

ON TEST

The Bronica SQ-A

BY DAN O'NEILL

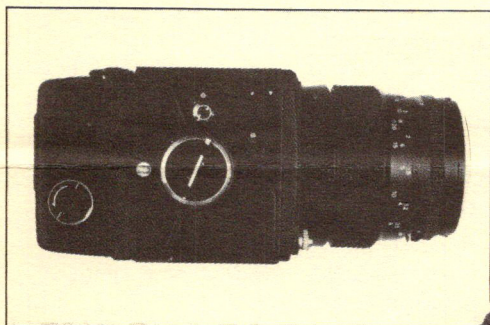


FIGURE 1

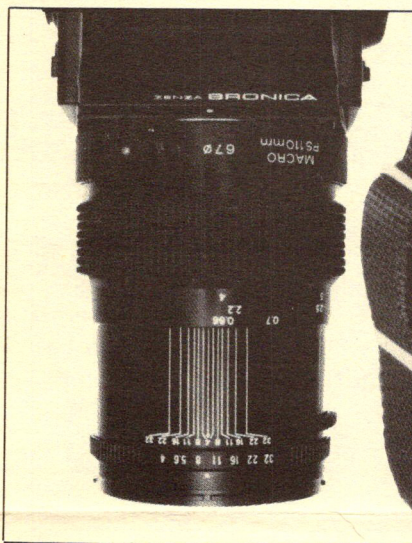


FIGURE 2

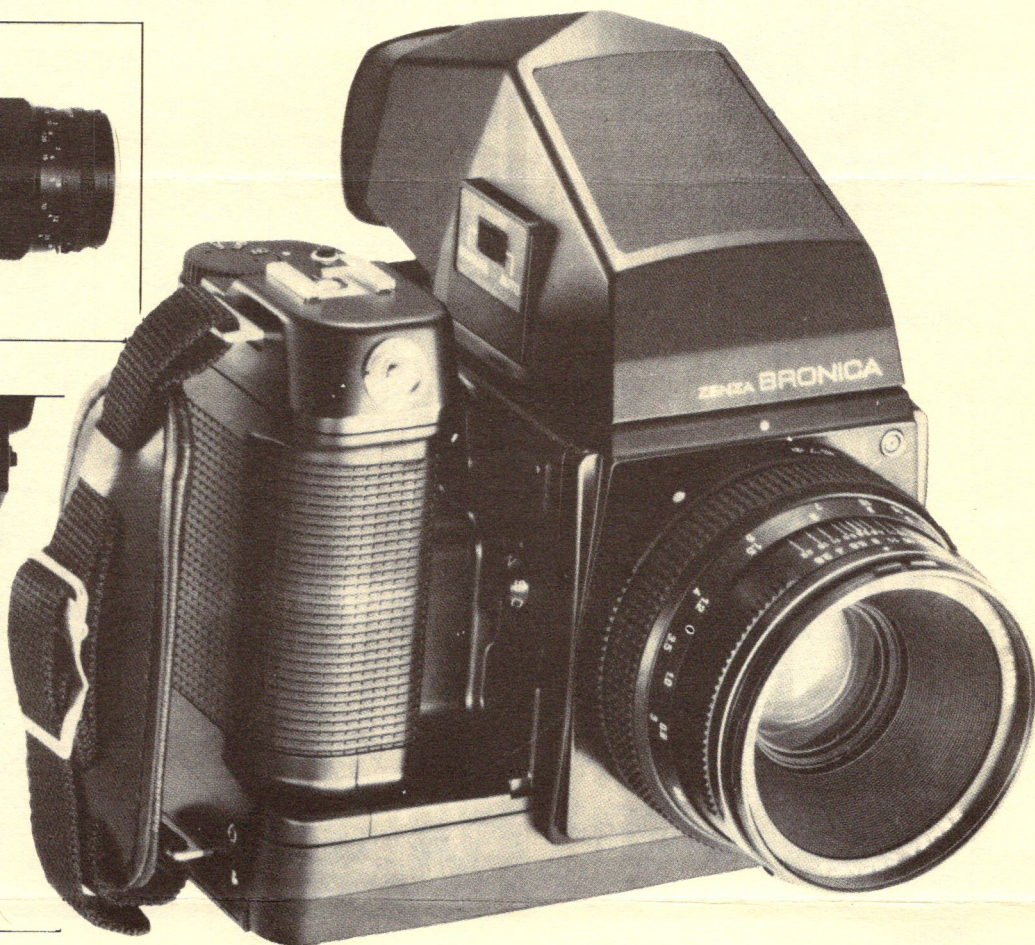


FIGURE 1. Controls on the right-hand side of the SQ-A include the film wind crank, multiple exposure lever, and mirror lock-up lever.

