

—ROUND—SHOT— 360 ° PANORAMA CAMERA

MODELS 35 / 35 & 35 / 35 S

THE FIRST LIGHT, HANDY AND TOUGH REFLEX MIRROR PANORAMA CAMERA 360 ° FOR THE PHOTOGRAPHER WHO WORKS WITH 35 mm.

I. INTRODUCTION

Your precision, Swiss-made camera is designed to give you many years of highly reliable service. Please follow these instructions carefully to insure optimum performance and experience.

This instruction booklet is written for both the standard and Special models of the Seitz 35/35 ROUNSHOT 360 ° panoramic cameras. The Special model has a second motor and gear system allowing for a second, lower range of effective speeds to be used and thus doubling the exposure range available. This model often allows pictures to be taken with slower, finer grained films; or used in lower light levels and/or with smaller apertures for greater depths-of-field.

An asterisk (*) indicates additional technical data of Special camera.

II. REMOVING CAMERA COVER & LOADING FILM

Unscrew the two knobs on the top of the camera and lower camera cover. With cover down, open the film pressure plate from the right. Slip film leader through slot behind plate hinges indicated by the arrow, taking care not to catch film on the hinges. Pull up the rewind knob "-->" insert cassette into left side of camera and push knob "-->" down fully. Draw leader to right takeup spool, fold the first 5 mm (1/4 inch.) of leader toward camera, and insert this tab from right side of a plate on the takeup spool (spool turns counter-clockwise).

Before closing pressure plate make sure film is in guide channel and the two flat steel springs are horizontal and will bear on the film sprocket holes.

After closing pressure plate to detent position but before closing camera, turn the upper part of the camera clockwise slowly watching the takeup spool to see that the film is holding in the slot and winding up smoothly. Slide up cover and tighten knobs snugly.

After loading film, but before using camera, run 2 segments to remove fogged film. then, press "RESET" on the controller. (See instruction "V" to learn the controller operation.

III. " R " SWITCH PICTURE TAKING POSITION

It is very important that the rewind release button "R" beside socket on camera be completely at bottom of slot for picture taking.

If "R" is slightly above the bottom of the slot it is necessary to turn the rubber coated film holding wheel inside the top of the camera, relative to the top of the camera.

USE 1 OF THESE 4 WAYS

1. Before removing cover to install film; Hold base of camera and turn top clockwise slightly until the "R" button seats itself.
2. Camera is open but no film inside; move inside rubber coated wheel either way relative to top assembly until "R" seats.
3. If film is loaded and camera open, press film firmly against rubber wheel and move slightly right or left until "R" seats.
4. Cannot open camera, good film inside; use rewind knob to rewind back slack film and then little more to seat "R".

IV. GETTING READY TO TAKE A PICTURE

Use a tripod to hold and level camera using top spirit-level.

View scene with the reflex viewer. Full horizontal view can be seen by rotating the lower portion of camera while the detented base is fixed to the tripod. Detents have 30 degree spacing.

CAUTION: Rotating the upper part of the camera by hand will consume unexposed film.

For clearer viewing, place viewer/ magnifier between pins near the reflex viewer after setting to f. 2.8 and 1/15 of a second.

Use an exposure meter to evaluate the most important part of the scene and scan rest to check for anomalies. Bear in mind that both f-number and exposure time settings are really apertures. Therefore, the select both larger "f" s and "faster" speeds combined to yield best depth-of-field. Use depth-of-field table, (page 4) to determine best settings.

Start your picture before and continue beyond your desired scene to insure slight start and stop effects do not interfere with the picture.

V. THE PROGRAMMABLE CONTROLLER

LCD numbers become visible when controller is plugged into camera.

It has a 5-year lithium battery and settings are retained when it is unplugged. Unplug when not in use. To unplug pull on plug, not the wire.

Numbers are for 90 degree segments: 1 segment = 90 degree = 1 1/2 frames, 2 segments = 180 degree, 3 = 270 degree, 4 = 360 °, 5 = 450 °, 6 = 540 °, 7 = 630 °, 8 = 720 °, 9 = 810 °

"PROGRAM" -- Left numbers, "1" to "9", are the number of segments that will run after pressing "START". Use "0" and hold "START", down for continuous rotation release to stop. (Upon releasing "START", camera will continue to end of current segment.)

"RESET" -- to zero both picture segment numbers in memory.

"STOP" -- to interrupt camera rotation during a shot but works only in first 45 degree of segment, otherwise rotation stops at end of segment.

"START" -- starts both rotation and picture taking together.

The right hand number is the total number of segments taken after reset. (Segments in a full roll $135/24 = \text{about } 16$, $135/36 = \text{about } 24$).

This allows you to know how much of your film roll has been used.

VI. UNLOADING THE FILM

At the end of a film, the rewind knob will no longer freewheel and you will hear a motor load increase and/or ratchet noise when camera is run. To remove film, first move the rewind release button "R" to its upper left position. (This prevents unnecessary wear on the rubber, film holding surface.) Then rewind with knob on top of the camera in arrow direction. When film will disengages knob will rotate freely. Open the camera and remove cassette.

VII. OTHER CAUTIONS

Do not turn or run camera when closed with "R" down and no film in place as it will cause wear on the rubber, film holding ring.

With "R" up, clean rubber ring with a little ethyl alcohol, other mild solvent or detergent to avoid any grease or oil buildup

TECHNICAL DATA

LENS	2.8 / 35 mm SEITZ - 6 element
FOCUSING	Fixed focus; set at 7 m (23 feet)
SHOOTING ANGLE	38 degree vertical field of view
OPTICAL VIEW FINDER	Reflex mirror viewfinder
FILM	Any 35 mm , 135 cassette film
PANORAMA CAMERA BASE	every 30°
PICTURE SIZES 360 °	224 mm x 24 mm (8,8" x 0,94") 9,3 : 1
CAPACITY OF 1 FILM	36 / 135 = 6 x 360 °
SHUTTER SPEEDS "A"	1/1000, 1/500, 1/250, 1/125, 1/60, 1/30, 1/15
SHUTTER SPEEDS "B"	1/8, 1/4, 1/2, 1s. 2s. 4s. 8s.
APERTURE VALUES "f"	2,8 - 4 - 5,6 - 8 - 11 - 16 - 22
360 ° REVOLUTION TIME	About 1,2 sec. * About 96 sec.
CAMERA DIMENSIONS	145 x 100 x 155 mm 5,7" x 3,9" x 6,1"
CAMERA WEIGHT	1,7 kg (3 3/4 lbs) camera / 3,5 kg compl.
BUILT-IN RECHARGE-	3 x 1,25 volt = 3,75 volt, 2,2 amp. hrs.
ABLE BATTERIES	"A" ca.100 x 36/135, "B" ca. 20 films
BATTERY RECHARGING	Recharging takes about 12 hours.
* = Additional characteristics of the 35/35 Special camera	
CAUTION: Recharger should not be left plugged into the camera for more than 24 hours.	

VIII. DEPTH OF FIELD TABLE

Aperture	Depth of field about 7 mtr. (23 feet) Fixed Focus	
2,8	5,1 m - 10,8 mtr.	16,7 ' - 35,4 '
4,0	4,7 m - 14,0 mtr.	15,4 ' - 45,9 '
5,6	4,1 m - 23,3 mtr.	13,5 ' - 76,4 '
8,0	3,5 m - ∞	11,5 ' - ∞
11,0	2,9 m. - ∞	9,5 ' - ∞
16,0	2,3 m. - ∞	7,6 ' - ∞
22, 0	1,9 m. - ∞	6,2 ' - ∞