This manual is for reference and historical purposes, all rights reserved.

## This page is copyright© by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

If you use Pay Pal or wish to use your credit card, click on the secure site on my main page.

BRONICA

ETRS

ETRC

INSTRUCTIONS

Congratulations on your choice of the Zenza Bronica ETRS (or ETRC) single lens reflex camera which will offer you high quality performance, handling convenience and versatility required for professional photography. The Zenza Bronica ETRS and ETRC have both been developed as "system" cameras, with a very high degree of interchangeability in lenses, finders and focusing screens, with the ETRS also having full film back interchangeability. Both cameras are also backed up by a full range of valuable accessories which permit use in many other day-to-day assignments which require a fast-handling

camera with complete exposure automation.

To get best results from your camera, may we suggest that you read this instruction manual carefully, before you even touch the camera. However, if your camera is the ETRC, please disregard instructions regarding the film back which are for the ETRS only.

#### NOTICE

Since both system cameras permit the photographer to build up a personalized system, the choice of finder has been left to the user's discretion. (However, the instructions are based on the use of the Waist-Level Finder.)

## Contents

Specifications	2	17. Multiple Exposures 25
Parts of the ZENZA BRONICA		18. Attachment and Removal of
ETRS/ETRC	. 4	Film Backs 26
1. Loading the Battery	_	19. Construction of Film Back 28
2. Checking the Battery	_	20. Interchanging Finders and Magnifiers . 29
3. Film Loading	_	21. Interchanging Focusing Screens 30
4. Film Unloading		22. Film Type Indicator Frame 32
5. Setting the Shutter Speed Dial		23. Attaching and Removing the
6. Time (T) Exposures		Neck Strap
7. Exchange Lenses		24. Facts about the Battery 34
8. Waist-Level Finder		25. Pointers on Shooting 35
9. Setting the Aperture		26. Care of the Zenza Bronica
10. Focusing Adjustments		ETRS/ETRC
11. Film Advance and Shutter Cocking		27. Accessories for Increasing
12. Exposure Counter		the Versatility of the ETRS/ETRC 37
13. Shutter Release Button		28. Zenzanon Interchangeable Lenses 43
14. Distance Scale and Depth of		Depth of Field Table 46
Field Scale	22	Accessories for the Zenza Bronica
15. Infrared Photography		ETRS/ETRC
16. Flash Photography		

#### Specifications of the ZENZA BRONICA ETRS/ETRC

Type 4.5cm x 6cm format lens shutter single lens reflex camera, with interchangeable lens, film back, finder and focusing screen systems. Frame size 42.5mm x 55.1mm (side/length ratio of 1:1.29 closely matches standard paper and reproduction sizes) Film 120 roll film (15 exposures) Standard lens Zenzanon E 75mm F2.8 lens; interchangeable type; 5 elements in 4 groups; multi-layer anti-reflection coated: 50° angle of view, F22 minimum aperture, helical focusing from inf. to 60cm.(2 ft.) Filter size 58mm diameter screw mount on 75mm lens: 62mm diameter screw mount on lenses from 40mm to 250mm focal lengths. Lens mount Exclusive four-claw Bronica bayonet mount. 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. plus T (time exposures); mechanical control setting 1/500 sec. Multiple exposure Multiple exposures possible with lever on body. Film back ETRS has daylight loading interchangeable backs, with exclusive backs for 120/220 roll films, 70mm film and Polaroid film pack and is supplied with the 120 roll film back. ETRC has a fixed back with interchangeable film holders for 120/220 roll films and is supplied with the former

Finder system	optional finders or was exposure)-II finder, rot sports finder. (No sta	system, with choice of five aist-level finder, AE (automatic ary viewfinder, prism finder and andard finder is supplied and,	
Focusing screen	Interchangeable type. oriented split-image r	ne must be ordered separately.) Standard screen has diagonally- angefinder spot surrounded by II-area matte screen. For optional 31.	
Flash synchronization	X-setting (up to 1/500 s	sec.)	
Battery checking		ts up within screen area when s depressed, if there is sufficient	
Battery	Single 6-volt silver oxide battery (Eveready No. 544, UCAR No. 544 or Mallory No. PX-28); also powers AE-II finder, when attached.		
Dimensions	(6-1/4") long (with star	( 106mm (4-1/4") high x 157mm adard lens and waist-level finder).	
Weight		ETRS camera with waist level finder and 75mm lens	
	493 grams (1 lb.):	ETRS body only (with battery)	
	1,330 grams (2.9 lbs.):	ETRC camera with waist-level finder and Zenzanon 75mm lens	
	803 grams (1.7 Jbs.):	ETRC camera (with battery) only	
	326 grams (11.4 oz.):	120 roll film back only	
	417 grams (14.6 oz.):	75mm F2.8 lens only	
	110 grams (3.8 oz.):	Waist level finder only	

#### Parts of the ZENZA BRONICA ETRS ETRC









## Loading the Battery ETRS ETRC



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

The shutter will be mechanicallycontrolled when the battery is not loaded or when it is loaded with its polarity marks reversed. It will then be released at 1/500 sec., regardless of the setting on the shutter speed dial.

