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INSTRUCTIONS

www.bronica.com

Congratulations on your choice of the Zenza Bronica SQ single lens reflex camera which has been developed to give you high quality performance, simple handling convenience and extremely useful versatility, such as required for professional photography.

The Zenza Bronica SQ has been designed to take full advantage of the square 6cm x 6cm medium format and has been developed as a complete modular "system" camera, with a very high degree of interchangeability in lenses, finders, focusing screens, film backs, etc.

To obtain best results from your camera, may we suggest that you read this instruction manual carefully, before you even touch the camera. Thoroughly familiarize yourself with its working parts, before loading your first roll of film, and your pleasure in using the Zenza Bronica SQ will be even greater.

NOTICE

Although the instructions following are based on the use of the Waist-Level Finder S, the choice of finders is left to the discretion of the photographer.

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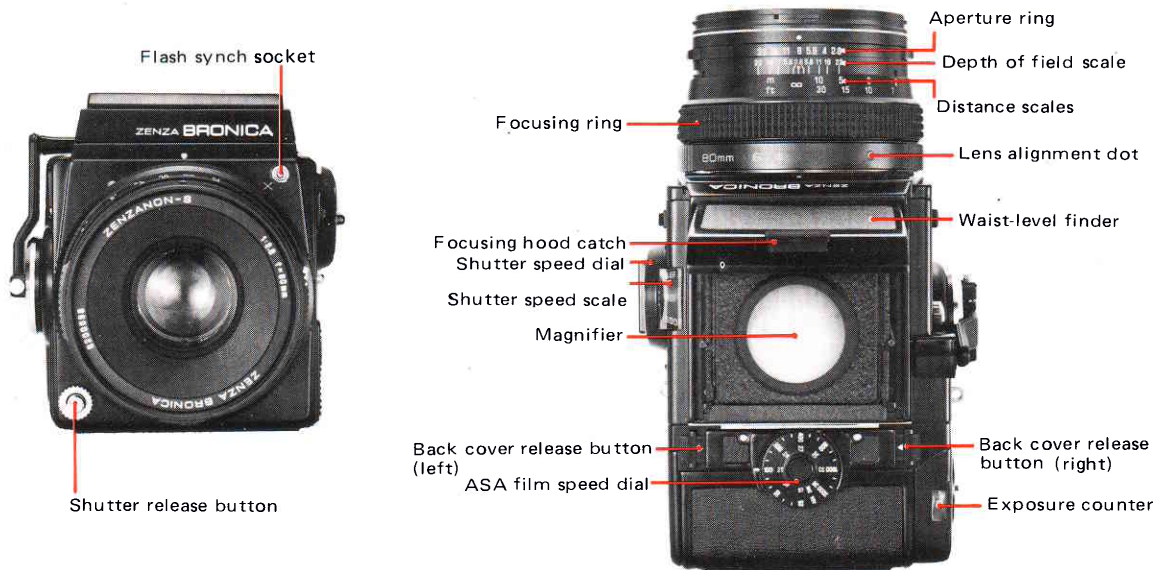
Specifications of the ZENZA BRONICA SQ

