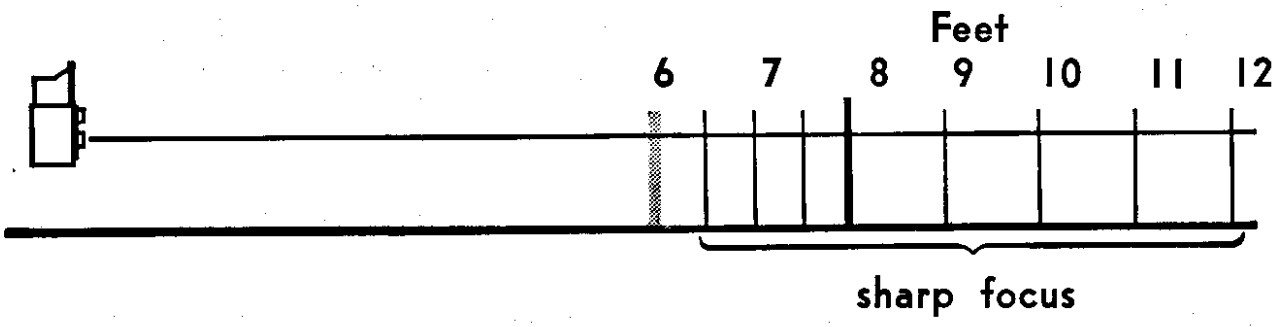


Fig. 13—Camera focused at 8 feet. Aperture at f/16

Fig. 14—Using Sportsfinder for flash pictures

Flash Exposures

For the attachment of flash guns, an extra tripod bushing has been installed on the left side of the DeJUR Reflex. Other flash guns may be attached to the tripod bushing on the bottom of the camera.

After attaching the flash gun to the camera, press in and turn connecting plug in the flash connection on the front panel of camera. The shutter has built-in flash contacts so an external synchronizer is not needed.

To make a flash picture, be sure batteries are in good condition in the flash gun. Adjust the reflector to face forward and insert the flash bulb. Carefully focus your subject and read its distance from the focusing knob. Set the diaphragm to the f/number determined from the table below. It is best to use the sports finder for flash to keep the light out of your eyes. Upon pressing the shutter release, the picture is made.

Flash Bulb — **No. 5 G. E. or Westinghouse or No. 25 Sylvania**

Shutter — **Set to 25**

f/Stop

1. **In instructions packed with film, find Tungsten ASA Index. (For example, Verichrome is 32.)**
2. **Find GUIDE NUMBER in table below under this ASA index. (In column under 32, read 140.)**
3. **Focus your camera carefully on your subject. Read its distance from focusing knob. (Suppose it is 7 feet, for example.)**
4. **Divide the GUIDE NUMBER by the distance. (In above example, 140 ÷ 7 = 20.) This is the number to which you set the f/number for correct flash exposure. (In the example, closest number to 20 is 22. Set f/number to 22 and make your picture.)**

FLASH TABLE

No. 5 or 25 FLASH BULB SHUTTER SET TO 1/25 SECOND									
TUNGSTEN ASA INDEX	8	10	12	16	20	25 32 40	50 64 80	100 120 160	200 250 320
GUIDE NUMBER	70	80	90	100	110	140	200	280	400

