# BRUMBERGER 35

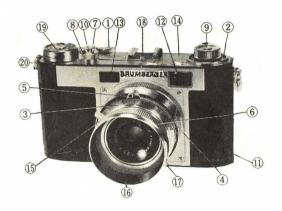


## BRUMBERGER SALES CORP.

34 - 34TH STREET BROOKLYN 32, N.Y.

#### NOMENCLATURE OF PRINCIPAL PARTS

- Film Transport Lever
- ② Film Counter Disc
- 3 Shutter Speed Dial
- 4 Lens Aperture Dial
- Shutter Set Lever (self-cocking)
- 6 Focusing Ring
- 7 Rewinding Button
- (8) Cable release ring
- Rewinding Knob
- (10) Shutter Release Button
- (II) Back Cover Lock
- 12 Viewfinder Window
- (13) Rangefinder Window
- Finder Eyepiece
- 15 Auxiliary Focusing Lever
- 16 Lens Hood
- (17) Synchro-Flash Terminal
- (18) Accessory Shoe
- 19 Film Indicator
- 20 Neckstrap ring



#### PRINCIPAL FEATURES

LENS: BRUMBERGER F: 3.5 45 mm. hard coated, fully corrected anastigmat with excellent resolving power assuring edge-to-edge sharpness.

SHUTTER: Fuji Rectus shutter, German type, F synchronized, with highly accurate speeds from B, 1, 1/2 to 1/300 of a second (5 blade construction).

FINDER: Combined Coupled Rangefinder and Viewfinder Window. Camera-to-subject distance is automatically set by rotating the focusing ring (6), thus turning the front lens, which is directly coupled with the rangefinder by means of a connecting bar passing through the shutter. The Brumberger 35 Rangefinder assures sharp focus—an essential feature for fine photographs.

SELF-COCKING DEVICE: Rapid film transport lever (1).

Two strokes of lever advance film... counts exposures... sets shutter. The double stroke produces smoother operation and is easier on the film than comparable single stroke systems. Accidental double exposure (i.e. two pictures on the same frame) is impossible with Brumberger 35. However, for trick effects it is possible to double expose intentionally, simply by cocking the shutter set lever (5) without advancing the film transport lever (1).

BODY: Made of light, diecast metal and covered with genuine black leather. All exterior metal parts feature a satin finish. This attractive combination of black and silver, combined with well-proportioned design, gives the camera a appearance. Genuine leather case accommodates the lenshood.

#### **HOW TO USE BRUMBERGER 35**

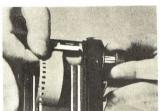
LOADING THE CAMERA

(Do not load film)

in direct sunlight)



Open the back cover of the . camera by pulling down the lock (11) as shown in photo 1.



Brumberger 35 takes standard 35 mm daylight loading film. Pull up the Film Rewind Knob (9) and place the film cartridge in the film chamber. Press down the rewind knob with a slight turn to the right or to the left to engage the film spool inside the cartridge.



Pull out the film leader about 4 inches from the cartridge towards the film take-up spool at opposite side. Insert the leader into clip on film take-up spool (see photo 3). Turn the take-up spool slowly by one or two strokes of the film transport lever until the sprocket wheel securely engages the perforations in the film, and then close the back cover of the camera.





Advance the film two frames, pushing the shutter release button each time. Set "0" (zero) on the film counter disc (2) opposite the marker. (See photo 4 & 5). Advance film once more; you are now ready for your first exposure.

#### **Taking Pictures**

#### SETTING THE APERTURE:

The size of the aperture or lens opening determines, in part, the amount of light passing through the taking lens on to the unexposed film. The aperture dial (4) is arranged in the order of the following F-stop values: 3.5, 4, 5.6, 8, 11 and 16.

Most light is let through at the f: 3.5 opening, and there is approximately 25% decrease in light transmission between the f: 3.5 stop and the f: 4 stop. For each successive higher F-stop number thereafter, there is an approximately 50% decrease so that the least amount of light is admitted at f: 16. To put this another way, at f: 5.6 the lens admits twice as much light as at f: 8 and so on. Since the amount of light required to reproduce the image on the film is fixed, it can be readily seen that the shutter speed and the aperture are inter-dependent.

Selecting a suitable combination of lens aperture and shutter speed depends on (a) the speed of your film and (b) prevailing light conditions. Use the settings recommended in the instruction slip accompanying the film you are using.

It is recommended that a photoelectric exposure meter be used when shooting colour film.

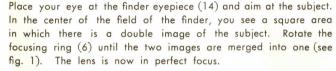


## Holding the Camera

Hold your camera pressed firmly against the right cheek with both hands as shown in photo 6, the tip of your right index finger lightly touching the shutter release button (10) Now focus, by rotating the focusing ring (6), or the lens hood (16) when attached. At some distances the auxiliary focusing lever (15) may be found convenient. When using the camera vertically, hold it firmly in your right hand as shown in photo 7. In this case, the right thumb is placed on the shutter release button and facusing is done with the second finger of the left hand, its index finger and thumb supporting the camera in position.



## How to Operate the Rangefinder



Note—The Brumberger 35 can be accurately focused as close as 20 inches, without supplementary attachments.



Incorrect



Correct

## Explanation of "Depth-of-Field"

When the camera is focused on a picture-subject, there is a zone in front of and behind the picture-subject which is still in acceptably sharp focus. Everything outside of this zone becomes progressively out-of-focus. This zone of acceptable sharp focus is called the "depth-of-field" or the "depth-of-focus" and is particularly important to beginners when focusing at very close distances (see fig. 2).