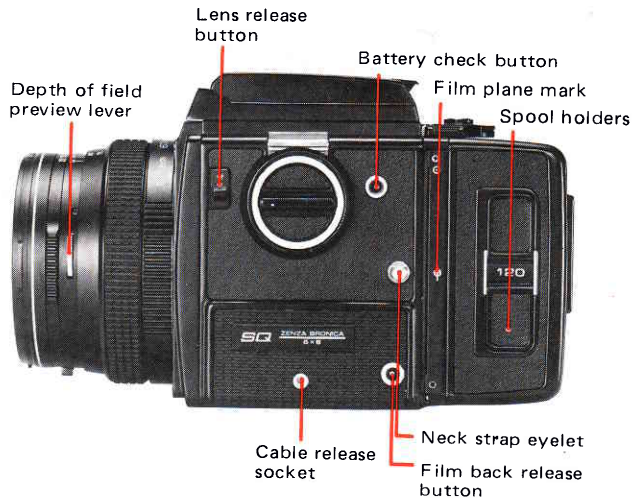
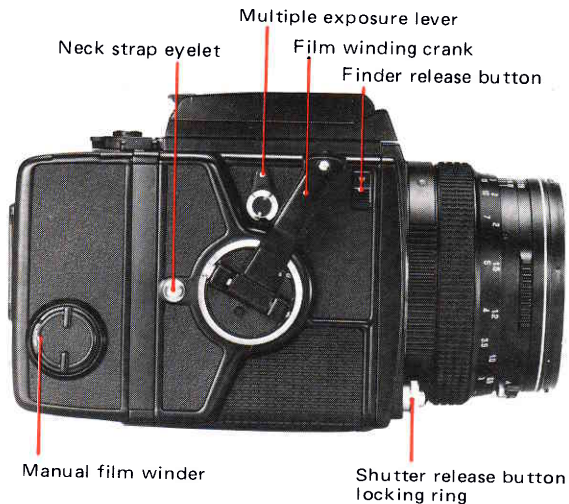
Type	6cm x 6cm format lens shutter single lens reflex camera, with interchangeable lens, film back, finder and focusing screen systems.
Frame size	55.6mm, x 55.6mm
Film	120 roll film (12 exposures) and 220 roll film (24 exposures), with exclusive film backs.
Standard lens	Zenzanon-S 80mm F2.8 lens; interchangeable type; 6 elements in 4 groups; multi-layer anti-reflection coated; 51° angle of view; F22 minimum aperture; helical focusing from infinity to 80cm.
Filter size	67mm diameter on 50mm to 250mm lens; 82mm diameter on 40mm lens; and 95mm diameter on 500mm lens.
Lens mount	Exclusive four-claw Bronica SQ bayonet mount.
Focusing	Helical focusing system built into each lens; angle of rotation 171° for standard lens.
Lens diaphragm	Fully automatic instant reopening lens diaphragm action; equal-distant aperture scale graduations; depth of field previewing.
Shutter	Electronic control SEIKO #0 between-lens leaf shutter; shutter speeds 8 sec. to 1/500 sec., without intermediate settings, plus T (time exposure); mechanical control 1/500 second.
Multiple exposure	Multiple exposure possible with lever on camera body.
Film back	Daylight loading interchangeable type; exclusive backs for 120 (12 exposures) and 220 (24 exposures) roll films (supplied with Film Back SQ 120); with ASA film speed dial coupling to CdS MF Finder S and CdS MM Finder S, when attached.
Finder	Interchangeable finder system (no finder specified as standard type).
Focusing screen	Interchangeable type. Standard type, supplied with camera, has split-image rangefinder spot surrounded by microprism ring and full-area matte screen. Optional types are (1) central matte spot, (2) full-area matte with grid-lines, (3) microprism spot and (4) split-image rangefinder spot.
Flash synchronization	X-setting (up to 1/500 sec.)
Battery checking	Red-colored LED lights up at front end of finder, outside screen area, when battery check button is depressed; also doubles as shutter closing signal.

Battery	Single 6-volt silver oxide battery (Eveready No. 544, Malloy PX-28 or 4G13) or alkaline-manganese battery (SR44).
Dimensions	92mm wide x 109mm high x 179mm long, with standard lens and waist-level finder attached.
Weight	1,500 grams (with standard lens and waist-level finder)
	900 grams SQ camera body w/Film back SQ
	130 grams Waist-level finder S
	470 grams Zenzanon-S 80mm lens

The specifications are subject to change with or without prior notice.

Parts of the ZENZA BRONICA SQ





Time
exposure lever

Set screw

Flash synch contact

Accessory mounting guide

Tripod socket (1/4" screw)

Battery chamber cover

Battery chamber button

Film type indicator frame



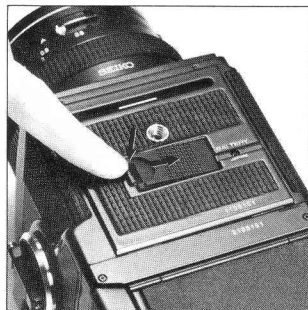
1 Loading the Battery

The electronically-controlled shutter will not work without loading the battery.

