

**Close shooting
concentration
counts**



Close shooting concentration counts

... for it yields better pictures. In camera design this fact has produced a number of operational convenience features such as automatic shutter tensioning, aperture and speed selection and reading while viewing the subject, automatic full and working aperture setting for viewing/focusing and for the exposure, respectively, double exposure locks, etc. In other words, camera makers try to eliminate distracting and error-prone operations immediately before shooting.

At least, that is the case with miniature and medium format cameras where such aids and features have long been taken for granted.

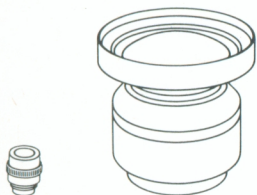
Now the SINAR *digital* shutter with its electronic control brings versatile automation to the universally versatile view camera, too.

Better pictures – by more precise exposure, for ...

... electronics does more here, too;

... *one* single shutter for all interchangeable lenses at a stroke eliminates individual shutter-to-shutter tolerances;

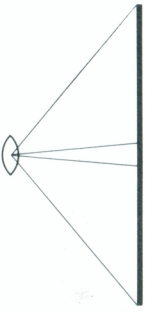
... the *digitally* controlled rotary slit shutter also eliminates variations listed below. This not only gives you more precise but also more consistent exposures:



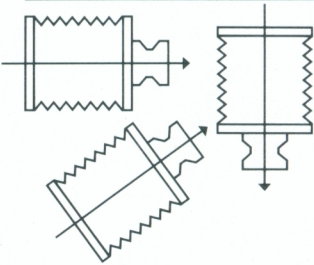
– consistent with *all* lenses, from the smallest to the largest diameter



– consistent from the smallest to the largest f-stop



- consistent from centre to edge, at any image angle



- consistent with horizontal or tilted camera set-ups

- consistent over a temperature range from -15° to $+50^{\circ}\text{C}$ (5° to 122°F)
- consistent also in long-term precision thanks to fewer moving parts.

Progress with economy

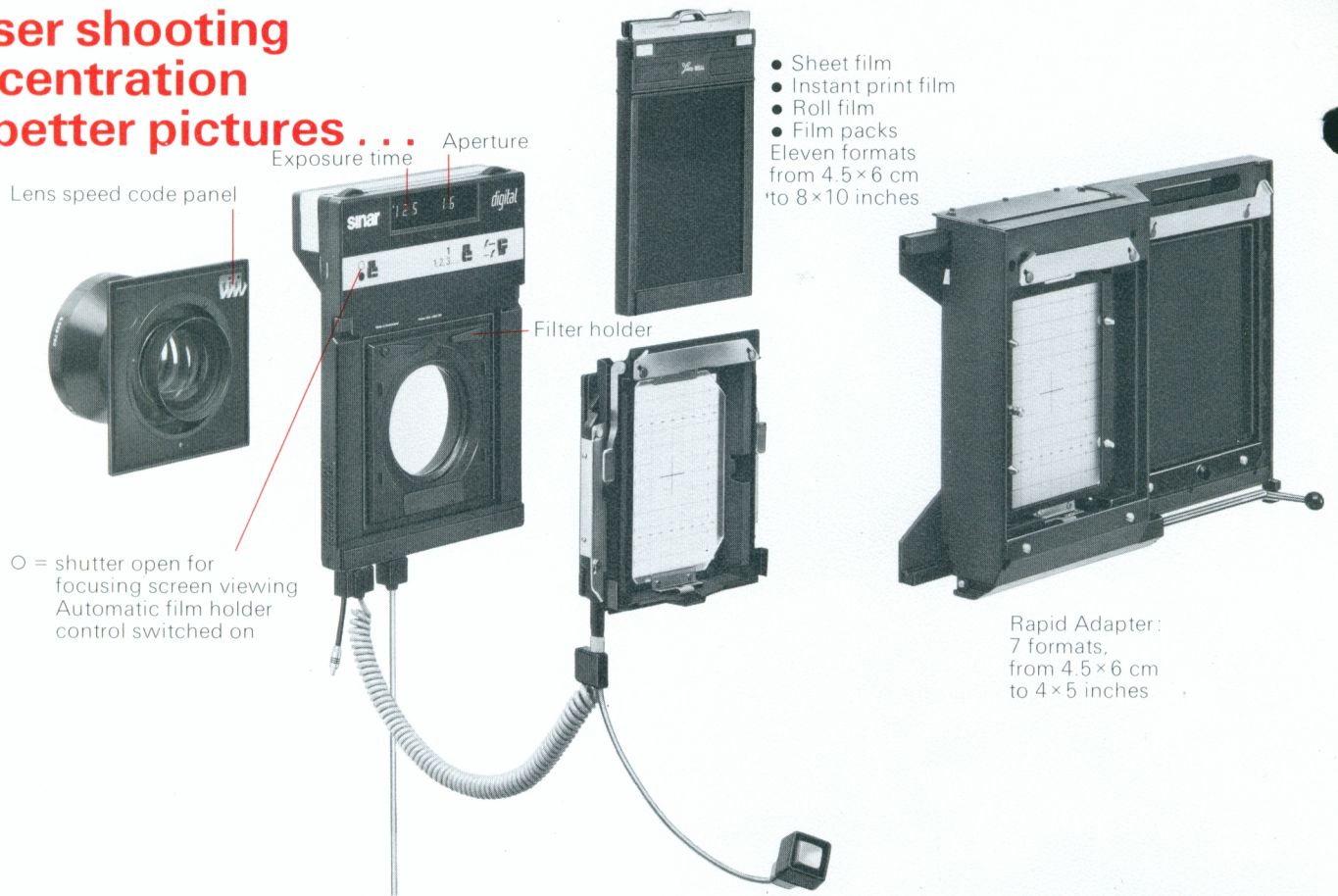
... the SINAR *digital* shutter is no engineering gimmick, but

