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Linhof color

4 x 5 in. 9 x 12 cm.

Operating Instructions

LINHOF COLOR 4x5 in. / 9x12 cm.

1. Milled head for locking lensboard tilt
2. Spring-tensioned lock for interchangeable lensboard
3. Spring-tensioned milled pressure knob for releasing lensboard forward or backward tilt through central horizontal axis
4. Lens in Compur shutter mounted on lensboard
5. Lens standard with rack-and-pinion adjustment for rising and falling front
6. Locking lever for lateral shift of the lens standard
7. Release lever for front swivel through a vertical axis
8. Base of lens standard
9. Precision ground, chromium-plated monorail with geared rack
10. Face plates (2) of monorail
11. Knurled locking knob for camera front adjustment
12. Captive locking knobs (4) for swing-back
13. Position of the focal plane
14. Swing-frame with revolving back
15. Base of camera body and back
16. Knurled focusing knob
17. Knurled track locking knob
18. Tripod base
19. Knurled knob for locking monorail to tripod base

TECHNICAL DATA:

Weight without lens: 4 lbs. 6 oz.

Total extension: 16 1/2 in.

Height: 11 1/2 in.

Width: 7 1/4 in.

Maximum back tilt: 15°

Maximum rise of front: 1 1/2 in.

Drop front: 1/4 in.

Lateral shift, each way: 1 in.

Lensboard tilt, forward and backward: 15°

Swing of the lens standard, each way: 15°

Your LINHOF COLOR is a precision camera of great stability. It is nevertheless of avail to treat it with the care appropriate for a precision instrument. Read closely the following instructions to avoid serious mistakes and to keep your camera in top shape:

THE SETTING UP AND FOCUSING OF THE CAMERA:

Attach the tripod base (19) to the pan/tilt head on the tripod. Open the clamp on the tripod base by loosening the knurled knob (18) and insert the monorail (9) so that the clamp is located between the base of the lens standard and that of the camera back (Fig. 1). It is thereby of no concern which side of the camera is on the right or left. The clamp is then closed and the knurled knob (18) tightened up. By slightly slackening that knob (without opening the clamp) the camera can be tilted to the right or left or the monorail slid forward or backward (Fig. 2). Preliminary ground glass focusing with the camera is done by loosening the knurled locking knob (11, Fig. 3) and sliding the camera front forward or backward on the monorail (9). For critical focusing the knurled knob (17) is slackened and the camera on its base (15) moved forward or backward on the monorail (9) by operating the rack-and-pinion focusing knob (16). The camera back can be locked in any position by tightening the knurled knob (17). The extension of both back and front is limited by the two face plates (10), one on each end of the monorail.

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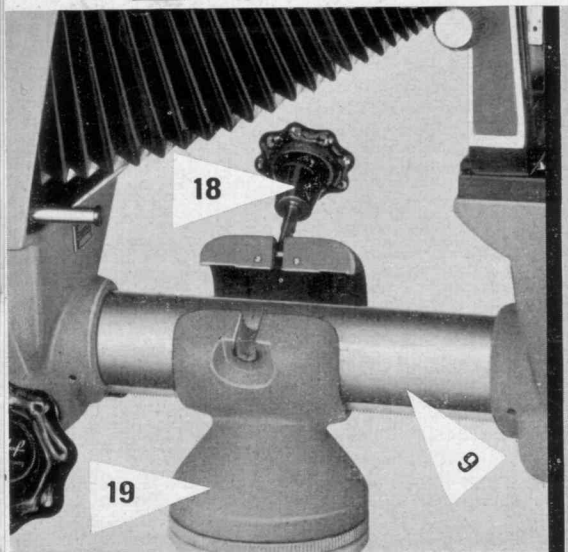