The shutter will be mechanically controlled when the battery is not loaded and will be released at 1/500 sec., regardless of the setting on the shutter speed dial.

Use one 6 volt silver oxide battery or alkaline-manganese battery.

* The battery may be obtained at any photographic equipment or electrical appliance shop.



A. Depress the battery chamber button with your finger and, at the same time, move the battery chamber cover in the arrow-indicated direction. The cover will come off easily.

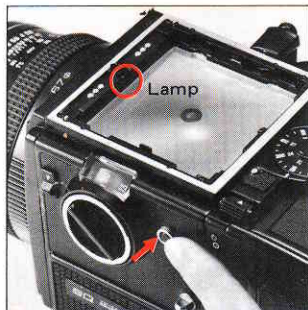


B. Coincide the plus (+) and minus (—) marks on the battery with similar polarity indications in the battery chamber. Then, push in the battery.

Insert the battery chamber cover into the BATTERY end first and then move the cover in the other direction (opposite to the arrow indication) until it locks.

* The shutter will be mechanically-controlled (at 1/500 sec.) when the battery is loaded with polarity marks reversed.

2 Battery Checking



If a red-colored LED battery check lamp lights up outside the focusing screen area (central front of finder), when the battery check lamp is pressed, the battery is loaded properly and there is sufficient power for operations.

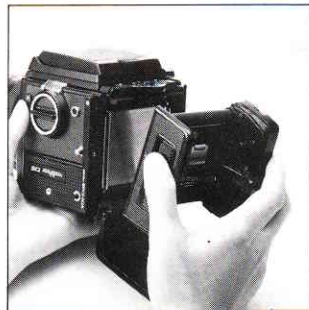
* If the lamp does not light up,
(1) the battery is not loaded properly or (2) the battery is completely drained and should be exchanged.

3 Film Loading

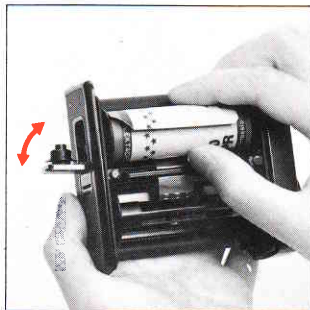


A. To open the back cover, squeeze the left and right back cover release buttons, in the arrow-indicated directions, at the same time and the back cover will open.

The film back attached to the camera body is the Film Back SQ 120 which is exclusively for 120 roll film. To use 220 roll film, an exclusive Film Back SQ 220 must be purchased, although operations will be the same.

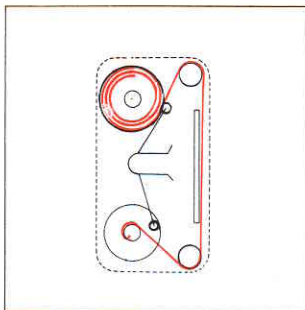


B. The film holder can be taken out for film loading, upon opening the back cover.



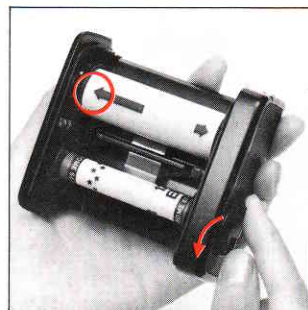
C. There are two spool holders on the film holder. The top one is for the fresh film spool while the bottom one is for the empty take-up spool. The left-side shafts of both spool holders can be opened outwards, as illustrated. Therefore, insert the right end of the spool on to the right-side shaft, which is fixed, and then close the left-side holder (shaft) which will engage the spool.

* The spool holders on the left side will be locked securely, when the back cover is closed.



D. After loading the fresh film spool properly, draw out the leading end of the film and turn it across the film pressure plate (as illustrated). Run it down and turn it over to the take-up spool. Insert the leading end into the slit of the take-up spool and wind slightly until securely engaged.

* The inside black surface of the leader must face out when running across the pressure plate, in this case.

