

## TECHNICAL

# Format flexibility



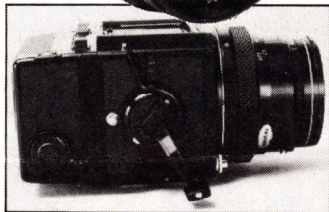
**John Kyriacou takes a look at the compact and easy to use Bronica ETRS**

*The 6×4.5 format gives 15 exposures on a 120 roll*

**D**o you think of all medium format cameras as big, clumsy to use, and expensive? That is true of *some* 120 roll film models — but there are also some exceptions . . .

The Bronica ETRS is a 6×4.5cm format camera that has been introducing countless 35mm photographers to the delights of large format shooting over the past few years. It is inexpensive, compact and easy to use — and is still one of the best first-time medium format buys.

One argument that is usually sparked off when discussing roll film cameras is which format size is "best". Many experienced photographers still think that the 2¼ square format is tops for convenience and versatility in darkroom cropping, while others insist big is beautiful and won't use anything but 6×7cm. The 6×4.5cm format, however, has many advantages. It gives 15 exposures on a roll of 120 film, comparing favourably with 6×6 and 6×7, which give 12 and 10 shots respectively. This is particularly important if you have only a single film magazine, and are shooting a great many pictures. You may, too, prefer a rectangular format over a square one — even though the latter *can* be cropped to the same dimensions. When using the full frame of the negative in printing, the rectangular formats also relate bet-



*Film crank and shutter release*



*Shutter speed dial for manual use*



*Interchangeable viewfinders are useful for different shooting situations*

ter to the common paper sizes. The smaller 6×4.5cm format scores over the 6×7cm in that there are more projectors and enlargers available for it.

For the ETRS body, 75mm Zenzanon lens, 120 film back, and the waist-level finder, you are going to have to pay £400. That's about the price of a top class 35mm SLR; but it's exceedingly good value for a medium format camera with interchangeable film backs! Also available in the 6×4.5cm market are the Fujica fixed lens models, and the three Mamiya M645s but these do not have interchangeable backs, and so aren't as

versatile.

Of course, there are 6×6 and 6×7 models with the same features as the ETRS, but they are a lot more money. The lowest cost for a Hasselblad is around £1000 (if you can find it), and the SQ Bronicas start at £680. The GS-1 is Bronica's 6×7cm model — and that costs just under £900. These cameras could be just beyond the reach of most enthusiast hobby photographers, especially those also wishing to equip with additional lenses and maybe even a couple of spare backs.

In its basic form, the ETRS is a manual exposure control camera with electronically-controlled

shutter speeds from 1/500sec to 8sec. Flash synchronisation is possible at all shutter speeds, and there are a number of other useful features, such as depth of field preview, multiple exposure facility, and a time exposure setting.

It is quite a compact camera when compared to the usual medium format heavyweights, and handling is extremely good. On the right hand side of the body are the wind-on crank, multiple exposure switch, and shutter release. On the left side is the shutter speed dial. When using the ETRS with the waist-level finder, the film advance crank allows quick and easy operation; but if using one of the eyelevel prism finders the optional Speed Grip introduces even better handling.

A single 6V battery provides all the power for the electronic shutter, and the automatic AE-II metering head when fitted. The cell goes into the battery chamber in the base of the camera. A battery check is also provided, with an LED lighting up in the viewfinder when there is sufficient power. On most cameras this facility is an extraneous feature, but on the ETRS it is very important: if there is no power in the battery the Bronica will operate at its mechanical shutter speed of 1/500sec, and without checking the battery the photographer will not know if the camera is using the set shutter speed or the mechanical one. And, of course, 1/500sec will usually give disastrously underexposed results if the intention was to shoot at, say, 1/125sec! In fact, Bronica *should* have provided a slower mechanical speed, to 1/125 or 1/60sec; at least that way the photographer could use the full aperture range to give a greater number of successful shots in all types of lighting.

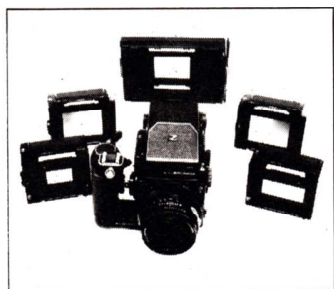
Loading the ETRS with film is simple enough, and anyone who has loaded a roll film magazine before will have no difficulty. First-timers will also find the procedure easy if they follow the instructions. The magazine can be loaded with the back attached to the body, or pre-loaded ready for quick film change. Unlike the



## BRONICA ETRS



Contacts for AE-II metering finder



Interchangeable backs for versatility

SQ backs, those for the ETRS do not have separate film speed settings for automatic translation to the metering finder, so if using the AE-II head, remember to change its film speed setting whenever you change film type.

As well as the standard 120 back, Bronica provide alternatives in the form of 220, 35mm, 35mm Wide, and Polaroid backs. This multi-format personality gives the ETRS a considerable advantage over the Mamiya M645s, and the provision of instant Polaroid pictures means that it is suitable for precise exposure checks.

Winding the film on requires a single rotation of the film advance crank, or two throws of the film wind lever on the Speed Grip E.