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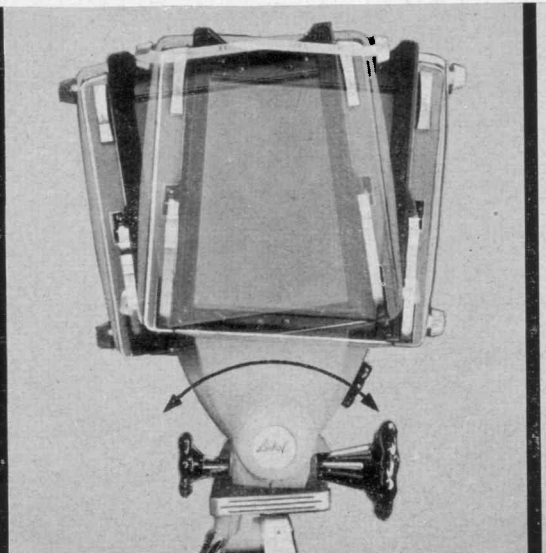

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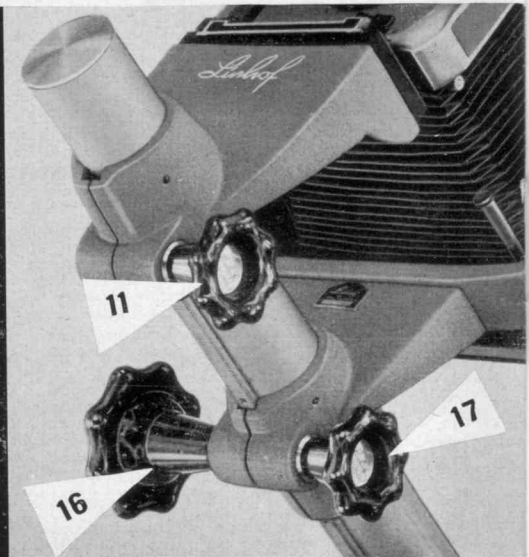

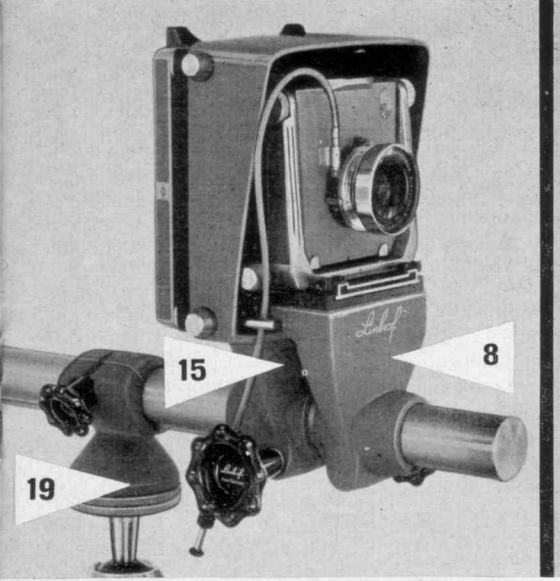

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SETTING UP THE CAMERA IN WIDE-ANGLE POSITION:

For wide-angle work the monorail (9) with the camera, is lifted out of the clamp on the tripod base (19) and re-inserted in such a way that the whole camera is positioned in front of the clamp. The camera in this position permits the bellows extension to be reduced to a minimum (Fig. 4) and is thus suitable for wide-angle work.

LENSES:

One lens only is not sufficient to fully exploit the technical possibilities offered with this camera. Therefore, a whole range of lenses is adaptable, beginning with the 65 mm. (2 9/16.) f/6.8 Super wide-angle lens and ending with the 360 mm. (14 in.) Telephoto lens. All lenses are mounted on the lensboard of the SUPER TECHNIKA IV; lenses mounted on the lensboards pertaining to the SUPER TECHNIKA III may be used with an adapter lensboard. Details on available lenses are given in the current price list. An interchange of lenses is achieved simply by disengaging the spring-tensioned lock (2), lifting out the lens (mounted with shutter on lensboard) and inserting the new lens by letting the spring-tensioned lock (2) snap back over the lensboard of the new lens (Fig. 5). Do not push lensboard in place.

