

## Viewing and Accessories.













#### The ground glass

Asymmetrical tilt axes for easy two-point settings are marked on the extrafine-grained SINAR ground glass. In addition to these swing and tilt axes, the ground glass also carries a grid to facilitate camera alignment with vertical or horizontal subject lines.

The ground glass is available in  $4 \times 5$ "/ $9 \times 12$  cm,  $5 \times 7$ "/ $13 \times 18$  cm and  $8 \times 10$ "/ $18 \times 24$  cm sizes.

#### Mask and Fresnel lens holder, Fresnel lenses

It is difficult to check the whole image at once on a plain ground glass screen. The only part of the screen that appears sufficiently bright is that viewed in line with the light path.

To solve this problem SINAR therefore provides Fresnel lenses that are instantly fitted behind the focusing screen and permit perfect viewing of the whole bright screen image from corner to corner.

The 4 x 5"/9 x 12 cm Fresnel lens is supplied mounted in the mask and Fresnel lens holder. This holder also takes the masks for rollfilm and Polaroid film pack sizes.

The Fresnel lenses for the  $5 \times 7''/13 \times 18$  cm and  $8 \times 10''/18 \times 24$  cm camera backs have appropriately longer focal lengths.

The screen frames of these sizes have retaining springs to permit easy fitment and rapid removal of the Fresnel lenses.

The Fresnel lenses are included in the complete SINAR p EXPERT outfits.

#### Binocular loupe with BINO light hood

With the Fresnel lens the screen image becomes noticeably clearer, but for optimum brilliance it should not have any stray light falling on it, either. That's why generations of photographers used a black cloth.

For the SINAR we have a wide-angle or multipurpose bellows which simply couples to the ground glass screen frame. This viewing bellows can then take the binocular loupe andBINO light hood. The twin magnifier (one lens for each eye) magnifies the screen image 2<sup>1</sup>/<sub>2</sub> times and so permits precise observation of every image detail. Turning a simple lever swings aside the magnifier while you observe the screen image. That way your eyes don't have to readapt to the screen brightness. A 4.25 diopter magnifier is available for long-sighted users.

The BINO light hood is equally easy to use if you wear spectacles.

If you want to keep both hands free, you can attach the focusing hood to your head with a rubber band.

Alternatively, the binocular loupe can also be mounted on the camera rail with a multi-purpose standard.

The binocular loupe with BINO light hood and wide-angle bellows is included in the SINAR p EXPERT outfit.





## optimum image adjustment.



#### Binocular reflex magnifier 4 x 5"/9 x 12 cm

Many photographers find it difficult to assess an inverted screen image.

It is perfectly feasible to turn the image upright with a reversing mirror, as in any rollfilm reflex camera. The SINAR uses the binocular reflex magnifier for the purpose. It consists of a housing with a built-in mirror which takes the same focusing hood as the binocular magnifier board. With extreme camera movements and with extreme wide-angle lenses the mirror has the drawback that only the centre of the screen appears bright, while the margins get progressively darker. Rotating the patented swivelling reflector with a knob solves this problem: you can scan the screen image right into the corners. The binocular reflex magnifier already incorporates the twin magnifying lens. This can also be swung into or out of the optical path.

A special 4.25 diopter magnifier is available for long-sighted users.

For more convenient screen observation in any camera position, the mirror housing can rotate through 90° in either direction on the screen holder. The binocular reflex magnifier is directly attached to the  $4 \times 5^{"}/9 \times 12$  cm screen holder. With larger screen sizes a multi-purpose standard and wide-angle bellows is required behind the back to provide a view over the whole screen image.

SINAR also offers appropriate binocular magnifier adapters for owners of Toyo, Linhof, Cambo, Calumet or Plaubel view cameras who also want to view a brilliant upright screen image.





#### Repro reflex viewer 8x10"/18x24 cm

A special reflex viewer with fixed mirror is available for the 8 x 10"/18 x 24 cm format. It is mounted directly on the screen holder without an additional multi-purpose standard. It is particularly suitable for copying work with the camera pointing vertically downwards.