- permits closer shooting concentration
- improves exposure precision *and* consistency
- reduces exposure errors, waste – and annoyance
- saves having to get separate shutters for *every* lens
- saves having to get individual aperture and shutter speed setting systems for *every* lens
- brings your SINAR outfit fully up to date – *without* any model change
- can be used with over 200 lenses, including more than 25 lenses with auto-aperture control (SINAR DB*)
- you can switch it at any time against the mechanical SINAR auto-aperture shutter – and it is compatible with the lenses available for the latter

That is progress with economy!

* With SINAR DB auto-aperture lenses. Many existing view camera lenses can be remounted from their original mount into a DB auto-aperture mount. See conversion set 446.21 in the lens list.

Closer shooting concentration for better pictures . . .



- Sheet film
 - Instant print film
 - Roll film
 - Film packs
- Eleven formats from 4.5 × 6 cm to 8 × 10 inches

Rapid Adapter:
7 formats,
from 4.5 × 6 cm
to 4 × 5 inches

The *digital* display

250

8.5 mm *high luminous digits* (LEDs) display shutter speed and aperture values for easy reading as you look at the subject from behind the focusing screen — even at some distance and in poor light. It's equally easy if you wear spectacles. With longer exposure times the digits provide a second-by-second countdown. That way you can at exactly the right moment switch on a lamp, remove "ghost objects" from the scene, initiate partial movements, etc.

.....

Five dots signal the B setting. Here again the digits additively count the exposure second by second up to 999 seconds (16.65 minutes) and go on again starting from 0 — without distraction and within easy view as you watch the subject from behind the focusing screen.

Shutter speed and aperture

You preselect exposure time and aperture from behind the focusing screen on large and conveniently located control wheels with click stop settings.

The extended digitally controlled exposure time range from 1/500 to 80 seconds +B offers professional versatility. The short exposure times down to 1/500 second permit wide control of aperture use and hence depth of field even with daylight shots and high-speed materials.

Displays of fractional seconds (shorter than 1 second) are shown by a dot *in front of* the number — for example '250.

The *aperture** range from f/4 to f/45 is also controlled digitally. Lenses capable of stopping down below f/45 are available on request with manual aperture control.