NEGATIVE HOLDERS AND ADAPTERS:

The LINHOF double cut film/plate holders 4x5 in. or 9x12 cm., the single metal plate holder 9x12 cm. (with adapter frame), the film pack adapter 4x5 in. or 9x12 cm., the Grafmatic magazine (for 6 cut films 4x5 in.) and the Kinematic magazine (for 10 cut films 4x5 in.) are used in connection with the Universal spring-back. The spring-back yields to the negative holders, but holds them tightly in place between the camera housing and the ground glass frame (Fig. 6). When the negative holder is removed from the camera back, it is slightly pulled back and can then be easily lifted out. Super Rollex, Cine Rollex or Rollex roll film adapters and police adapter are attached after the ground glass frame has been removed. To remove the latter, the spring-tensioned hinges on the right and left-hand side of the ground glass frame are sligtly pressed down and the ground glass frame slid out in a short upward motion. A firm lock of the adapters to the camera back is assured by the two lock slides (20, Fig. 7).

CAMERA BACK:

The camera back of the LINHOF COLOR can be rotated for horizontal or vertical composition (Fig. 8). Back swings can be employed by slackening the four captive locking knobs (12); intermediate positions of the camera back can be locked by re-tightening the knobs (Fig. 9). With the aid of the back adjustments extreme depth of field is obtained and perspective distortions eliminated. Full details about camera movements are given in the LINHOF Technique Data Sheets or in the LINHOF PRACTICE, the comprehensive manual of large-format photography.

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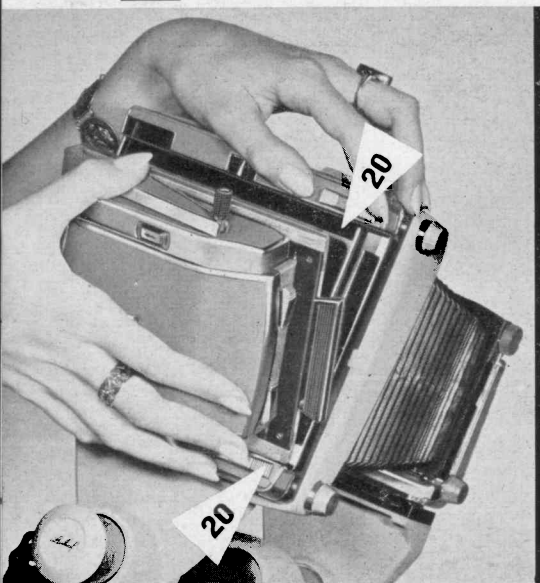

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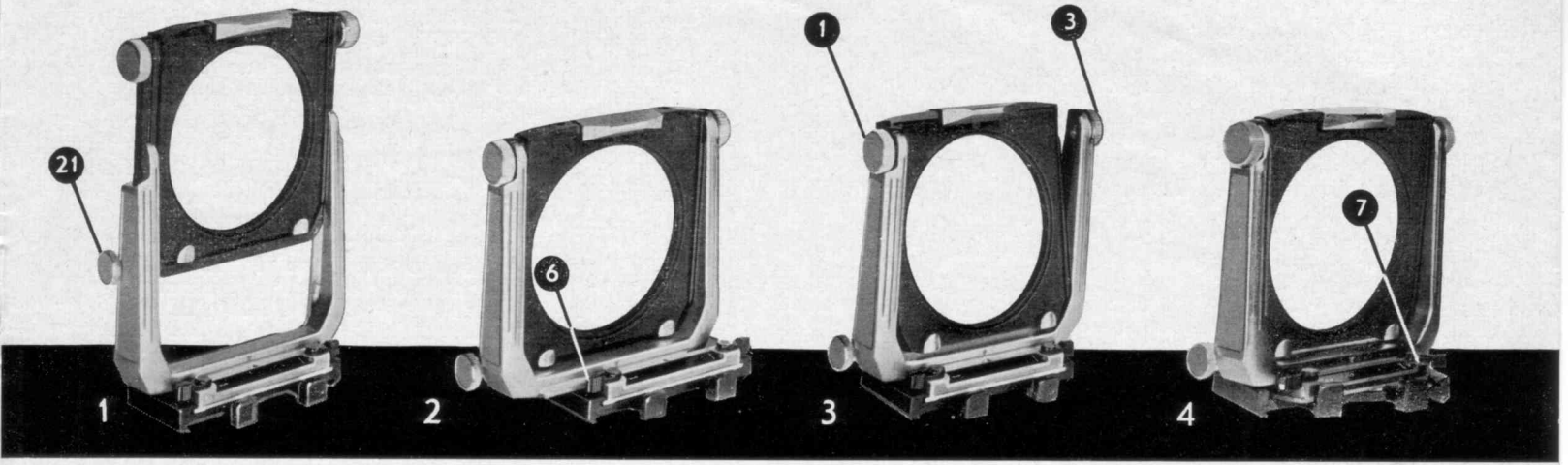