## How to secure



#### The pan-tilt head

The most rigid tripod cannot be better than its pantilt head. The SINAR pan-tilt head has a large base for solid contact with the tripod top. The head rotates horizontally through 360°; a clear scale shows the rotation angle.

The tilting range covers 110°. The convenient tilt lock lever, individually adjustable for position, locks the head absolutely firmly in any orientation.

#### The rail clamp

Thanks to its 3-point support the SINAR rail clamp can mount the view camera rock-steady on the SINAR pan-tilt head or directly on the tripod. You only have to screw the tripod screw moderately tight; the clamping lever finally locks it. The SINAR rail may be moved forward or back at will in the rail clamp or rotate about the rail axis.

#### The universal camera holder

Combining the pan-tilt head and rail clamp with the SINAR universal camera holder yields a very solid double tilt head with an exceptional adjustment range for miniature and medium-format cameras. The quick-change mounting on the rail clamp permits immediate switching from the view camera to rollfilm or miniature cameras. This item, too, is included in the SINAR p EXPERT outfit.

#### The camera support

For copying, macrophotography, double exposures or filming titles it sometimes helps to mount a medium-size, miniature or motion picture camera on the SINAR rail. This is easy with the SINAR camera support. You simply mount it on the SINAR p or c standard bearer in place of the format frame or carrier. That way you can adjust the camera as precisely and accurately as the back of the SINAR p.

The camera support is included in the SINAR p EXPERT outfit.



# a firm camera setup.



#### The camera bracket

A SINAR f owner can also mount a still or motion picture camera on the SINAR rail with the aid of the SINAR camera bracket.

The settings are not quite as convenient as with the universal SINAR p standard bearer, but in most cases the coarse adjustment on the rail and the vertical movement available are fully adequate.

#### The clamping stand

The SINAR clamping stand mounts cameras wherever normal tripods are unusable – for instance on window frames, table legs, rails and pipes or on ladders. It is also a solid camera support for copying.

The clamping stand consists of a robust screw clamp with a connection each at the top and the side for SINAR rail units.

The latter can be fixed directly to these connections. A screw fitting permits attachment of the SINAR pan-tilt head or universal screw adapter set.

#### The universal screw adapter set

The universal screw adapter set saves much trouble and improvisation. It is a cage carrying six different screw fittings and screws of  $^{1}\!/_{4}$ " (small tripod screw),  $^{3}\!/_{8}$ " (large tripod screw) and M 6 (fitting for SINAR rails).

With this unit, cameras may be mounted on tripods of the «wrong» screw fitting, camera pairs joined for stereo-photography, SINAR rails mounted at right angles to each other – you have almost any combination you are ever likely to need.

#### The baseplate

A single support for the camera rail is not always firm enough for extremely long camera extensions or when photographing out of doors in strong wind.

The SINAR baseplate mounts the view camera on a tripod at two supporting points. This also requires a second rail clamp.

Or, the baseplate can hold two cameras on one tripod, for instance for simultaneous shots on different film sizes or film materials.







## How to extend









#### The multi-purpose standards

Multi-purpose standards are frequently needed with view cameras as intermediate standards to cope with long extensions, to support the bellows hood, as object stages in close-ups, to hold the SINAR mirrors for double-exposure effects or to hold viewing aids.

The SINAR system includes two different multipurpose standards:

The multi-purpose standard I opens at the base for attachment between two main standards without having to remove the latter from the rail.

The multi-purpose standard I has parallel displacement and tilt movements.

The multi-purpose standard I is also the lens standard of the SINAR c and f. It is included in the SINAR p EXPERT outfit.

The <u>multi-purpose standard II</u> has in addition a fine focusing drive, a tilt mechanism with precise angle finder and a depth of field scale. It serves as the image standard of the SINAR f.

### The multi-purpose bellows and conical bellows

SINAR bellows are attached easily to the image standard and lens standard. The multi-purpose bellows is available for the  $4 \times 5$ "/9 x 12 cm image size. It has openings of the same size at both ends, making it particularly versatile.