Viewing with the waist-level finder gives the usual reversed images; with the 75mm Zenzanon lens the f2.8 maximum aperture gives a bright, easy-to-focus screen.

The standard screen is the split-image/micropism type and the finder has a built-in magnifier for critical focusing. The only irritation is that the 75mm lens has a very narrow focusing ring, and this could slow the process down. A quick focusing lever would be a worthwhile investment.

The battery check LED in the viewfinder also provides an exposure confirmation. This is helpful when dealing in long shutter speeds, because even when the camera is midway through an exposure it can be accidentally advanced, consequently spoiling the shot.

The depth of field preview is built into the Zenzanon lenses, and will give a clear indication when the stop-down lever is depressed. The multiple exposure lever is located just above the film advance crank; when engaged it will allow as many exposures on a single frame as you need.

The flash synch socket is the only way to trigger a flash unit with the ETRS, though the Speed Grip E has a hotshoe for cordless flash control.

The AE-II Finder E converts the ETRS to an aperture priority automatic exposure camera with metered manual. At £214 it is an expensive addition, but if it is needed there is no alternative. It uses two silicon photocells to give an averaged meter reading, and has a sensitivity of EV4 to EV17 when using ISO 100 film. The film speed range is ISO 25 to 3200 and there is also an exposure compensation dial for up to one stop under/over exposure.

### Viewfinder display

The viewfinder has a shutter speed display scale at the bottom of the screen. Speeds of 8sec to 1/30sec are indicated in orange, so that you the user is warned about camera shake, and 1/60sec to 1/500sec are shown in green.

In use, the Bronica proved to be an excellent performer. Shutter speeds were well within the acceptable limits; only the top speed was more than one-fifth of a stop out, and that was only just! Automatic exposure with the AE-II finder was also very reliable. Only in bright light is the meter very slightly misled — at levels of EV7 to EV13 exposure readings were spot on.

The Zenzanon E-II 75mm f2.8 also proved to be of good quality. The image is very slightly soft at open aperture, but it quickly picks up at f4, and is very sharp at f5.6.

Professional cameras build a reputation on their accessory back-up as much as on their performance and reliability, and the ETRS is well supported in this respect. As well as the backs that have already been mentioned and, of course, a large range of lenses, there are auto bellows and extension tubes, a motor-drive, a range of focusing screens, two other finders, and a teleconverter. Prices for the interchangeable 35mm and Polaroid backs are £95. Typical of Bronica value.

## Bronica ETRS £400



### TECHNICAL DATA

**Type:** 6×4.5cm medium format single lens reflex camera  
**Lens mount:** Bronica ETR bayonet  
**Shutter:** electronically-controlled Seiko between-lens leaf type  
**Speeds:** 1/500sec to 8sec plus B, mechanical 1/500sec  
**Exposure:** manual, aperture priority with AE-II finder  
**Viewfinder:** interchangeable. Standard waist-level finder: LED indication of power, interchangeable focusing screens.  
**Focusing:** split-image/micropism as standard  
**Flash:** synch-cord socket, shutter synching at all speeds  
**Film backs:** interchangeable, 120 is standard  
**Film advance:** manual crank, optional speed grip  
**Power:** one 6V cell  
**Other:** depth of field preview on lens, battery check, multiple exposure, motor drive facility  
**Dimensions:** 100×106×106mm (with finder and 120 back)  
**Weight:** 1346g (with 75mm lens)

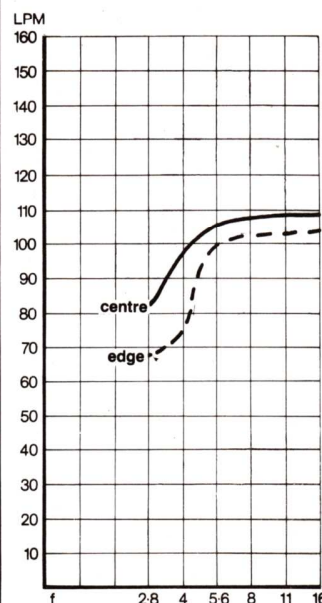


## Bronica Zenzanon E II 75mm f2.8

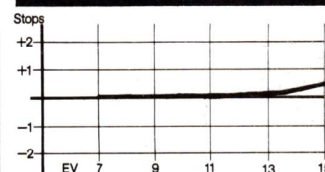
### LENS DATA

**Minimum aperture:** f22  
**Measured focal length:** 77.2mm  
**Colour shift:** neutral  
**Distortion:** not detectable  
**Vignetting:** not significant  
**Astigmatism:** not significant  
**Weight:** 420g  
**Length on camera at infinity:** 50mm  
**Maximum focused length:** 64mm  
**Closest focus:** 0.6m  
**Maximum diameter:** 82mm  
**Filter thread:** 62mm  
**Axial image contrast held to:** 80Lpm at f5.6

## LENS PERFORMANCE



## EXPOSURE ACCURACY



Graph shows over and under exposure errors at five different light levels and with the meter set to 100ASA/ISO. Error is in stops.

## SHUTTER PERFORMANCE