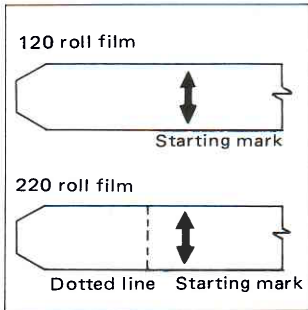


E. Rotate the manual film winder on the right side of the film holder in the arrow-indicated direction. When the starting point, or arrow mark, on the leader is aligned with the triangular ▼ start-mark on the top left side of the film holder, stop rotation.

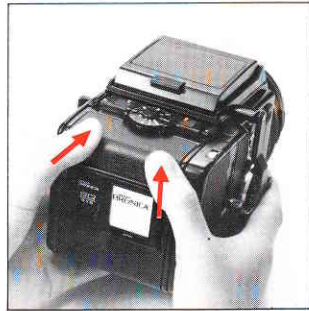
* When loading 220 roll film in the Film Back SQ 220, do not mistake the dotted line before the arrow mark for the start-mark.



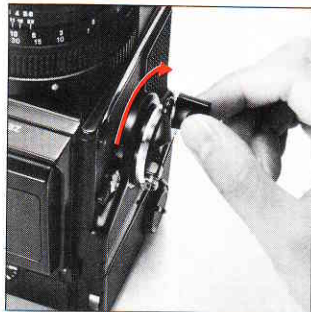
F. The starting point, or arrow mark, can also be aligned with the start-mark, with the film holder loaded in the film back. Simply rotate the film winding crank on the camera body, in this case. This method is preferred since there will be coupling with the camera body mechanism, from the beginning.



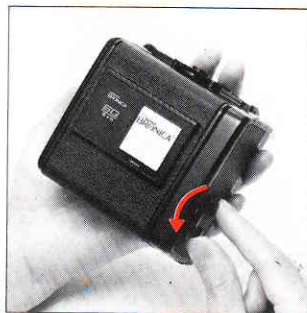
* If the film is not advanced when the film winding crank is rotated, the film holder is not inserted properly and/or the camera body may be set for multiple exposures. In the latter case, return the multiple exposure lever to an upright or vertical position. See "18. Multiple Exposures" on page 25.



G. Close the back cover, by pressing it firmly against the base of the film back, as illustrated. The back cover will automatically lock and close. The same operation will close the back cover when the film back is detached from the body.

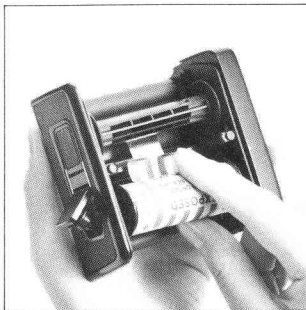


H. Upon loading the film, rotate the film winding crank until it stops to place the first frame into place for taking the picture. The exposure counter will also change from "S" to "1", while the shutter will also be cocked.



When the film back is detached from the camera body for film loading, the manual film winder is used for advancing the film. The film will stop when it is in place for the first exposure, with the exposure counter also changing to "1". However, it will be possible to rotate the manual film winder and, therefore, it should be rotated 2 or 3 times more, in order to take up any slack in the loaded film.

4 Film Unloading



A. After the 12th exposure of the 120 roll film (24th exposure of the 220 roll film), the film winding crank will turn freely with further rotations. Therefore, continue rotating the film winding crank until the remaining film and all the leader paper is wound up on the take-up spool.

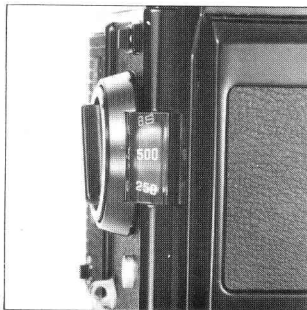
Open the back cover when winding action becomes very light.

B. Remove the film holder and, while preventing the loose film from unwinding, take out the take-up spool. Seal the exposed film and return it to its original box until development.

* Load and unload film away from direct sunlight and/or strong illumination.