Use one silver oxide battery (EVEREADY No. 544 or equivalent).



B. 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.

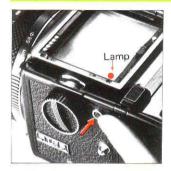


C. Coincide the plus (+) and minus (-) marks on the battery with similiar polarity indications in the battery chamber. Then, push in the negative end of the battery first and follow with the positive end.

Insert the BATTERY end of the battery chamber cover which also has a mark coinciding to that on the body. Then move the cover in the other direction (opposite to the arrow indication) until it locks in place.

ETRS

ETRC



If a red-colored battery check lamp lights up in the left-rear corner (of the waist-level finder) when the battery check button is pressed, the battery is loaded properly and there is sufficient power for electronic operations. \* If the lamp does not light up, (1) the battery is not loaded properly or (2) it is completely drained.



A. To detach the film holder. open the back cover. First, press the safety lock (1) in the arrow-indicated direction and then push the back cover release button (2) towards the exposure counter.

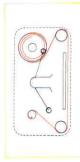


B. Then, the film holder can be detached.



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.

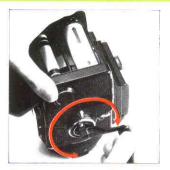


D. When the fresh film spool is loaded, draw out the leading end and turn it across the film pressure plate, as shown. Run it down to the lower end and turn it over to the take-up spool. Insert the end into the take-up spool slit and wind it slightly until engaged.

\* The inside of the leader paper must face out, when running across the film pressure plate.



F. Unfold the manual film winder on the right side of the film holder and rotate in the arrow-indicated direction, while checking the advancing film. When the starting point, or arrow mark, is aligned with the triangular  $\forall$  start-mark on the top left side of the film holder, stop rotation.



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.



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, with the safety lock also locking the back cover release button.

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.

The manual film winder on the film back should be used to advance the film to its first frame, when the film back is detached from the body. However, the manual film winder will not stop rotating.

# 4 Film Unloading ETRS ETRC



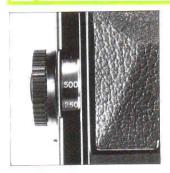
A. After the 15th exposure of the 120 roll film (30th exposure of the 220 roll film), the film winding crank will turn freely with further rotations. Therefore, continue rotating the film winding crank until the remaining film and all the leader paper is wound up on the take-up spool.

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.

## Setting the Shutter Speed Dial ETRS ETRC

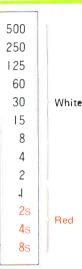


A. The shutter speed scale is viewed in its window over the shutter speed dial. The numbers on the scale are shutter speed settings, with numbers 1 to 85 full numbers and numbers 2 to 500 fractions of a second. For example, "8S" is 8 sec., "2S" is 2 sec. and "500" is 1/500 sec. \* The shutter is released 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 red and white. Red-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.

The shutter speed dial cannot be rotated beyond the settings for 1/500 sec. and 8 sec., at both ends of the scale.



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 ETRS ETRC



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

Therefore, first, rotate the film winding crank and cock the lens shutter. Then, rotate the lens release button 45° in the clockwise direction and depress it at this position.



Next, while keeping the lens release button depressed, rotate the lens in the clockwise direction, too, until it makes a full stop, at which point it can be detached.

The locking ring on the lens release button will automatically return to "lock" when pressure is released from the lens release button.



- B. To attach the lens to the body, first, align the red dots on the lens and body and then inthe lens fully into its mount. Rotate in the counterclockwise direction until it stops, with an audible click which will indicate that it is securely locked.
- \* The lens cannot be attached. unless the film is advanced and the shutter cocked on the body.

## Waist-Level Finder ETRS ETRC



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

\* As noted, there is no standard finder for the Bronica ETRS/ETRC and the user has a choice of several finders. Instructions are made on the basis of the waist-level finder because of its popularity.