As the lens standard is the same with all film sizes, the bellows for the two larger  $5 \times 7''/13 \times 18$  cm and  $8 \times 10''/18 \times 20$  cm camera sizes are conical. If a bellows should prove too short for extreme extensions, two or more bellows can be joined with the multi-purpose standard.

An additional multi-purpose bellows is included in the complete SINAR p EXPERT outfit.

#### The wide-angle bellows

With very short focal lengths even the closed multipurpose bellows is still too long and hence unwieldy. SINAR therefore also offers mobile wideangle bellows for all three camera sizes. The wideangle bellows is also very convenient for viewing the ground glass screen with the binocular magnifier.

A wide-angle bellows is supplied with the SINAR p EXPERT outfit.





## the SINAR outfit.



#### Bellows holder, bellows/filter holder rod

An adjustable bellows hood consisting of a multipurpose bellows protects the lens against stray light. It may be mounted with a long bellows/filter holder rod and two bellows holders directly in front of the lens standard.

Where adjustment of the lens standard involves appreciable tilts, a multi-purpose standard is more suitable for holding the front of the bellows hood. This improved combination is the so called professional bellows hood. Bellows/filter holder rods are available in lengths of 11, 16 and 25 cm.

The SINAR p EXPERT outfit includes the three rods and two bellows holders.

#### The rail units

In wide-angle photography the base rail must not protrude too far in front of or behind the camera itself. Yet it must be long enough to cope with extreme extensions.

The SINAR rail system meets both requirements: The basic rail is 30 cm (about 12'') long and carries fittings on both ends to take further extension rails. That way it can be extended at will in both directions, without having to remove the standards or the rail clamp.

Extension rails are available in lengths of 15, 30 and 45 cm (6", 12", 18"). That way the camera rail can be extended for any job in 15 cm steps.

The SINAR p EXPERT outfit includes a 15 cm and a 45 cm extension rail.

### The 4 x 5"/9 x 12 cm, 5 x 7"/13 x 18 cm and 8 x 10"/18 x 24 cm format changing set

The SINAR p and c are available for three different film formats. Each camera may also be converted subsequently to the alternative formats. To simplify this format switching in the SINAR, you don't have to change the entire image standard. You retain the standard bearer with all the displacements and swing movements and change only the format frame (light metering back 4 x 5"/ $9 \times 12$  cm) consisting of the film holder and screen frame with ground glass, the rear support and bellows. Changing formats is supremely simple – just release the lock and interchange the format frames.

#### Format reducing adapter 5 x 7" / 13 x 18 cm to 4 x 5" / 9 x 12 cm and 8 x 10" / 18 x 24 cm to 4 x 5" / 9 x 12 cm

The format reducing adapters are introduced into the rear carrier instead of the glass and holder carrier. They represent another possibility of format reduction to 4 x 5" / 9 x 12 cm.

Yet the SINAR swing and tilt system and wideangle capability are less efficient using this simpler way, because the film plane coincides no longer with the tilt axis.

This way of format reduction is recommended if the  $4 \times 5$ " /  $9 \times 12$  cm format is used only rarely.



# How to main a with sensible

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#### The Rapid adapter

The Rapid adapter is an accessory that greatly increases the shooting speed of the view camera. It consists of a screen and film holder support taking standard  $4 \times 5^{"}/9 \times 12$  cm film holders, various roll-film magazines and Polaroid film pack or sheet film holders.

The Rapid adapter has a built-in automatic drawslide to protect the film holders against light. Hence the film holder darkslide can be removed as soon as the holder is inserted in the Rapid adapter.

After focusing on the screen you move the sliding frame of the Rapid adapter to the left into the shooting position.

When the SINAR shutter is used, this automatically closes the shutter and lens aperture. The Rapid adapter also takes the exposure meter for spot readings in the film plane.