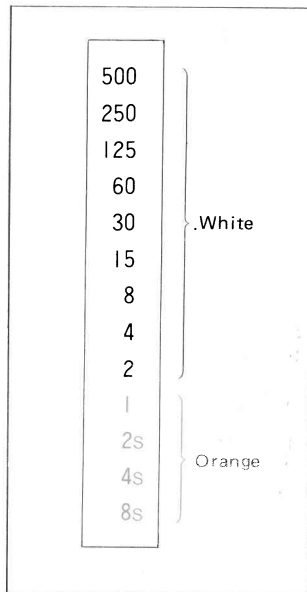
* Use 120 roll film with Film Back SQ 120 and 220 roll film with Film Back SQ 220.

5 Setting the Shutter Speed Dial



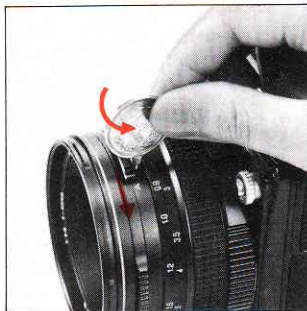
A. The shutter speed scale is viewed in its window over the shutter speed dial. The numbers on the scale are shutter speed settings, with numbers 1 to 8S full numbers and numbers 2 to 500 fractions of a second. For example, "8S" is 8 sec., "2S" is 2 sec. and "500" is 1/500 sec.
 * The shutter is released at 1/500 sec., regardless of the setting when the battery is not loaded or is completely drained.

B. The numbers on the scale are color-coded in orange and white. Orange-colored numbers are full number settings of 1 second and longer while white-colored numbers are settings from 1/2 to 1/500 second. There is no B (bulb) setting. See the following page for time (T) exposures.
 Shutter speed settings can be changed before or after shutter cocking.



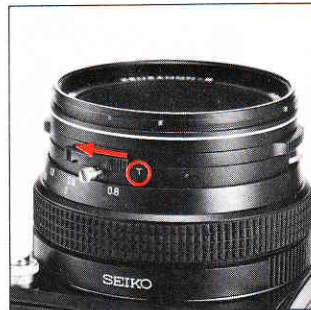
6 Time (T) Exposure

A. Time exposures are made with the time exposure lever on the lens, regardless of the setting on the shutter speed scale. However, the lever is locked to prevent accidental movement and must be unlocked for use. Unscrew the setscrew on the time exposure lever until further revolution is not possible, which will permit the lever to be moved freely.



B. Next, cock the shutter with the film winding crank and then shift the time exposure lever to the left (looking from the body towards the lens) which will expose a red-colored "T" on the barrel. The shutter will stay open when the shutter release button is depressed in this condition.

The shutter is closed by shifting the time exposure lever in the opposite direction and exposing the letter "A" once more.



* Except for time exposures, always shift the time exposure lever so that "A" is visible on the lens barrel and keep it locked with the setscrew to prevent accidental movement.

7 Exchanging Lenses

A. The lens cannot be attached or detached unless the shutter is cocked.

Therefore, first, rotate the film winding crank and cock the lens shutter.

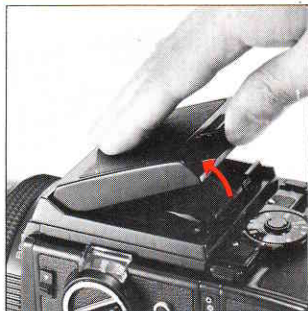


To attach the lens to the body, next, align the orange dots on the lens and body and then insert the lens fully into its mount. Rotate in the counter-clockwise direction until it stops, with an audible click, which will indicate that it is securely locked.



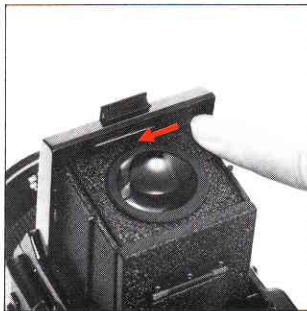
B. To detach the lens, the film winding crank must also be rotated to cock the lens shutter first. Then, press the lens release button down and, at the same time, rotate the lens in the clockwise direction until it makes a full stop, at which point it will be possible to detach the lens.