The *aperture** and exposure time intervals are subdivided in one-third steps for professional fine control. The setting wheels engage at these one-third stop settings.

The one-third stop intervals are signalled by LED dots behind the digital time and aperture display.
● = 1/3, ●● = 2/3, thus indicating an exposure time one-third or two-

third steps longer, and a correspondingly higher f-number.

By turning the two setting wheels *in the same direction* through the *same number of click stops* you can adjust the time and aperture by equivalent compensating values at a constant exposure value. That eliminates figuring: for instance you shorten the exposure time by two click stops and open the aperture — rotating its setting wheel in the same direction — by two click stops to compensate. Quickly, without distraction.

Existing lenses without SINAR auto-aperture coupling can also be used on the SINAR *digital* shutter. In this case apertures are set on the lens itself. That way the *digital* shutter is universally usable and simplifies a rational switchover to up-to-date technology.

Shutter speed and aperture AUTOMATION

Positive control without distraction

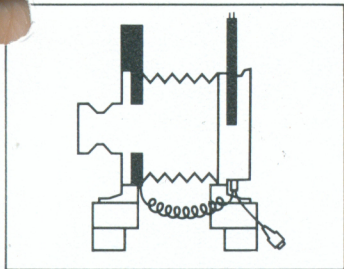
If you don't have to hop back and forth around the tripod, fiddle with finicky settings or worry over operating errors, you can concentrate more closely on the picture. On that perhaps obvious piece of wisdom we based the automation design of the SINAR *digital* shutter.

— The shutter is tensioned automatically. You'll no longer miss shots by forgetting to tension. Nor do you get double outlines in multiple exposures, from camera shifts during manual retensioning.

— The *aperture** is controlled automatically — fully open for ground glass screen viewing and the preselected working aperture for the exposure. You can forget about constant stopping up and down. Nor will you have spoilt exposures through forgetting to stop down. With more positive control and closer shooting concentration your work becomes easier. And that means greater shooting readiness.

AUTOMATIC film holder control

Again positive control without distraction



— The automatic film holder control is a special aid to closer shooting concentration.

— It eliminates operating errors and greatly increases your view camera's shooting readiness. Automatic shutter and aperture* control is coupled with film holder via the release and automatic cable No. 522.11.002/3. Thus:

- Inserting the film holder automatically closes the shutter and stops down the lens to the preselected working aperture*.

- Withdrawing the film holder opens the shutter and aperture* again for visual image control on the ground glass screen.

Automatic film holder control covers not only *all* available lenses, but also *all* SINAR formats from 4.5×6 cm to 8×10 inches, in sheet film, instant picture, film pack and roll film holders.

— With the SINAR Rapid adapter, shooting readiness increases even more dramatically.

Soft and silent releasing



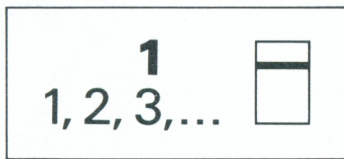
— Special damping ensures particularly soft operation.

The flexible release and automatic cable isolates the camera against any vibration, however abruptly you release. The cable is always at hand at the camera back; its socket is clearly marked in green.

— Operating the release with the shutter open (for ground glass screen viewing) permits working aperture exposure metering in the film plane — without change of viewpoint or other fiddling. Again you control everything from one point — without unnecessary distraction.

— A release and automatic cable up to 5 metres (16 feet) long is also available. This cable serves as a remote release, e.g. when operating in front of the camera. With this long release you can move around at will in the studio, for instance to hold a lamp or to light sections of a large room by multiple flashing with a single flash unit without touching the camera. And there are many more applications.

Double exposure lock — to protect your shots



— With the switch up, you can only release the shutter once. That reminds you to change the film holder. This safety feature ensures that you can make a new exposure only after viewing the image on the ground glass screen.

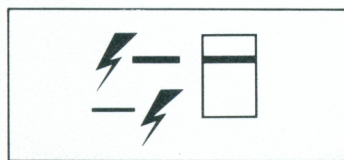
— With the switch down, you can make any number of exposures, for instance for multiple shots.