FIGURE 2. One of two new Zenanon lenses for the SQ-A, the 110mm PS f/4 macro.

FIGURE 3. Eye-level ME Prism Finder S.

FIGURE 4. The standard waist-level ME Prism Finder S. The ME Prism Finder S is a TTL exposure meter finder, coupling to the aperture and shutter in each Zenanon lens.

Unlike 35mm SLRs, the roll film SLR field is populated with relatively few cameras, all of which are of generally high quality. The simple reason for uniformly high quality in roll film SLRs is (probably: ED) that they are used mainly by professionals.

The selection of one make over another is, of course, due to a number of factors, reputation aside — features that suit one's particular area of photography, for example. And then there are logistical factors. Handling. Range of lenses and accessories. Adaptability. Compatibility. Nor should one ignore brand loyalty and purely personal preference. I often think that photographers choose much of their equipment

(all the above-mentioned factors being equal) as much for emotional reasons as they do for intellectual ones! Sometimes it seems that way.

Bronica is one of those cameras that held a fascination for me way back when it had a focal plane shutter. It was a hefty camera that felt solid and real. Composing and focusing was done with a waist-level finder, and metering was accomplished with a hand-held meter. The lenses (then) were excellent and sharp, producing crisp images, which, after all, are the primary criteria for any camera.

Some things have changed, but the essence of the Bronica camera has not. The SQ-A, the modern successor to the early

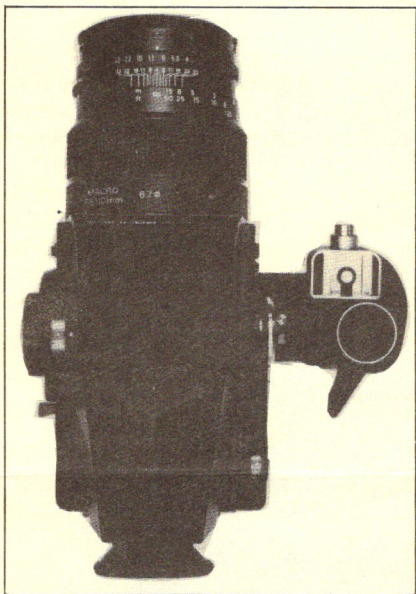


FIGURE 3

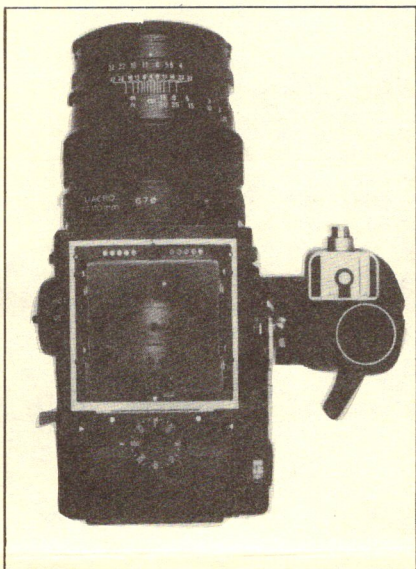


FIGURE 4

Bronica 2 1/4 square format, is still a solid, well-built camera. Now the shutter is a quiet leaf type contained in each lens, but the mirror, although pneumatically dampened, still has the Bronica sound. Somehow that sound is reassuring.

The SQ-A is, of course, a modular camera system with interchangeable lenses and backs. The backs include 120 and 220 film holders for 6x4.5cm images, a 35mm film holder for 24x54mm images, a 35mm film holder for panoramic 24x54mm images, and a 6x6cm Polaroid pack film holder. Each back has its own ISO (film speed setting) dial that couples to the electronics in the body, and will automatically program any meter prism in use to the correct ex-

posure index.