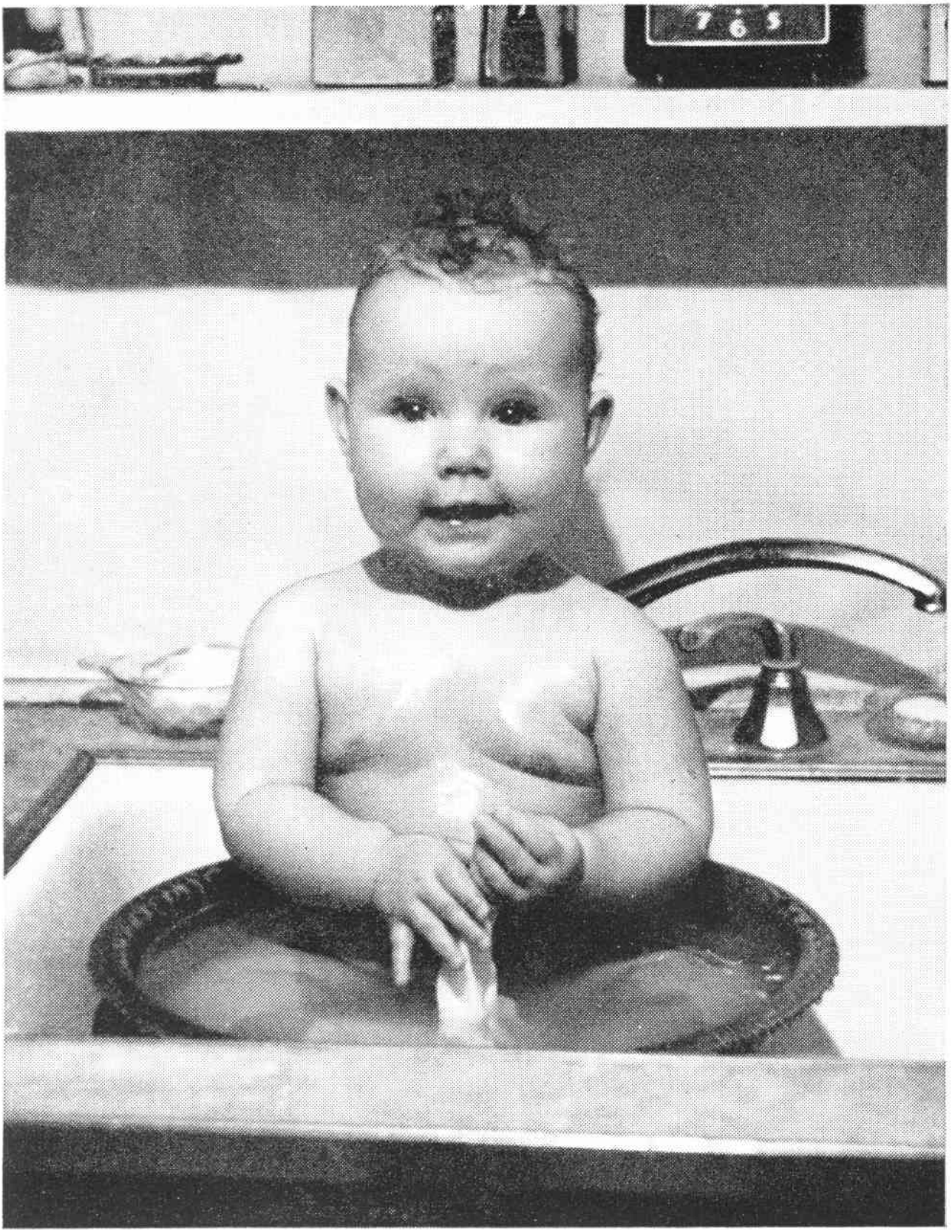


Fig. 15—Indoor photographs may be made with existing light.

Indoor Pictures

To make indoor pictures without flash, a tripod or other support for the camera is needed to hold it stationary during the rather lengthy exposure usually required.

Set up the camera carefully and focus with the magnifier first upon the nearest object in the picture, making note of the distance on the focusing knob. Now focus upon the most distant subject with the magnifier and again note its distance. These measurements will give you two distances, everything between which must be brought into sharp focus. The depth-of-field indicator on the camera will show you what f/number to set the diaphragm to in order to get both distances sharp.

An exposure meter will tell you how long to expose the picture.

For relatively short exposures of from 1 to 5 seconds, set the shutter indicator to B (bulb). Now cock the shutter on Models DR 20 and 40. The shutter will open when you press the release lever and will remain open for as long as you hold the lever down and will close when you remove the pressure. The same will be true with the cable release.

For longer exposures, set the shutter indicator to T (Time). The shutter is cocked (only on Models DR 20 and 40) and the first pressure on the release will cause the shutter to open. It will stay open even after you release pressure and until the next pressure, when it will close.

When there is enough light such as may be supplied with photoflood lamps, exposures may be as short as 1/25 to 1/50 second. Here again an exposure meter is needed to determine the correct settings of shutter and diaphragm.

