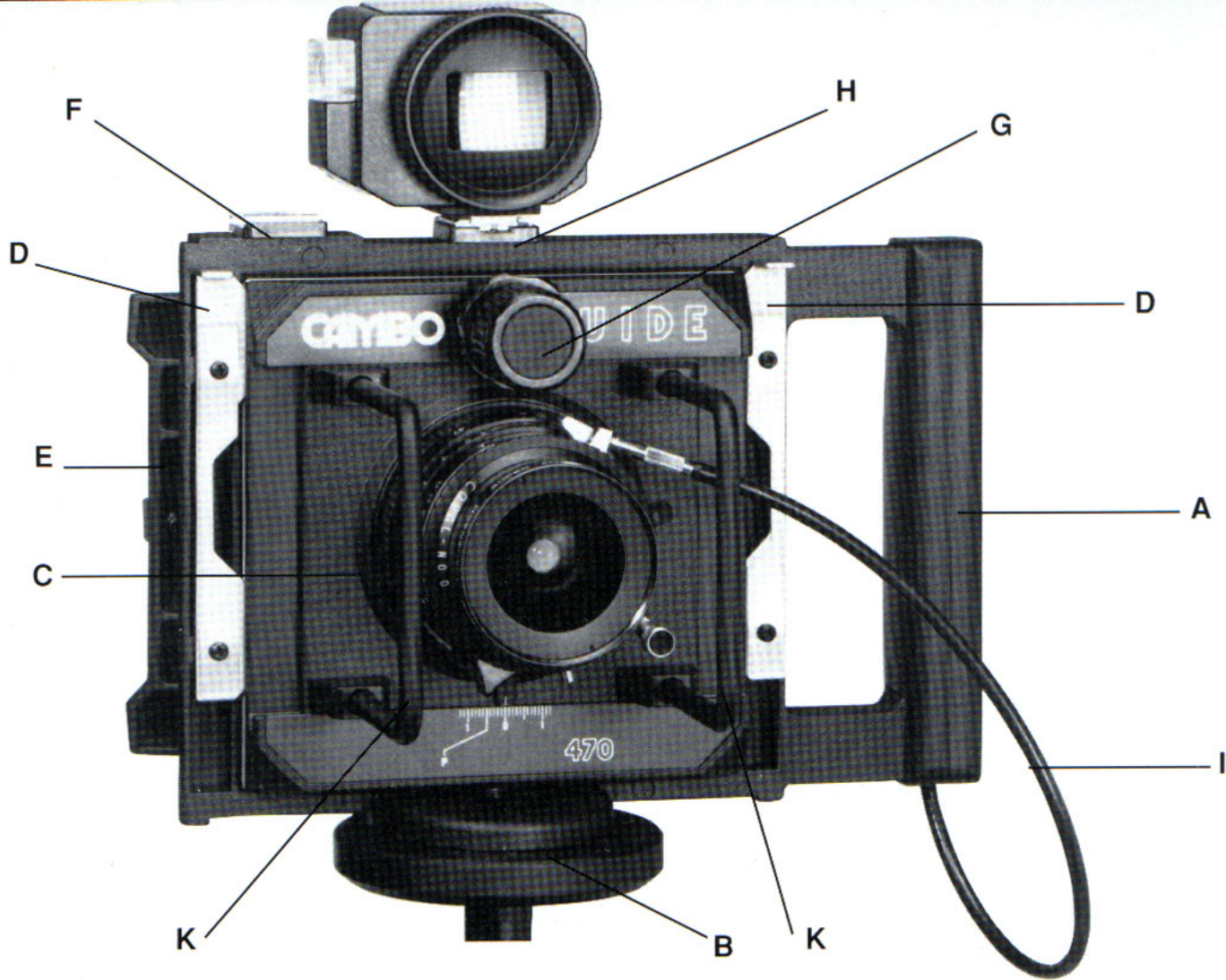


Cambo Wide

operating instructions



fig. 1



Cambo Wide operation instructions

This specially designed camera is ideal for a multitude of wide angle applications. By virtue of its simple, compact design, the Cambo Wide is easy to use in confined situations and is extremely portable for field use. And don't let its "simple" appearance fool you, the Cambo Wide offers many of the same advantages as a monorail view camera; including vertical or lateral lensshifts, interchangeable lens/lens panel capabilities, several filmformat options and a wide choice of convenient viewing accessories.