## Lens Opening, Distance, and "Depth-of-Field"

Fig. 2

A direct relationship exists between the "depth-of-field" and such factors as distance of camera to the picture-subject, lens opening (f stop), and focal length of taking lens. The "depth-of-field" is primarily influenced by (1) the lens opening and (2) the distance between the camera and the picture-subject. Taking these two factors in the order listed, it can be said that a small lens opening (higher F-stop number) gives GREATER "depth-of-field" and conversely, a large lens opening (lower F-stop number) will result in DECREASING this zone of sharp focus.

As to the distance between camera and picture-subject, it is well to remember that the closer the distance the less "depth-of-field" so that the beginner should be very careful to focus his main subject correctly when taking pictures at close distances. For fairly distant to very distant images, the "depth-of-field" for most lenses is considerable and there should be no problem of any image being out of focus.

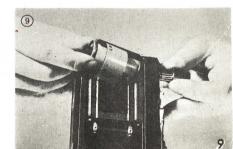
### Releasing the Shutter

Push the shutter release button with your index finger (Photo 6 & 7) using steady, even pressure. Care should be taken to prevent movement of the camera while pressing the release button.

#### Rewinding the Exposed Film

After entire roll of film has been exposed, the film winding knob will not advance further. Do not force it beyond this point. The film must now be rewound into the original cartridge from the take-up spool. Press down on the rewinding button (7) and turn the rewind knob in the direction of the arrow until the entire film has been completely rewound into the cartridge (see photo 8 & 9).





### Flash Synchronization

Your Brumberger 35 has a built-in German type Flash Terminal (17). A clip-on flash unit can be conveniently mounted in the Accessory Shoe (18). The flash gun cable must have a "COMPUR TYPE" tip.

Correct synchronization of the flash and shutter opening is obtained at all speeds up to 1/100 second with Class "F" flashbulbs. Class "M" and M-2 bulbs should be used at 1/25 second. Electronic flash units (speedlights) should not be used at speeds over 1/25 second.

Every film type has an ASA Tungsten Index Number. Since flashbulbs use guide numbers for determining the f-stop according to your distance-from subject and shutter speed setting, it is recommended that you refer to the film and flashbulb data sheets.

SYNCHRO-SUNLIGHT: Use flash "fill-in" to eliminate unattractive squinting and harsh, dark shadows caused by strong sunlight. You'll find that flash adds a sparkling quality to your pictures if you have your subjects facing off to an angle from the sunlight instead of having it shine into their eyes. It is very easy to determine the distance to shoot from. First, obtain your DAYLIGHT EXPOSURE by either an exposure meter or the film manufacturer's chart. Next, set the shutter speed and diaphragm opening. Then from the chart on the flashbulb sleeve, obtain the guide number for the film and shutter speed you are using; divide that number by your f-stop and you have your distance from camera-to-subject.

FOR EXAMPLE; Your chart or meter reading shows 1/50 second at f:8 is best for your exposure. Assume guide number of a given flashbulb for Plux-X film at this shutter speed is 120. Dividing 120 by 8 gives you a distance of 15 feet — move to this distance from your subject, set the camera distance scale to 15 and shoot. You'll be pleased with the "professional" touch that's added to your pictures, especially when you have colour film in your camera.

Note—When using Daylight Type colour film (or Type A or Type F Colour film with a Conversion filter in daylight), you must use blue flashbulbs.

#### **ACCESSORIES**

LENS HOOD: The lens hood provided is a valuable accessory and should be used constantly. It prevents stray light from entering the lens and helps give pictures that crisp look.

CAUTION: If it is necessary to remove or apply the lens hood, as when using filters, always grasp the auxiliary focusing lever (1.5) firmly, to prevent the focusing ring (6) from turning. NEVER apply force against the focus stop at either end of the focusing scale (1.7 ft. and inf.), as this may damage the focusing mechanism (see photo 11).

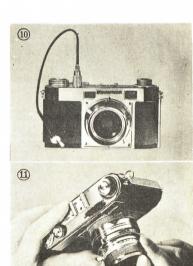
CABLE RELEASE: When using a cable release, take milled ring (8) off the shutter release button (10) by turning it counterclockwise. A Leica-type cable release or self-timing device may now be attached (see photo 10).

FILTERS: Your Brumberger 35 lens will give you pictures of excellent sharpness; but the mood of the picture can often be improved by using filters.

Yellow filters help bring out clouds and are a "must" for snow scenes and scenes at sea shore.

Green filters lighten red colour and will bring out greens in landscapes. Also recommended for outdoor portraits.

These filters are for black-and-white films only.



#### PROPER CARE OF YOUR BRUMBERGER 35

- Always keep your camera in a dry place when not in use. It is best to keep it safely enclosed in a moisture-proof box or case. Avoid exposure to rain, dust, and sand.
- Do not leave your camera unused with the shutter cocked, as this may gradually weaken the shutter spring.
- 3. Periodically clean the camera body with a soft brush to remove dust or dirt. It is especially important to keep the pressure plate and other parts inside the film chamber clean, as even small dirt particles can cause film scratching. Avoid dirt and fingermarks on the lens. If necessary, clean the lens carefully with a soft camel-hair brush to remove gritty particles which may scratch the lens coating; if grease or fingermarks remain, breathe on the lens and remove marks gently with lens tissue or a very soft cloth—avoid rubbing.

#### ACCESSORIES (Continued from page 11 )

For colour film, a haze filter and conversion filter may be found helpful; ask your dealer for the correct filters for the type of colour film you wish to use.

Filter Diameter: Interior ..... 27.0 mm Exterior ..... 28.5 mm



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