EFFECTS OF FILTERS

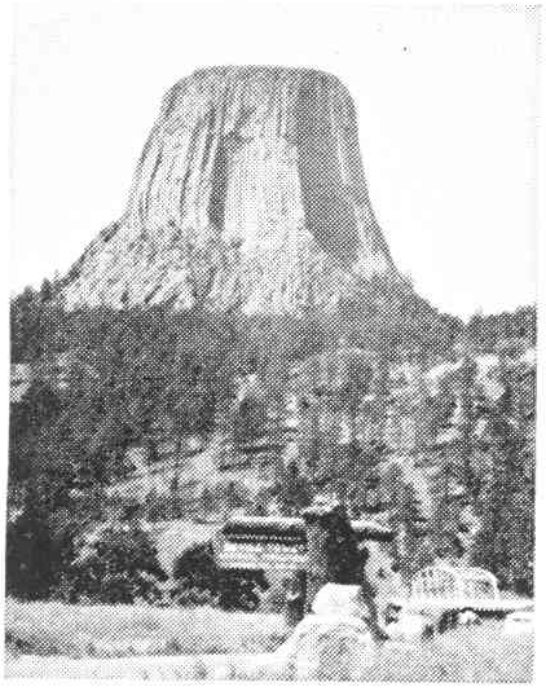


Fig. 16—No filter

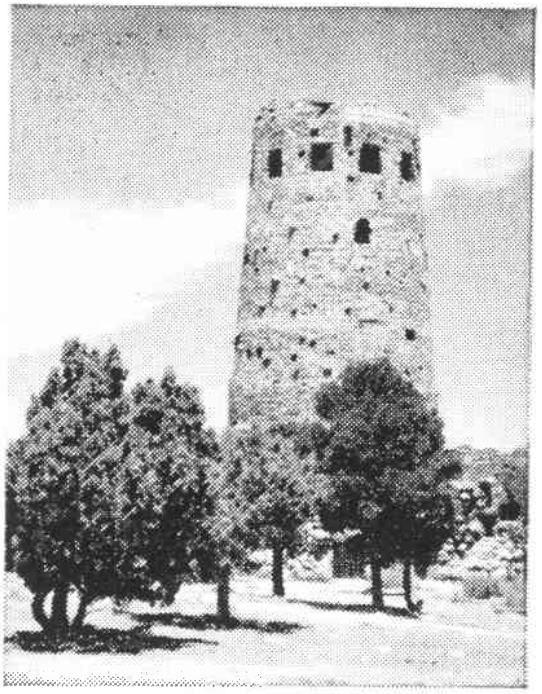


Fig. 17—Yellow filter

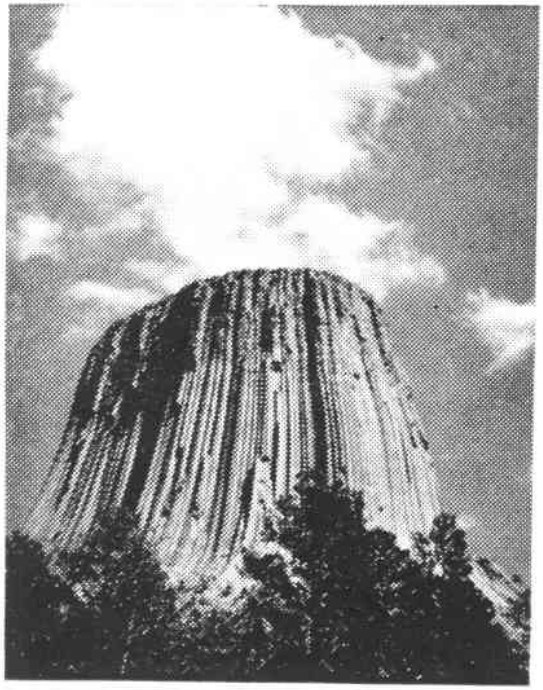


Fig. 18—Orange filter

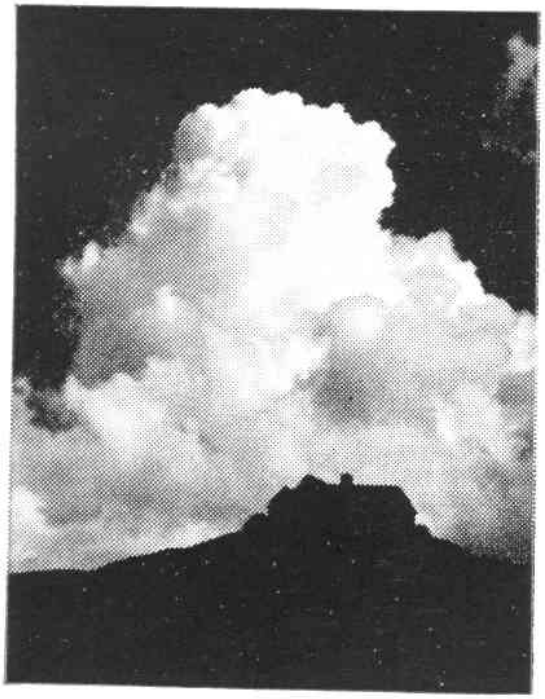


Fig. 19 Red filter

Filters

Filters are colored disks of glass that are used in front of the photographic lens to improve the appearance of sunlit scenery on black-and-white film. Scenes in overcast weather or pictures of people are usually not improved by filters. Your DeJUR Reflex uses a 31.5mm ring, Series VI filter.