The SQ-A body features an instant return mirror that is very smooth in operation. The mirror action is clean, and its stop in the up position is well-dampened. Provision is made for locking the mirror up when working with long exposures to avoid even a hint of vibration.

The focusing screen is, of course, interchangeable. The standard focusing screen is the microprism/split image screen for general photography. The 6x6 screen and four others have etched outlines for using the 6x4.5-format back. Two other 6x6 screens have etched lines indicating the outlines for the two 35mm-format backs.

The controls are elegantly simple and

At A Glance Bronica SQ-A

Types: 6x6cm-format lens shutter single-lens-reflex camera, with interchangeable lens, film back, finder and focusing screen systems.

Frame size: 55.6x55.6mm

Film: 120/220 roll film, 135 roll film in film cartridge and Polaroid pack films. (Exclusive film backs for each film type.)

Standard lens: Zenzanon-PS 80mm f/2.8 lens; interchangeable type; six elements in four groups; multi-layer anti-reflection coated; 51° angle of view; f/22 minimum aperture; helical focusing from infinity to 80cm.

Lens mount: Exclusive four-claw Bronica SQ bayonet mount.

Shutter: Electronic control SEIKO #0 between-lens leaf shutter; shutter speeds eight sec. to 1/500 sec., without intermediate settings plus T (time exposure); mechanical control at 1/500 sec.

Multiple exposure: Multiple exposure possible with lever on camera main body.

Mirror lock-up: Mirror lock-up possible with switch lever for single or continuous picture taking.

Film back: Daylight-loading interchangeable type; exclusive Film Backs of SQ 120 (12 exp.) SQ-J 120 (15 exp.) SQ 220 (24 exp.) SQ-J 220 (30 exp.), SQ 135-N, SQ 135-W and Polaroid Film Back S; with ASA/ISO film speed dial on Film Back SQ/SQ-J

and ASA/ISO film speed switch on Polaroid Film Back S coupling to finders with built-in exposure meter, when attached.

Finder: Interchangeable finder system.

Focusing screen: Interchangeable type; Standard type (supplied with camera) has split-image rangefinder spot surrounded by microprism ring and full-area matte screen.

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 6V silver oxide battery (No. 544, PX-28 or 4G13) or alkaline manganese battery (No. S544 or 4LR44).

Dimensions: 92mmx109mmx179mm (SQ-A main body with standard lens, Film Back SQ 120 and Waist-level Finder S).

Weight: 1,500 grams (SQ-A main body with standard lens, Film Back SQ 120 and Waist-level Finder S).

Distributor: GMI Photographic, Inc., P.O. Drawer U 1776 New Highway, Farmingdale, NY 11735.

Suggested list price: Body, with 120 or 220 back: \$1,249; 65mm PS f/4 lens: \$1,222; 80mm PS f/2.8 lens: \$789; 110mm PSf/4 macro lens: \$1,375.

logically placed. On the right-hand side of the body are the film wind crank, multiple exposure lever, and mirror lockup lever. The mirror may be locked up for a single exposure, which then returns the mirror to the viewing position when the camera is cocked for the next exposure or locked up until you physically switch it to normal. On the left side of the body are the lens lock release, camera back release, cable release socket, battery check button, and shutter speed dial with shutter speeds from eight seconds to 1/500, plus T, visible in a window on top of the body. The shutters are contained in the lenses, but are controlled by the camera electronics, which interfaces with other accessories such as me-

ter prisms. The shutter release button and the pc socket are located on the front.

Each lens has its own depth of field preview lever, which is logical, ergonomically, for checking depth of field. The film speed dial, located on the interchangeable backs, has a range of ISO 25 to 200 and couples with the meter prism finders. Putting the ISO dial on the back allows you to change backs and film speeds during a shoot and not have to worry about resetting film speeds on one of the meter finders.

There are five finders for the Bronica SQ-A camera: Three are eye-level prism and two are waist-level finders. Two eye-level finders and one waist-level finder are meter-coupled. The AE Prism Finder S features aperture-priority automatic exposure providing stepless shutter speeds from eight seconds to 1/500 second.