B. The magnifier can be flipped up into viewing position, by simply sliding the focusing hood/magnifier catch in the arrowindicated direction (to the left). To return the magnifier to its storage position, simply push it down until it catches.

\* The magnifier is interchangeable with one matching the eyesight of the user. See "20. Interchanging Finders and Magnifiers".



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

#### Setting the Aperture ETRS ETRC





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 he used when the AE-II (automatic exposure) Finder is used.



B. All Bronica interchangeable lenses for the ETRS/ETRC 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 preselected lens opening (aperture). permitting 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. \* Furthermore, the depth of field preview lever must not be used for taking an exposure reading, with the AE-II Finder E, in both automatic and manual exposure operations, as the indicated shutter speed setting will not be correct. This is because the Bronica ETRS/ ETRC has been designed for full aperture metering and over-exposure will result, in this case.

## **10** Focusing Adjustments **ETRS ETRC**



A. The lens is focused on the subject, by rotating the focusing ring in either direction, while checking the effect on the microprism / split-image range-finder spot in the center of the focusing screen (standard type).



B. The central split-image spot splits the image diagonally, with the upper and lower halves being separated diagonally when the lens is out of focus. When in focus, however, the two halves will coincide with the diagonal displacement disappearing. The microprism ring surrounding the central spot can also be used for checking the sharpness of the focused image, since the image will glitter when the lens is not focused.



The full-area matte surface surrounding the central focusing aids can also be used for checking image sharpness.



Rotating the film winding crank completely one time, in the forward direction, will advance the film one frame and, at the same time, cock the shutter, with the winding action stopping automatically. On the other hand, short, rapid strokes, up to an accumulated full rotation, will also do the job.



The exposure counter shows the number of frames exposed or, in other words, is an additive type. Starting from "S", the odd numbers 1, 3, 5, etc., up to 15, are indicated in actual numbers while the even numbers are indicated with dots, coupled with the film winding crank action.

The letter "S" and number "15" are orange-colored while the other numbers and dots are white.



A. Depress the shutter release button with the ball of the finger. Press all the way in with a smooth and gentle action. There is no need for strength or jerky action, which will induce camera shake and affect picture sharpness.

\* A red-colored LFD will flash briefly in the left-rear corner of the waist-level finder, when the leaf shutter closes and the shutter action is completed.



B. Safety Lock The shutter release button has three settings to which it can be set by rotating in the clockwise direction. Two of these settings have safety locking features of slight difference. The three positions are indicated by the red dot being placed at the bottom, at a position 45° from bottom setting and at the side. with functions differing as per table

Release with		0000	e O
release button red dot posi- tioned at	Shutter release button	Motor-Drive E & Speed-Grip E release button	Cable release release button
Bottom	Releases	Releases	Releases
45° left	Locked	Releases	Releases
90° left	Locked	Locked	Locked

Remarks: Use Motor Drive E with red dot positioned at 45° left.

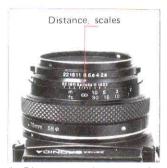
The shutter cannot be released, in the following cases:—

- 1. Shutter release button is locked.
- 2. Dark slide is inserted. ETRS
- 3. Film winding crank has not been rotated fully. (Same when the exposure counter is still between "S" and "1".)
- 4. Shutter is not cocked.
- Lens is not properly attached. (Same with extension tubes and bellows.)
- 6. Lens release button is being depressed.

- 7. All frames (15 on 120 roll film and 20 on 220 roll film) have been exposed already.
- \* If film winding crank is rotated while depressing shutter release button, the shutter will be released when the winding action is completed.
- \* A cable release or self-timer can be used with the cable release socket on the body.

#### 14 Distance Scale and Depth of Field Scale





A. Distance scales on Bronica lenses for the ETRS/ ETRC can be used for setting the focus on the required distance or finding the distance actually focused. Simply rotate the focusing ring and set the required distance opposite the green-colored index, which will adjust the lens for the required distance.



B. There is an apparent zone of sharpness, both in front and back of the focused subject. which is known as the depth of field. The depth of field scale shows the zone of apparent sharpness at any lens opening or distance and can be utilized for quickly and simply ascertaining the depth of field. The depth of field scale is next to the distance scales and is made up of identical pairs of apertures on both sides of the greencolored distance index. These

identical pairs of apertures indicate the distance that will be in focus at these lens openings. For example, if the 75mm lens is focused at a distance of 3m, it can be seen from the depth of field scale that the zone will extend from about 1.9 to 8 meters (6 ft. to 26 ft.), when a lens opening of F22 is used.