The yellow filter is the most useful. It is obtained in slip-over mounting that easily fits onto the photographic lens. Because it absorbs light, the aperture must be opened to the next lower f/number to compensate the exposure.

There are filters of various colors available for black and white and still others for color photography. Ask your dealer for more information on filters for your requirements.

Color Photography

Color pictures may be made in the DeJUR Reflex either for projection or for color prints.

For projection, the following films may be used:

Eastman Ektachrome, Daylight
Eastman Ektachrome, Tungsten
Ansco Color, Daylight
Ansco Color, Tungsten

Follow the manufacturer's instructions for exposure or use a good exposure meter.

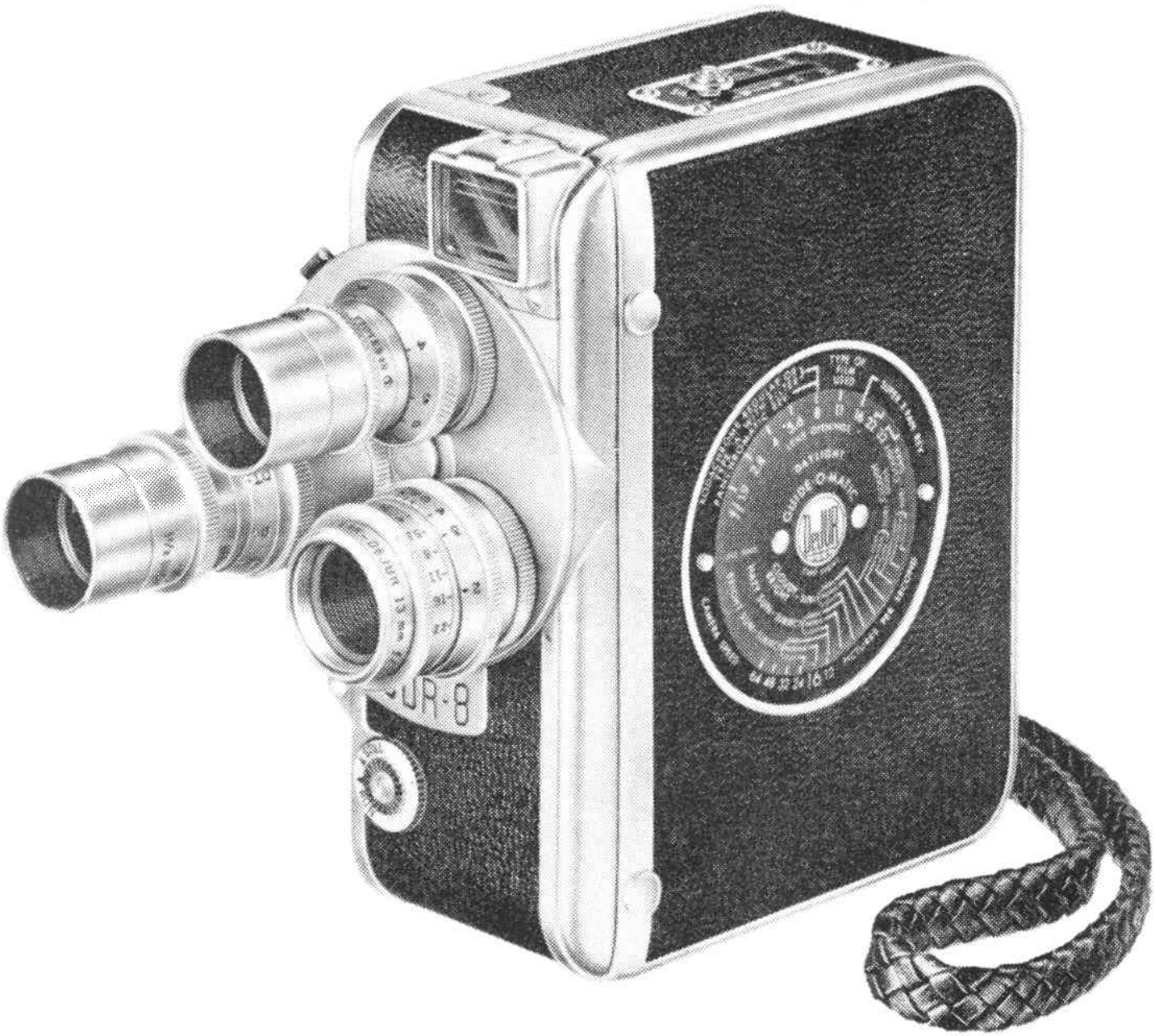
The pictures resulting may be mounted and shown in projectors which take 2¼ x 2¼ slides.