8 Waist-Level Finder and Interchanging Magnifiers



A. The focusing hood of the waist-level finder is opened by pushing up on the focusing hood catch at the rear end of the folded waist-level finder.

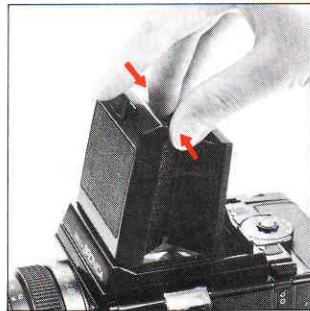
* There is no standard finder for the Bronica SQ, with the user having a choice of several finders. Instructions are based on the waist-level finder because of its popularity.



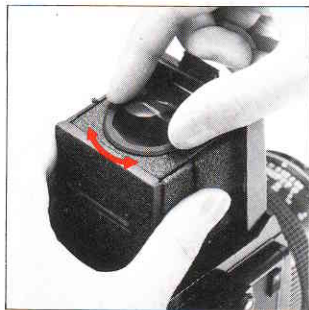
B. The magnifier is flipped into viewing position, by simply sliding the release lever in the arrow-indicated direction.

To store the magnifier, simply push it down until it catches.

* The magnifier can be exchanged for one matching the eyesight of the user.



C. To close the focusing hood, first, push down the magnifier (if it is in viewing position). Next, press in both side frames, as illustrated, and, at the same time, press the front frame back towards the rear. The focusing hood will automatically be folded down.

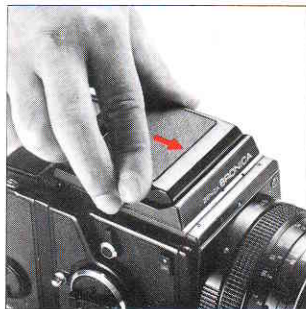


D. The standard magnifier supplied with the waist-level finder has a power of -1.50 diopters, which can be exchanged for others with powers of $+1.50$, $+0.50$, -0.50 , -2.50 , -3.50 and -4.50 diopters. These optional accessories should be purchased to suit the user's eyesight, if necessary.

Simply rotate the magnifier frame in the counter-clockwise direction to unscrew.

Attach in the reverse manner.

9 Interchanging Finders

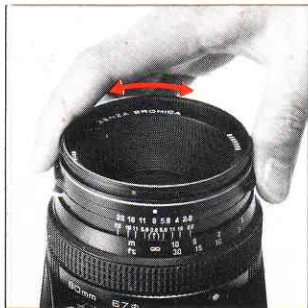


A. The finder can be interchanged, with other optional finders, to match shooting conditions to photographic conditions. To attach the finder, align the front end of the finder with the front end of the finder frame on top of the camera body, as shown. Then, gently lower the finder and, when well-seated, slide forward until it locks.

* Although instructions are based on the waist-level finder, it is not necessarily the finder that is supplied.

B. To detach, simply depress the finder release button, while, at the same time, sliding the finder backwards where it can be taken up.

10 Setting the Aperture



A. The aperture ring is rotated, in either direction, to set the required f/number opposite the white index dot. The aperture ring click-stops at the numbered settings. Intermediate settings are also possible.

* Intermediate settings cannot be used when the CdS MF Finder S and CdS MM Finder S are used.



B. All interchangeable lenses for the Zenza Bronica SQ have fully automatic lens diaphragms which means that the focusing screen is always viewed at the full aperture, with the brightest possible image. However, depressing the depth of field preview lever will stop the lens diaphragm down to the pre-selected lens opening and permit the photographer to check the depth of field effect on the focusing screen.

* The aperture ring must not be adjusted while the depth of field preview lever is being depressed.

* If exposure measurements are taken with the depth of field preview lever depressed, when using either CdS MF Finder S or CdS MM Finder S, the shutter speed setting indicated will cause over-exposure. This is because proper exposures are obtained with exposure measurements made at the full aperture.