The MF Finder S and the ME Prism Finder S are TTL exposure meter finders. Both couple to the aperture and shutter in each lens. Both finders allow half-stop shutter speed settings for precise exposure control. For example, with the MF or ME you may set the shutter speed at 1/30, 1/45, or 1/60 second.

Bronica employs a pair of metering cells to cover the whole viewing area. The coverage of the cells overlaps to produce a moderately center-weighted metering system. The MF and ME use CdS cells, while the AE finder needs and uses the faster-reacting silicon photocells.

I have been using the ME Prism Finder S on the SQ-A in the test and have found it to provide acceptably accurate exposure information. There are red "plus" and "minus" symbols on either side of a green "on target" symbol. A good part of the exposure accuracy is due to the employment of electronic, rather than mechanical, connections between the body and the lenses.

There are ten Zenzanon lenses ranging from 40mm to 500mm, plus a 2X teleconverter, for the SQ-A. Two of the lenses include the recently introduced Zenzanon PS 65mm f/4 and the Zenza-

non PS 110mm f/4 Macro. The Zenzanon PS series of lenses utilize the latest lens design technology. The 110mm leaf shutter macro is a good example of the new technology that uses computers to work out lens designs heretofore almost impossible to arrive at. The 110mm lens focuses down to 2.2 feet to produce a 1:4 magnification ratio. Yet it is reasonably priced for a leaf shutter lens, with a suggested list of \$1,375.

Like all Zenzanon lenses, the two new Zenzanon PS lenses are excellent. They produce well-detailed images that are sharp and crisp from edge to edge. Both lenses are smooth in operation and handle very well. They are welcome additions to the SQ-A line of lenses.

The SQ-A has an accessory, the Speed Grip, that was first introduced by Bronica for their 645 cameras. The crank handle is removed from the side of the SQ-A, and the Speed Grip connected to the shutter cocking mechanism in its place. Two strokes of the thumb-operated lever advance the film and cock the shutter. The Speed Grip gives you a good grasp on the SQ-A. For anyone who does a lot of eye-level shooting, the Speed Grip becomes an essential part of the SQ-A. Without the grip, the camera is somewhat awkward to hold and operate at eye level, but with the grip the SQ-A handles almost like a 35mm SLR.

Other accessories include an automatic bellows, auto extension tubes, close-up lenses, Speed Light G1, bellows lens hood, rapid focusing lever, and remote camera battery pack for keeping the battery warm in freezing temperatures.

The images made with the Bronica SQ-A lenses meet all the standard criteria: edge sharpness and resolution, good contrast and saturation. But they also have that indefinable something that makes Bronica images stand out in a crowd of images. I have been trying for years to figure out just what it is, and the nearest I can come is that the images produced by the SQ-A have visual texture. They emanate mood and feeling. [®]

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NEW BRONICA LENSES

PS 65mm f/4 & PS 110mm
f/4 Macro for the SQ-A
& SQ-Am cameras

By David Brooks



Most photographers who have chosen medium format cameras have been motivated by an appreciation for image quality. Of all the factors involved, it is the optics that chiefly influence the most apparent dimensions of quality. The next critical agent in getting ideal results is having a lens which is exactly suited to the kind of photography you're doing. Bronica has filled out its selection of focal lengths for their square format SQ cameras very nicely with two new applicatory models.

The 65mm f/4 is an ideal choice for general field applications, corresponding to a 35mm moderate wide angle for a 35mm camera. For the landscape photographer, and those working with similar situations, the 65mm focal length can be a more practical "normal" lens choice than an 80mm. It provides a wider angle of view and greater depth of field, and also produces a more dramatic rendition of perspective without the distortion limitations of shorter wide angles.

Just on the other side of the "normal" focal length is the reach of the Bronica SQ's new macro lens. 110mm for a 6x6cm format is comparable to the 70mm short end of the most popular zooms for 35mm cameras. Like the 65mm, the 110mm is a moderate deviation providing a more selective, narrower angle of view, yet without an appreciable loss of depth of field or a need to increase shutter speeds to assure freedom from camera motion blurring. In addition to the special functions associated with a macro, including a flat field focus plane optimized at short conjugates and

a greater focusing range, this new lens can also serve effectively and advantageously for all but the most close-up portraits, as well as performing product illustrations and similar studio chores.