For color prints, the following films may be used:

Eastman Kodacolor
Ansco Plenacolor

Follow the manufacturer's instructions for exposure, or use a good exposure meter.

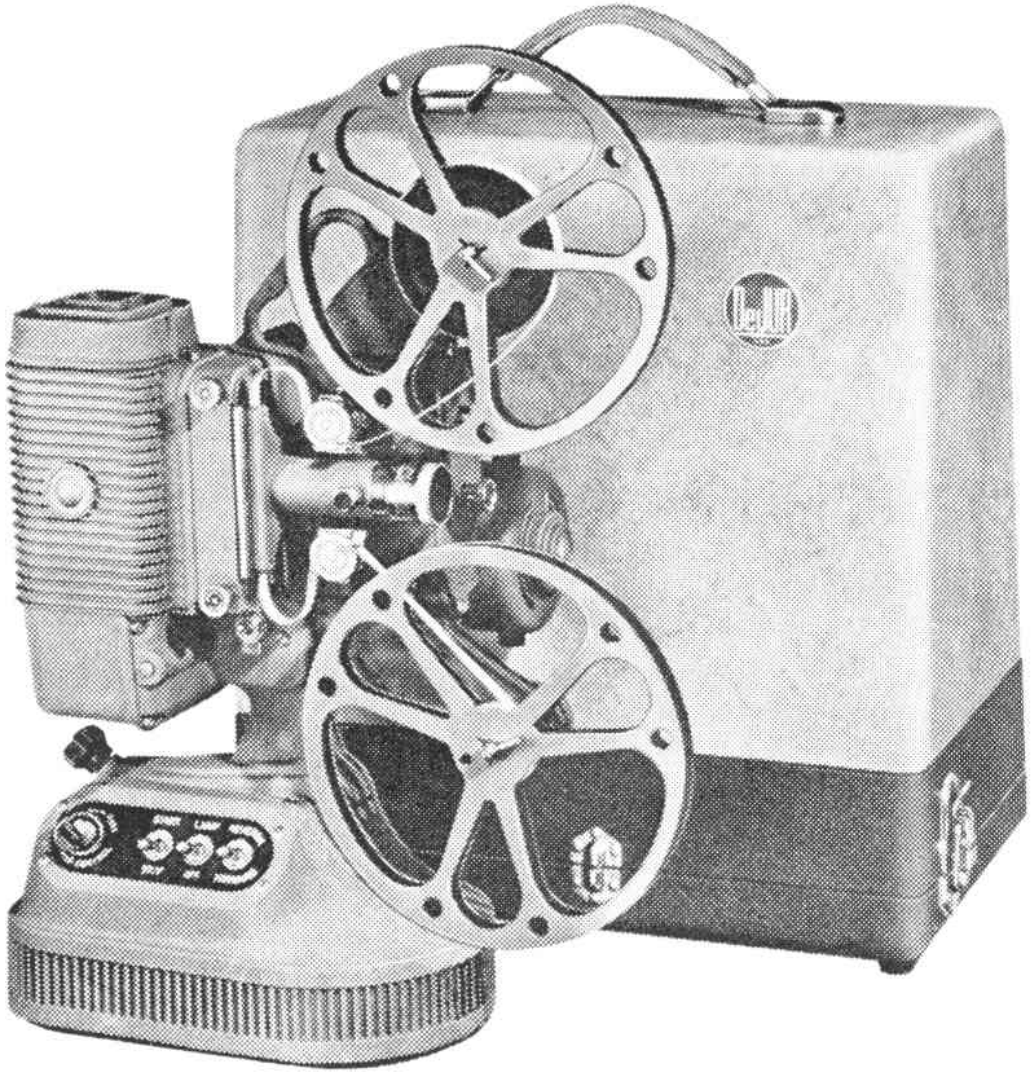
DeJUR Photo Equipment



DeJUR 8mm MOVIE CAMERAS

have been acclaimed by experts as the finest made in the United States. These cameras incorporate many exclusive features which make DeJUR ciné equipment the nearest thing to Hollywood motion picture cameras. Recently awarded the Fashion Academy Gold Medal for originality in design and smartness in fashion styling.