The Cambo Wide is available in four different models, each equipped with a different Schneider lens and lens panel combination. Your camera is designed to accept any one of these lens/lens panel combinations.

Note: Each lens panel is designed specifically for the lens that accompanies it and cannot be used with any other focal length lens or lens design.

Cambo Wide Components & Controls (fig. 1)

- A : Sure-Grip Handle
- B : 3/8" Thread for Tripod Mounting
- C : Helical Focusing Mount
- D : Lens Panel Lock/Release Bar
- E : Standard "Graflack" Back
- F : Spirit level shoe
- G : Shift Control Knob
- H : Viewfinder Mounting Shoe
- I : Cable Release
- K : Lens Guard Bars

Cambo Wide Assembly

The Cambo Wide consist of two parts, the camera back assembly and the lens/lens panel assembly, each packaged separately. Remove both parts from their packaging and remove the rear lens cap. The rear side of the lens panel is square and can be attached to the camera back assembly in any position, depending upon which format - horizontal or vertical - you wish to use (see Format Selection below). Once the panel is inserted into the front of the camera back assembly, lock it into position by pulling up on both lens panel lock/release bars.

Attach the cable release to the lens, and, if you have purchased an optical viewfinder, slide it into the shoe mount (the dual-axis spiritlevel should already be mounted to the off-center shoe mount).

Format Selection

The ground glass back of the Cambo Wide is fixed, and cannot be rotated or removed for horizontal/vertical format changes. This is done by tilting your tripod head. Shift control movements relative to the format chosen are determined by the position in which the lens panel is attached to the camera back assembly.

For lateral shift control on horizontal format shots, or vertical shift control on vertical format shots, the lens panel should be attached with the control knob directly below the viewfinder mounting shoe. For vertical shift control on horizontal format shots, or lateral shift control on vertical format shots, the lens panel should be attached with the shift control knob below the spirit level.

Shift movements are performed by turning the Shift Control Knob in the opposite direction you wish to move the lens panel. When the lens is in the desired position, lock it into position by turning the locking ring (behind the Shift Control Knob) counter-clockwise.

Viewing, Composing and Focusing

Like any view camera, critical viewing, composing and focusing with the Cambo Wide is done on the groundglass. However, in non-critical situations, composing can be done with optical viewfinders and the camera can be focused using the distance scale on the helical focusing mount. Both of these options make it feasible to "hand hold" the Cambo Wide, though great care should be taken that the camera is level. We recommend that you spend some time comparing the framing as seen through the viewfinder and as seen on the ground glass.

When using filmholders, you use the "crop marks" on the ground glass for composing your shots.

Many optical viewing aids are available to facilitate composing and/or focusing on the ground glass (see "Accessories" section for details).

To guarantee critical focusing, we recommend that you use a focusing lupe magnifier.

Camera Movements

As mentioned above, the Cambo Wide offers either lateral or vertical shifts, depending upon the position in which the Lens Mounting Panel is attached to the camera. The amount of movement available depends upon which lens/lens mounting plate you are using, as follows:

Model 470	(w/ 47 mm lens)	-/+12 mm
Model 650	(w/ 65 mm lens)	-/+15 mm
Model 900	(w/ 90 mm lens)	-/+ 7 mm
Model 1000	(w/100 mm lens)	-/+ 7 mm

Lens Coverage

Since the Cambo Wide is designed to accept a wide range of different film formats, from 6x7cm to 4"x5", it is important to understand the possibilities and limitations of each lens available for the Cambo Wide. The illustration below shows the "image circle" projected by each lens.