CAMERA FRONT ADJUSTMENTS:

1. The rising front is a parallel displacement of the optical axis moving the image upwards. Operated with the milled head (21) it is used to avoid perspective distortions in photographs of tall subjects. A lens with a large circle of sharp definition is needed for that purpose. The normal position of the lensboard is marked by the white line on the upper left of the lens standard.
2. The lateral shift is a parallel displacement of the optical axis moving the image to the right or left. The lens standard can easily be slid in both directions after operating the locking lever (6). To make full use of this movement a lens with a large circle of sharp definition is necessary. The lens standard - when moved back to the normal position - clicks into place. The zero position is marked by a red triangle.
3. The lensboard tilts (forward and backward) are movements through the horizontal axis, in the nodal point of the lens, displacing the zone of sharp focus in the direction of the movement. To put these movements into effect the milled head (1) is slackened, the milled knob (3) depressed, and the lensboard tilted forward or backward at 15°. Intermediate positions are locked by tightening up the milled head (1). When the lensboard is returned, it clicks audibly into the normal position.
4. The swivel of the lens standard is a movement through the vertical axis displacing the zone of sharp focus in the direction of the swing. The release lever (7) is operated and the standard swivelled into the required position. When the standard is returned it clicks audibly into the normal position.

ACCESSORIES: All accessories - as listed below - of the 4x5 in. SUPER TECHNIKA IV can be used with the LINHOF COLOR:

1. Lenses: Top-grade lenses, between 65 mm. (2 9/16 in.) and 360 mm. (14 in.) focal lengths (for details see current price list).
2. Negative holders and adapters: LINHOF double cut film/plate holders 4x5 in. and 9x12 cm., single metal plate holder or 9x12 cm. film pack in adapter frame, 4x5 in. Graphic film pack adapter, Grafmatic magazine for six 4x5 in. cut films, and Kinematic magazine for ten 4x5 in. cut films. Reducing formats can be used in the following adapters: 56x72 mm. (2 1/4 x 2 3/4 in.) Super Rollex 120 roll film adapter for 10 exposures, and by making use of the 4x5 in. to 2 1/4 x 3 1/4 in. reducing back, the LINHOF double cut film/plate holders 2 1/4 x 3 1/4 in. and 6,5x9 cm., and the 2 1/4 x 3 1/4 in. film pack adapter.
3. Adapters for specialized work: Police adapter for three 4x6 cm. exposures on 6x13 cm. plate or cut film, and focal plane shutter (shutter speeds up to 1/1000 th sec.).
4. Tripods: The most recommendable tripods for the LINHOF COLOR Camera are the Light Weight Pro Tripod, Model 138 P and DeLuxe Studio Tripod, Model 168 R, in connection with the LINHOF Professional Pan/Tilt Head.
5. Further accessories: Lens-shade/filter holders and filters of various diameters, Kodak Ektalite field lens (for better illumination of the ground glass image), ground glass with centimetre-grid, spirit level with ground glass adapter, cable release, focusing hood, multifocus optical viewfinder, magnifier for critical focusing.

CAMERA CASES: Two camera cases are available, the Standard Camera Case and the DeLuxe Camera Case. Each of the cases takes your camera, lenses, and accessories (see illustration at the left) protecting them from mechanical damage, dampness and dust and make the carrying of your equipment as convenient as possible.

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