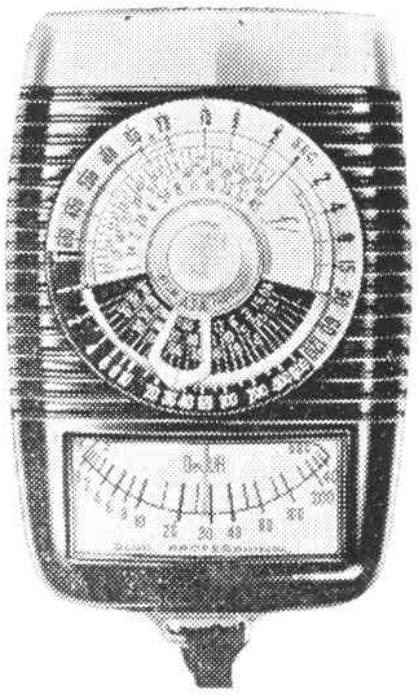
Is The Finest Available!



DeJUR 8mm MOVIE PROJECTORS

One of the joys of making home movies is showing them in finished form to your family and friends. A natural complement to your DeJUR movie camera is the DeJUR movie projector. It is tops in the 8mm field for projecting steady, flicker-free pictures. The DeJUR projectors come in two models — the "750" and the "1000".