EVALUATION

Although one of these two new Zenzanon lenses was a wide angle and the other longer than normal, both were about the same size and weight—modest for 6x6cm SLR lenses with built-in shutters. Beside adding little to the heft of the camera package, both lenses offer easy access to a rubberized focus ring close to the camera body. The aperture ring up front is well separated from the focus and offers distinct digital identification so the camera can be operated readily without taking one's eye from the viewfinder. Both lenses feature a control providing either automatic or manual diaphragm operation, as well as an accessible button to stop down the aperture to preview depth of field. Although both lenses are a stop slower than the 80mm standard lens, they provided bright screen images easily focused, particularly as each is close enough to normal to work effectively with both the microprism and split-image focusing aids.

The 110mm macro is unusually sharp at all focusing distances, in part due to a design which preserves image contrast and separates subtle distinctions in subject tones. The negative quality I obtained with the macro was akin to what I am used to using: a process-type lens with a 4x5 camera. Although extreme close-ups will require the use of extension tubes or a bellows attachment, for

SPECIFICATIONS

LENS: Zenzanon PS 65mm f/4
CONSTRUCTION: 9 elements in 7 groups
ANGLE OF VIEW: 62.3°
APERTURE RANGE: f/4 to f/22 with half-stop indents
DIAPHRAGM: Automatic
MINIMUM FOCUS DISTANCE: 0.6m (23.4 in.)
SHUTTER: Built-in leaf-type Seiko No. 0 with electronic speed control from camera body
SHUTTER SPEEDS: 8 to 1/500 plus Time
FILTER SIZE: 67mm screw-in
DIMENSIONS: 69.6x82mm (2.7x3.2 in.)
WEIGHT: 665g (23.4 oz.)
LIST PRICE: \$1,222.

LENS: Macro Zenzanon PS 110mm f/4
CONSTRUCTION: 6 elements in 4 groups
ANGLE OF VIEW: 40°
APERTURE RANGE: f/4 to f/32 with half-stop indents
DIAPHRAGM: Automatic
MINIMUM FOCUS DISTANCE: 0.66m (25.7 in.)
FOCUS RANGE WITH S-18 AUTO EXTENSION
TUBE S: 0.17 to 0.42m
FOCUS RANGE WITH S-36 AUTO EXTENSION
TUBE S: 0.33 to 0.59m
SHUTTER: Built-in leaf-type Seiko No. 0 with electronic speed control from camera body
SHUTTER SPEEDS: 8 to 1/500 plus Time
FILTER SIZE: 67mm screw-in
DIMENSIONS: 79x83mm (3.1x3.3 in.)
WEIGHT: 685g (24.1 oz.)
LIST PRICE: \$1,375.

DISTRIBUTOR: GMI Photographic, Inc., P.O. Drawer U, 1776 New Highway, Farmingdale, NY 11735; (516) 752-0066.

its focal length this lens focuses closer than a nonmacro. It permits ready access to photograph quite small areas of subject detail with no more effort than taking pictures with a normal lens at greater subject distances.

The 65mm's angle of view makes ultimate sense to me by producing a more distinct perspective effect and greater image depth than a normal lens, while not exaggerating size relationships with too obvious distortion. This wide angle's advantages are backed up by faultless performance. Although short SLR lenses must be retrofocus designs utilizing more elements and complexity than similar focal lengths for cameras without reflex mirrors, in the case of this lens it has not resulted in a tendency for flare and a general reduction in image contrast and acutance. Comparing the test results on the same film, processed along with tests of the 110mm macro, the 65mm held its own with subjects close enough to prevent the city atmosphere's content from diffusing the subject.

With both of these new lenses, Bronica maintains its good reputation for supplying superlative optics at moderate cost, when compared to the overall field of professionally oriented medium format single-lens reflex cameras. In addition, the practical uses for these two lenses make them a very complementary pair that add much to the SQ-A or SQ-Am camera system's capabilities.