The professional approach to flash

Synchronisation is also controlled *digitally*.

- X-synchronisation from 80 seconds to $\frac{1}{30}$ second and B, with all lenses *up to the largest*. *Warning light:* In the restricted synchronisation range, shorter than $\frac{1}{30}$ second, the dot blinks in front of the exposure *time* display.

- Lenses with a rear lens diameter smaller than 37 mm however permit synchronisation up to $\frac{1}{60}$ second.



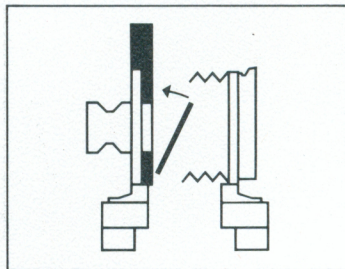
- A special refinement is the choice of triggering points. With the switch up, the flash is fired at the beginning of the exposure, as usual.

- With the switch down, the flash fires just before the end of the exposure. During for instance long time exposures this prevents unwanted subject movement — of sitters or people — before the end of the (silent) exposure. Also, you avoid unwanted repeated flashing if the flash unit recharges during a long time exposure. That makes separate switching off of the generator (another distraction) unnecessary.

- During ground glass screen viewing the flash contact is automatically disconnected. That also avoids unwanted triggering — again without separate switching off (another distraction).

- The flash socket and plug are clearly marked in red.

Filters — conveniently placed for maximum protection



— 10×10 cm (4×4 inch) gelatine filters or SINAR glass filters (103 mm diameter) fit at the rear of the shutter, protected against dust, moisture or reflection. That way you don't have to change colour correction or emulsion matching filters when you change lenses. The same filters also fit the SINAR filter holder or gelatine filter holder.

Automatic economy switching

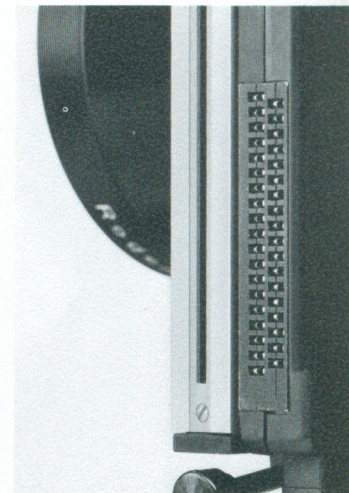
The SINAR *digital* shutter is powered by a rechargeable accumulator battery which can in turn be connected to a mains adapter and charger. An automatic economy switching circuit reduces current consumption with battery operation.

A *warning light* in the centre of the display window blinks on and off when the battery nears exhaustion. You then have enough power left for about 20 exposures.

When the battery is exhausted, operation of the *digital* shutter is blocked to avoid wrong exposures.

The unique battery cable is clearly marked in white.

Programming — with the built-in computer



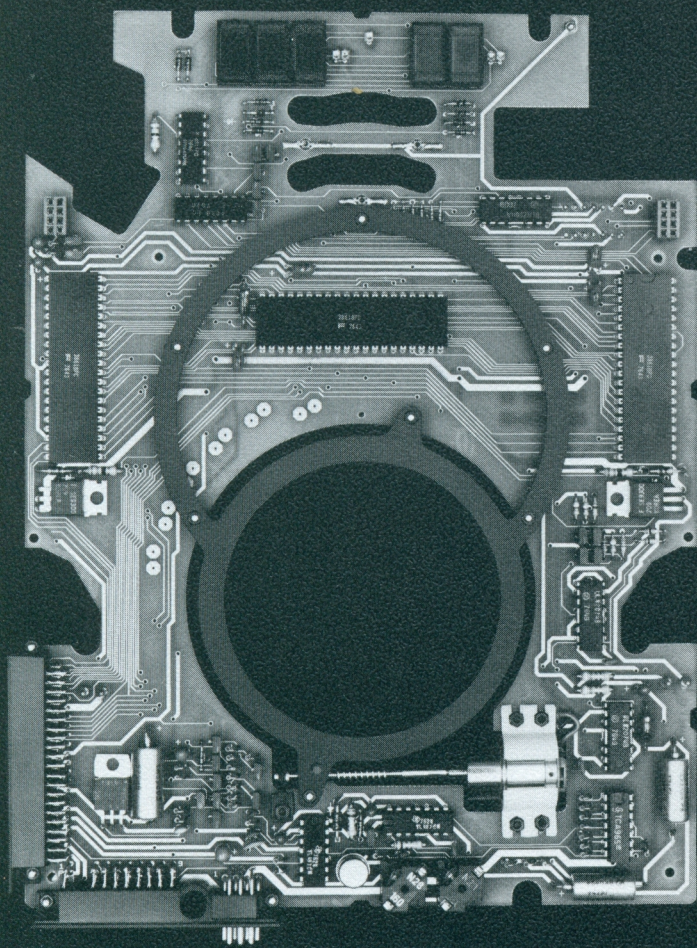
Like a modern computer, the SINAR *digital* shutter can take peripheral units for extended specific automation. Such units plug into the sockets at the side.