DeJUR Dual-Professional "Lifetime" Exposure Meter

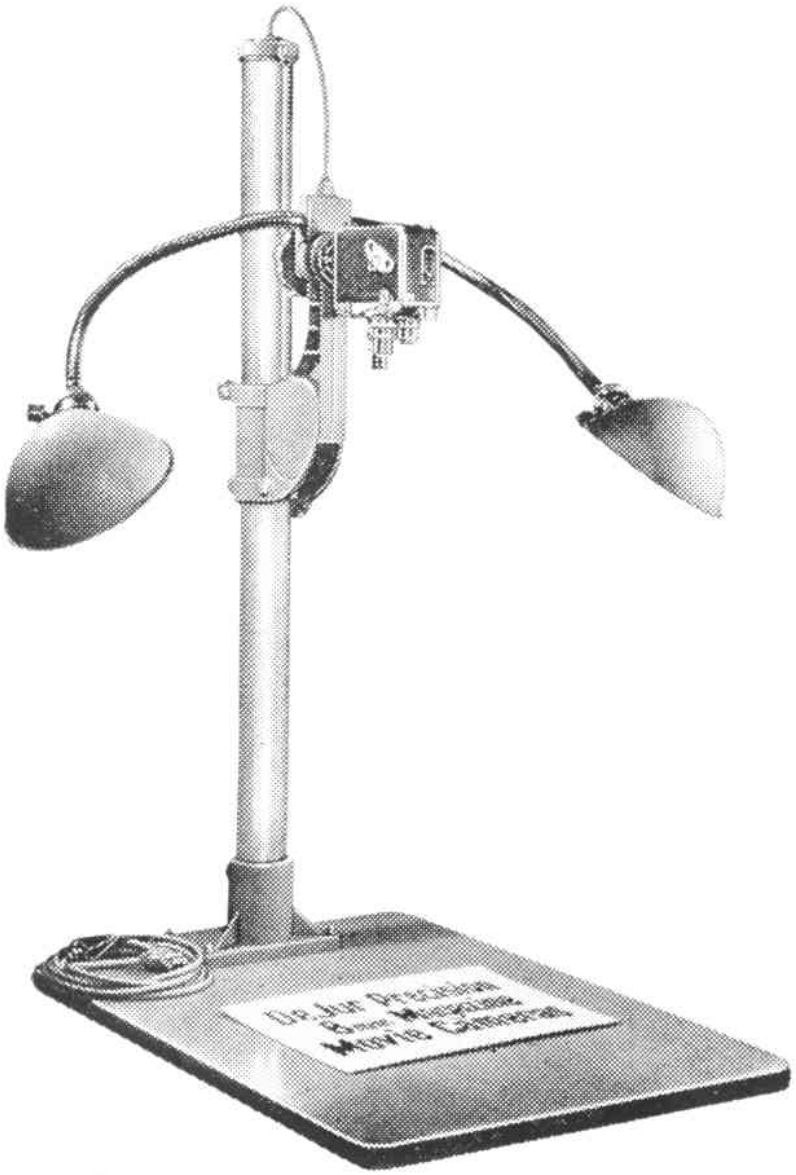


The unique design of the Dual-Professional makes it the easiest to operate of all exposure meters. It offers easy, one-hand operation for both INCIDENT-LIGHT and reflected-light readings, and only one setting is required for use with any film or any camera! Fool-proof — for indoors, outdoors, with color, black and white film, still or movie cameras. It is the first instrument to meet all the rigorous specifications for photo-electric exposure meters proposed by the American Standards Association.

Baffle drops at touch of button to read incident light in foot candles.

With baffle up, meter reads reflected light directly.

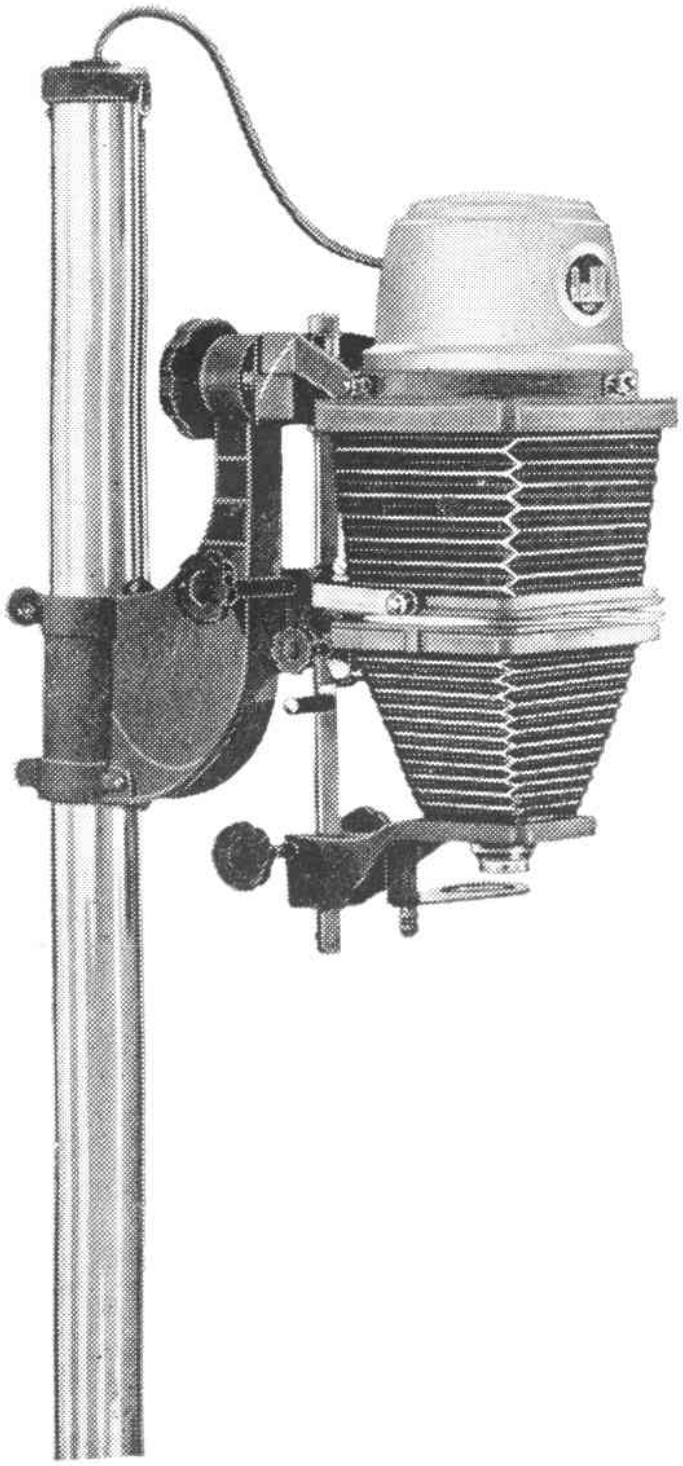
DeJUR Vertical Movie Titling Stand



The DeJUR Movie Titling Stand holds the camera and title precisely in line. The distance between the camera and title may be adjusted for titles varying in size from post-cards up to 12" x 16". The larger size makes it possible to use the large plastic letters available for such purposes.