The Rapid adapter can be used with the SINAR binocular magnifier and binocular reflex magnifier. The Rapid adapter slightly shifts the film plane backwards. With the SINAR p and c this combination therefore only permits the use of focal lengths of 90 mm and longer and with the SINAR f of 135 mm and up.

The image (rear) standard of the SINAR f is turned through 180° when used with the Rapid adapter.



#### The bellows hood mask

Like the bellows hood, the bellows hood mask may be mounted with a multi-purpose standard, or directly on the lens standard with the aid of the bellows holder and a bellows/filter holder rod. The bellows hood mask can serve as a hood with wide-angle lenses, as a mask holder for special effects and multiple exposures, or as a filter holder for the SINAR graduated shading filter. It consists of four movable flaps and clips to take filters or masks. The bellows hood mask is included in the SINAR p EXPERT outfit.



### tł job easier accessories.





#### The filter holder

The SINAR filter holder is simply mounted on the bellows/filter holder rod and the latter fixed to the lens standard. The filter holder swings out through 180° and takes 103 mm glass filters, the SINAR polarising filter or gelatine filters.

Since the filter holder swings out by exactly 180°, you can use a polarising filter and preset the exact orientation for polarisation already outside the camera. Moreover, this system permits easy filter changing during operation, even when the bellows hood is in use.

#### Filters

#### Glass filters

SINAR 103 mm diameter glass filters fit the SINAR filter holder and the SINAR shutters. They are made of glass dyed in the mass, are ground absolutely plane-parallel and are coated.

The SINAR polarising filter is supplied in its own mount and rotates in the filter holder.

#### Gelatine filters

Gelatine filters are available from various manufacturers in a wide colour range and in sizes of  $100 \times 100$  and  $125 \times 125$  mm. They fit the SINAR filter holder and the SINAR shutters.

<u>Shading filters</u> Shading filters are available in various colours and densities. They are filters cemented onto plastic U-shaped frames that are easily pushed into the bellows hood mask. Empty self-adhesive frames are also available to take any desired filter sheet.

The complete range of the filters with the colours, applications and factors are listed in the SINAR Code catalogue.





### How to wicer with sensible







#### The hand grip

The SINAR hand grip is solidly made and has a built-in cable release for between-lens leaf shutters. It is designed for the SINAR handy camera, but is equally suitable for other cameras.

#### The cross spirit level

The SINAR cross spirit level consists of two spirit levels mounted at 90° to each other and fitted in a mirror holder. With the mirror, the photographer can observe the spirit levels conveniently from behind the camera. The cross spirit level may be mounted along any of three sides of the SINAR standards. It is also a useful supplementary spirit level on the lens standard or for the SINAR handy.

The spirit levels are precisely adjustable.

#### The accessory shoe

The standard SINAR accessory shoe takes commercial finders, rangefinders, infrared slave controls for flash and small flash units for direct mounting on the SINAR. Like the two-way spirit level, the accessory shoe may be mounted anywhere along three sides of the SINAR standards.

#### The mirrors

SINAR produces different mirrors: the fully reflecting front-surfaced SINAR mirror to fit all SINAR 4 x 5"/9 x 12 cm standards; a 40/60% semi-reflecting mirror of the same size, and a 40/60% SINAR semi-reflecting mirror in a frame to fit 5 x 7"/13 x 18 cm standards.

#### The front-surfaced mirror

The SINAR front-surfaced mirror permits roundthe-corner shooting with the view camera or can reflect objects into the picture for special effects. To protect its sensitive surface coating against dirt and scratches, the mirror is housed in a protective case with sliding front.

#### The semi-reflecting mirror

The SINAR semi-reflecting mirror helps to center the camera in tricky copying setups and can solve close-up lighting problems. In front projection setups it reflects the projected image exactly in the camera's optical axis on to the special background screen.

The mirror can produce innumerable special effects for unusual pictorial tricks. the semi-reflecting mirror is of course also housed in a handy protective case with sliding front.