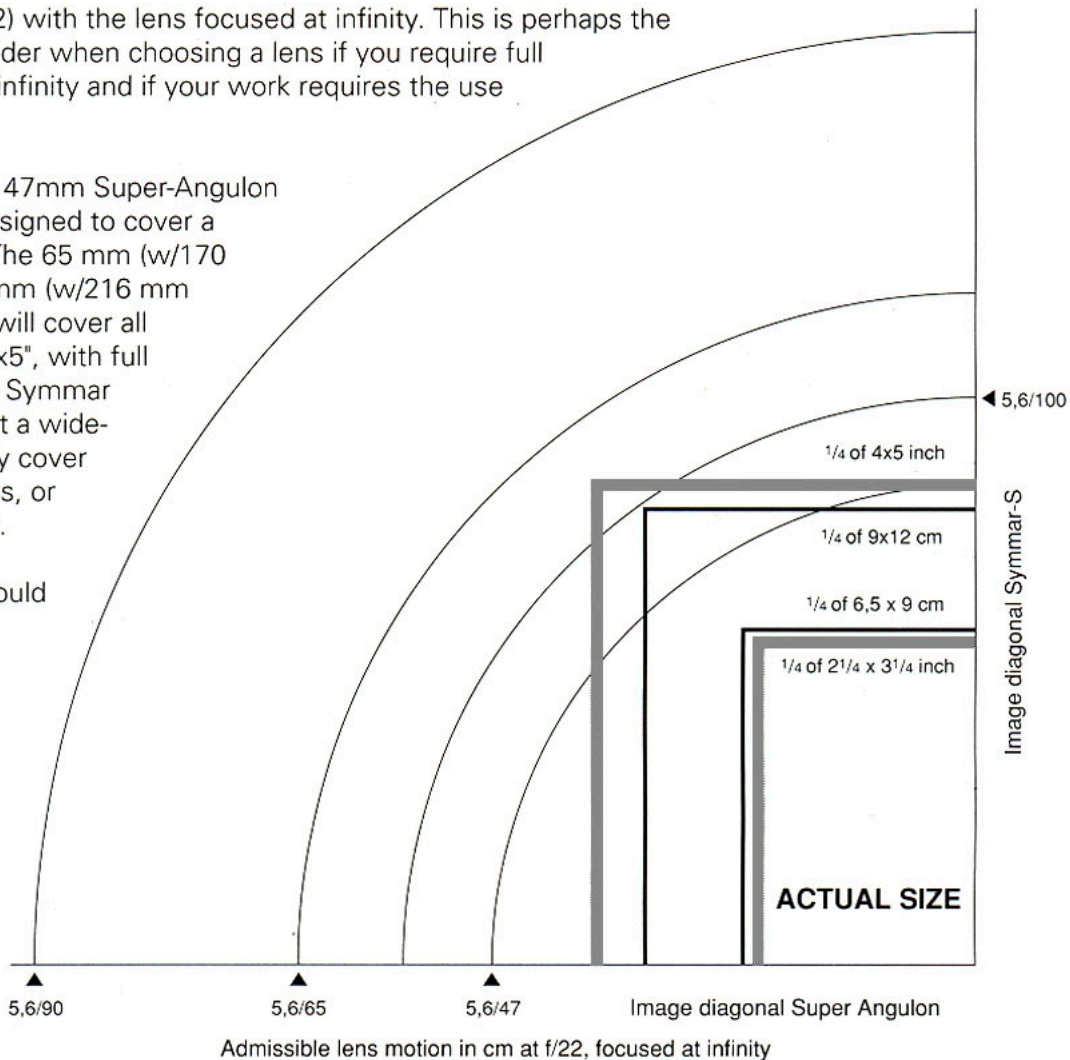
The image circle is the diameter of the cone of usable image area projected by a lens measured at a

particular aperture (usually f/22) with the lens focused at infinity. This is perhaps the most important factor to consider when choosing a lens if you require full film coverage of the image at infinity and if your work requires the use of camera movements.

As the diagram illustrates, the 47mm Super-Angulon (w/123 mm image circle) is designed to cover a maximum format of 6x9 cm. The 65 mm (w/170 mm image circle) and the 90 mm (w/216 mm image circle) Super-Angulons will cover all formats up to and including 4"x5", with full shift capabilities. The 100 mm Symmar (w/143 mm image circle) is not a wide-angle lens design, and will only cover up to 6x9 cm, with movements, or 6x12 cm, without movements. If you keep this in mind when changing film formats, you should obtain full coverage and satisfactory results with your Cambo Wide.

Film Format Selection

Another aspect of the Cambo Wide's versatility is its ability to accept a range of film formats, from 6x7 cm upto 4"x5".



Admissible lens motion in cm at f/22, focused at infinity

4"x5' Sheet Film Holders

The camera is packaged with the 4"x5" ground glass back installed and ready to accept any standard 4"x5" double sheet film holder.