Here, too, we are planning ahead for advanced future versatility with the electronic SINAR *digital* modular system. And all that without making any equipment obsolete.

With the SINAR digital shutter, working with the view camera becomes a pleasure.

* With SINAR DB auto-aperture lenses. Many existing view camera lenses can be remounted from their original mount into a DB auto-aperture mount. See conversion set 446.21 in the lens list.

Electronics and the SINAR system



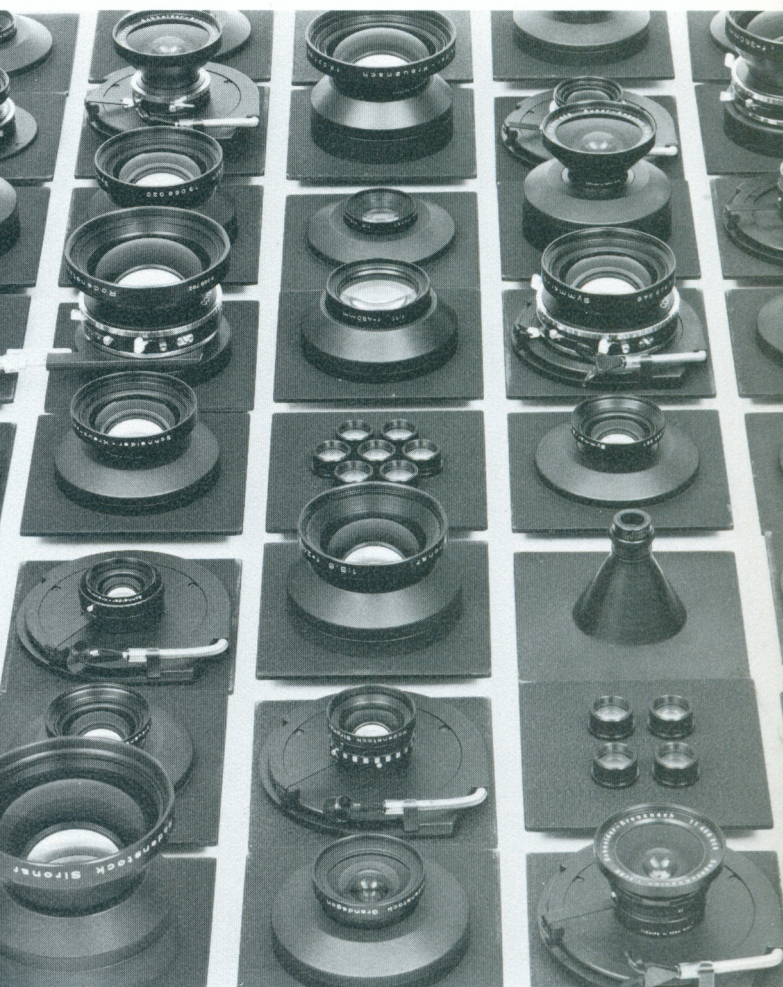
The core of the *digital* shutter is a microprocessor system. This evolution is consistent with the system approach in camera design. It takes over whenever electronics offers advantages over mechanical control.