# y ur scope accessories.





#### **Reflex camera adapter boards**

Various reflex camera adapters are available to turn the SINAR into a bellows unit for mediumformat or miniature cameras. These adapters fit the camera on the rear standard in place of the glass and holder carrier. For macrophotography this arrangement retains the full scope of the view camera's parallel displacements and swings and tilts.

Reflex camera adapter boards are available to match the lens mounts of Alpa, Minolta, Hasselblad, Exakta and Nikon cameras and of models with 42 mm screw fitting.

#### The macro tube

The SINAR macro tube allows the use of standard macro lenses, for instance the Zeiss Luminar range, in macrophotography. As these lenses again have no built-in shutter, the SINAR shutter is used for the exposure.

#### The quadruple lens and format divider

The quadruple lens enables a perfect definition of kaleidoscopic quadruple images, or four identity photographs on the same film.

This interesting accessory consists of four single lenses 1 : 8 / 125 mm on one lens board.

Three fixed stops each for f/11, f/16 and f/22 are delivered with each lens.

The quadruple lens is used together with a SINAR behind-lens shutter.

A format divider is necessary to yield four identity pictures on a 4 x 5'' / 9 x 12 cm sheet film, on Polaroid single-picture materials (part image size 38 x 50 mm) as well as on Polaroid film packs (part image size 36 x 47 mm).





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### How to transport a SINAR safely.







#### Cases

As view cameras are frequently used for assign-ments away from the studio, SINAR provides suitable special cases to take the camera. They hold the outfit with all the necessary accessories, easily accessible yet protected for convenient transport.

#### The SINAR p case 4 x 5"/9 x 12 cm and 5 x 7"/13 x 18 cm

This case takes the 4 x 5"/9 x 12 cm or 5 x 7"/ 13 x 18 cm SINAR p EXPERT outfit with 4 to 5 lenses and five 5 x 7"/13 x 18 cm double film holders and other accessories. All components are well padded and secured to protect them against damage even if the case is roughly handled. To facilitate transport, the case has removable wheels plus a pulling strap and solid carrying handle. The case is rigid enough to serve as a platform for

the photographer when high camera positions are needed.

The case is supplied with the 4 x 5"/9 x 12 cm or 5 x 7"/13 x 18 cm SINAR p EXPERT outfit.

#### The SINAR p case 8 x 10"/18 x 24 cm

This case takes the 8 x 10"/18 x 24 cm SINAR p EXPERT outfit plus 4 to 5 lenses, six 8 x 10"/ 18 x 24 cm double film holders and a 4 x 5"/ 9 x 12 cm format changing set. This case also has removable wheels, a pulling strap and carrying handle.

The case is included in the 8 x 10"/18 x 24 cm SINAR p EXPERT outfit.

#### The SINAR f case

The SINAR f case is small enough to count as cabin luggage on aircraft yet large enough to hold a SINAR f outfit and sufficient accessories. In addition to the dismantled SINAR f it takes 1 or 2 lenses, 3 film holders, 2 bellows holders, 1 bellows/filter holder rod each of 11, 16 and 25 cm, 1 multipurpose bellows, 1 universal filter holder and 1 binocular magnifier board with focusing hood.

The same basic case, but with different interior layout, is available in 4 other versions:

The accessory case holds a complete SINAR handy with 8 film holders 4 x 5"/9 x 12 cm or 2 lenses, a multipurpose standard, a 45 cm (18") extension rail and 8 film holders or other accessories.

<u>The 5 x 7"/13 x 18 cm adapter case</u> holds the  $5 \times 7$ "/13 x 18 cm format changing set with 2 extension rails, the light meter or other accessories.

The 8 x 10"/18 x 24 cm adapter case holds the 8 x 10"/18 x 24 cm format changing set, 1 .....deangle bellows and 1 SINAR p universal st bearer.

The universal case contains 3 foam plastic panels 5, 10 and 50 mm thick. These can be cut to your own requirements with the knife supplied.

With the double handle you can carry two cases of the same size in one hand.



# **Sinar**<sup>®</sup>

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