The camera is screwed by means of its tripod socket to the bracket which may be easily raised or lowered and locked at any position. The camera faces downward toward the thick, laminated baseboard. The upright column is 2¼" diameter, chrome-plated steel for perfect rigidity. The bracket has adjustable bearings for smooth operation. The counterbalance spring supports the weight of the camera when moving it up and down. The bracket may be locked at any height by a quarter turn of the large hand knob. To illuminate the title which is set up on the baseboard, a twin light unit is available.

DeJUR "Versatile" Enlargers



After critical tests conducted under the most extreme conditions, the DeJUR "Versatile" Enlargers were chosen for use by the U. S. Air Force over all other enlargers.

KOOLITE SERIES:

Versatile Koolite II — All negatives up to 3¼" x 3¼" with 3½" coated f/4.5 lens.

Versatile Koolite I — All negatives up to 2¼" x 3¼" (6x9 cm.); complete distortion control; with 3½" coated f/4.5 lens.

Versatile "Professional" Koolite — All negatives up to 4" x 5" (10 x 12 cm.); with 5½" coated f/4.5 lens. Distortion correction.

Chosen by U.S. Air Force!

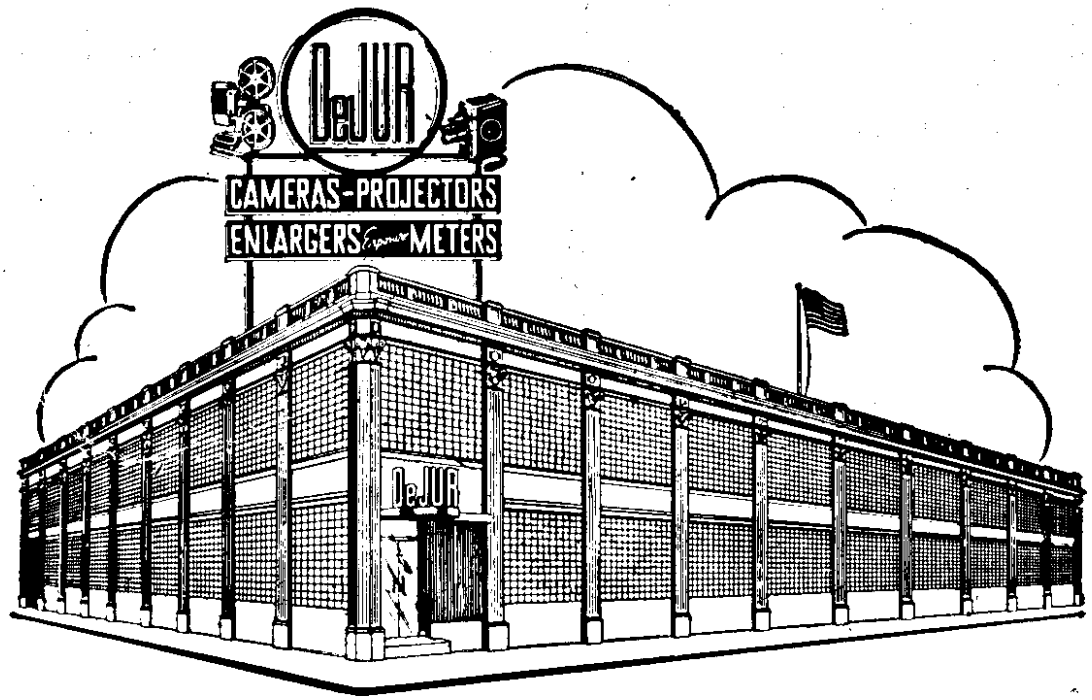
There are two series of DeJUR "Versatile" Enlargers — the Koolite and the Condenser. Choose the one best suited to fit your needs —whichever you choose, you can depend on it to give you top performance at all times.

CONDENSER SERIES:

Versatile II — All negatives up to 3¼"x3¼"; with 3½" coated f/4.5 lens.

Versatile I — All negatives up to 2¼" x 3¼" (6 x 9 cm.); complete distortion control; with 3½" coated f/4.5 lens.

Versatile "Professional"—All negatives up to 4" x 5" (10 x 12 cm.); with 5½" coated f/4.5 lens. Distortion correction.



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F-648-1-53 168 Printed in U.S.A.