The result is an utterly new performance level in a view camera. It meets all present and future requirements of simpler operation.

The aim remains clear :

Closer shooting concentration for better pictures

You can use more than 200 different lenses



Lenses with SINAR DB* auto-aperture control
Focal lengths from 65 to 480 mm

Lenses with SINAR B aperture control unit
Focal lengths from 65 to 600 mm, various mounts

Lenses with Compur aperture control unit
Focal lengths from 65 to 360 mm

Lenses with Copal or Compur shutter
Focal lengths from 65 to 480 mm

Quadruple lenses

Multiple lenses

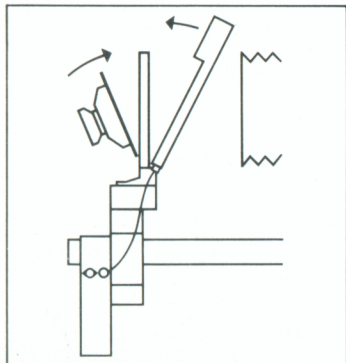
Macro lenses

Pinhole apertures

Enlarging, process, medium-format, miniature camera
and special lenses

* Many existing lenses can be remounted from their original mount into a DB mount; see conversion set 446.21 in the SINAR lens list.

Technical data



The SINAR digital shutter fits all SINAR cameras of any format. It is mounted at the rear of the lens standard, in front of the camera bellows. You change lenses in the usual way on the front standard of the camera. The battery case is mounted on the rail.

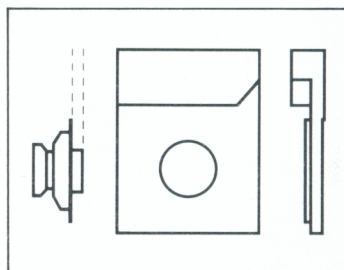
Up to date technology.

Built-in rotary 2-blade behind-lens slit shutter with very few moving parts. Digital electronics acting as computer (microprocessor system with MOS technology – the latest state of the art). Periphery units extend automation to further applications. Electro-optical location monitors check shutter blade operation at the speed of light. The blades are suspended at their centre of gravity in low-friction bearings. Apart from that, they operate virtually contactless and without lubricant, powered only by their stored angular momentum. The precision is independent of orientation and largely insensitive to shock, temperature or voltage. Simplest possible servicing by interchangeable plug-in electronic circuit module.

The clear shutter opening

is 75 mm, maximum rear lens mount diameter 80 mm. Lenses are, where necessary, set closely in front of the shutter blade plane. In other words, the lens mount protrudes up to 18.5 mm behind the lens board surface.

All lenses supplied by SINAR AG SCHAFFHAUSEN are mounted in this way. *When purchasing lenses check this important feature.*



Electrically powered.

Depending on use, a fully charged SINAR battery set lasts for 100 to 800 exposures.

A charger/mains adapter in conjunction with the battery case permits mains operation of the digital shutter with simultaneous accumulator charging.

Order numbers

digital shutter including release and automatic cable 522.11.002 and synchro lead adapter (7 cm long) 522.11.005

Battery case including accumulators 523.91

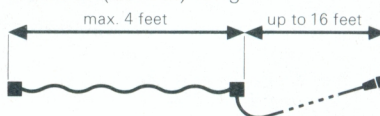
Charger/Mains adapter, 220/110 volts 523.11

Components

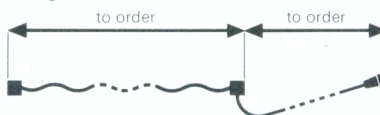
Standard release and automatic cable, maximum extension 1.2 metres (4 feet) 522.11.002



Long release and automatic cable, 5 metres (16 feet) long 522.11.003



Longer extensions to order 522.11.004



Synchro lead adapter with standard plug (approx. 7 cm long) 522.11.005

Exposure module 522.41

Changes in design and availability reserved.

Presented by:

sinar

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