Simply insert the holder in the same manner as you would with any 4"x5" view camera. When loading the holder, it is recommended that you place your index finger against the rear standard and push the ground glass frame away from the camera with your thumb. This will lessen the stress on your camera and reduce the chance of movement. To remove the holder, repeat this action, pull out slowly return the frame against the back.

Warning: Allowing the frame to "snap" back on its own tension could cause the ground glass to break. Don't let it "snap"!

Installing International or "Graflock" Roll Film Holders

In order to mount these "Graflock", or clip-on 120 or 220 mm roll film holders to the Cambo Wide, it is first necessary to remove the ground glass frame. Depress both spring-loaded, gripped bars attached to either side of the frame, slide the frame to the right (with the camera in the horizontal position) until it releases, and pull it away from the camera. Place the film holder against the back of the camera and lock it into position by pushing the "Graflock" sliding bars to the right.

After using the roll film holder, reinstall the ground glass frame by placing it against the back, and position the hooks of the frame's spring-loaded gripped bars into the recessed slots on the top and bottom. Depress the gripped bars and slide the frame to the left.

Cambo Wide Accesories

There are many optional accessories for the Cambo Wide designed to improve its performance or facilitate its operation.

Depending upon how you plan to use your Cambo Wide, you might consider choosing from these convenient aids:

Deluxe Optical Viewfinder (W-21)

with Built-in Spirit Level

This high quality optical viewfinder features a choice of optional, format framing masks for the Models 650 and 900 Cambo Wides. Choose from 4"x5", 6x7 cm, 6x9 cm and 6x12 cm masks to match the film format you are using. These masks can be rotated for either vertical or horizontal framing. (Note: Masks are not included with viewfinder.)

A built-in spirit level, mounted to the side of the viewfinder can be read directly or "in-view" while using the viewfinder, so you can conveniently check the level while composing.

The Deluxe Optical Viewfinder mounts to the shoe-mount on top of the Cambo Wide.

Wide Optical Viewfinder (W-20)

This general purpose optical viewfinder can be used on all Cambo Wides as a general composing, or framing aid.

Reflex Viewing Hood (T-20)

In-Line Viewing Hood (T-21)

Folding Viewing Hood (C-292)

To install any viewing hood, pull up the tab on top of the ground glass back. Position the viewing hood against the back, under the small lip at opposite side of the tab, and push the tab down to secure the hood in place.

Fresnel Lens Screen (C-158)

Super Sharp Focusing Screen (C-143)

The ground glass on your Cambo Wide camera can be replaced with an unlined or bright focusing screen. To remove the ground glass, unscrew the retainer clips and lift out the ground glass. Place the new glass or screen with the frosted side in towards the camera, and replace the retainer clips. The Fresnel lens, which is smaller than your ground glass, fits over the ground glass, with the smooth side facing you, and the etched side towards the ground glass. The Fresnel lens fits between the retainer clips, not behind these.

Roll Film Holders (on 4x5" Plate)

- (C-214) 6x7 cm 120
- (C-237) 6x7 cm 220
- (C-213) 6x9 cm 120
- (C-235) 6x9 cm 220
- (C-241) 6x12 cm 120
- (C-240) Calumet C-2N 6x7 cm 120/220

Polaroid Film Holders

- (C-220) Model 405
- (C-221) Model 545
- (C-217) Model 550

Center Filters

When working with ultra wide angle lenses, the fall-off illumination towards the corners is sometimes disturbing. For this reason, concentrically graduated "center filters" have been designed for compensating this vignetting. Each center filter is designed specifically for Super-Angulon lens.

- (W-80) Center Filter for 47 mm f/5.6 Super-Angulon
- (W-81) Center Filter for 65 mm f/5.6 Super-Angulon
- (W-82) Center Filter for 90 mm f/8.0 Super-Angulon

This manual is prepared by CAMBO with care, although no responsibility, financial or otherwise, is accepted for any consequences arising out of the use of this manual or this material.

All specifications in this manual are subject to change without notice.

Cambo Fotografische Industrie B.V.

Postbus 200, 8260 AE Kampen Holland

Telefoon 05202 - 14644

Telefax 05202 - 15110