



CAMERAS

by...

**ROSS
ENSIGN**

A GOOD CAMERA IS

MODEL	PAGE	LENS	SHUTTER	PICTURE SIZES
AUTORANGE 820	4	Xpres f/3.8	8-speed	$\left\{ \begin{array}{l} 2\frac{1}{4} \times 2\frac{1}{4} \text{ in.} \\ 2\frac{1}{4} \times 3\frac{1}{4} \text{ in.} \end{array} \right.$
AUTORANGE 16-20	6	Xpres f/3.5	9-speed	$1\frac{5}{8} \times 2\frac{1}{4} \text{ in.}$
SELFIX 820 SPECIAL	8	Xpres f/3.8	8-speed	$\left\{ \begin{array}{l} 2\frac{1}{4} \times 2\frac{1}{4} \text{ in.} \\ 2\frac{1}{4} \times 3\frac{1}{4} \text{ in.} \end{array} \right.$
SELFIX 12-20 SPECIAL	10	Xpres f/3.5	8-speed	$2\frac{1}{4} \times 2\frac{1}{4} \text{ in.}$
SELFIX 16-20/IV	12	Rosstar f/4.5	8-speed	$1\frac{5}{8} \times 2\frac{1}{4} \text{ in.}$
SELFIX 16-20/II	12	Xpres f/3.5	8-speed	$1\frac{5}{8} \times 2\frac{1}{4} \text{ in.}$
CLUBMAN	14	Rosstar f/4.5	4-speed	$2\frac{1}{4} \times 3\frac{1}{4} \text{ in.}$
SNAPPER	14	All distance	I & B	$2\frac{1}{4} \times 3\frac{1}{4} \text{ in.}$
FUL-VUE SUPER	16	All distance	I & B	$2\frac{1}{4} \times 2\frac{1}{4} \text{ in.}$

All models are synchronised for flash.



Other Ross Ensign products include . . . the famous range of Ross binoculars and theatre glasses, epidiscopes, professional lenses and precision apparatus for lens and instrument testing.

A SOUND INVESTMENT

IT is sometimes thought that photography is an expensive hobby; an idea which is very misleading. To say that photography can be a wasteful hobby would be nearer the truth, because only the owner of a good camera can rely on obtaining a complete set of successful pictures on every roll of film.

Remember that roll films cost just the same whether they are used in a good camera or a poor one, and the processing costs the same whether your results are successful or not.

Only by making sure that you have selected a reliable camera in the first instance can you be certain of avoiding a high percentage of failures and the consequent waste of films and paper.

This is the reason why a good camera is a sound investment, for it will handsomely reward you with successful pictures and give you far greater satisfaction from a fascinating hobby.

CHOOSING A GOOD CAMERA

What constitutes a good camera? The lens is of primary importance. You cannot do better than to buy a camera with a Ross lens as fitted on the models illustrated in this catalogue: firstly, because every Ross lens is carefully computed to suit the instrument on which it is to be used, and secondly because the lens will have been made in Britain's leading optical works where the finest lenses have been produced for over a century. Just as the quality of your pictures must depend on the performance of your lens, however, so correct exposure must be dependent on a reliable shutter. The Epsilon shutters fitted to Ross Ensign cameras are not only accurate within close limits when they leave our works, but if properly treated they will maintain this accuracy throughout the life of the camera. Finally, the mechanical perfection of our cameras is assured by an extremely high standard of precision engineering and by the rigid inspection methods employed during assembly.



THIS new model employs an entirely new focussing principle in folding cameras and allows the tremendous resolving power provided by an entirely new lens computation to be used to full advantage. In this model the focussing movement from the rangefinder mechanism is transferred directly to the camera baseboard, thus following the accepted practice adopted with larger studio cameras, but never found on a small folding camera before.

HIGH RESOLUTION

In this way the carefully calculated separation of the lens components is never disturbed and the maximum benefit from a lens giving exceptionally high resolution at any lens aperture is obtained at all distances.

This departure from traditional camera design has enabled Ross opticians to use a lens computation which could previously be employed only on the most elaborate professional equipment.

In the Autorange 820 the photographer has a camera bristling with new refinements and features which will provide him with the means of producing work up to the highest international standard.

SPECIFICATION

105 mm. Ross Xpres f/3.8 colour-corrected and coated lens of new computation.

Shutter synchronised for bulbs or electronic flash.

Masks for two picture sizes: $2\frac{1}{4} \times 3\frac{1}{4}$ or $2\frac{1}{4}$ in. square (6×9 cm. or 6×6 cm.).

Built-in rangefinder fully coupled.

Combined Albada viewfinder and rangefinder.

Rack-and-pinion focussing on baseboard.

Double - exposure prevention device.

Accessory shoe.

Lens mount takes 42 mm. filters.

Finished in black morocco and satin chrome.

Takes either eight pictures $2\frac{1}{4} \times 3\frac{1}{4}$ in. or twelve pictures $2\frac{1}{4}$ in. square on 120 or 620 roll film.

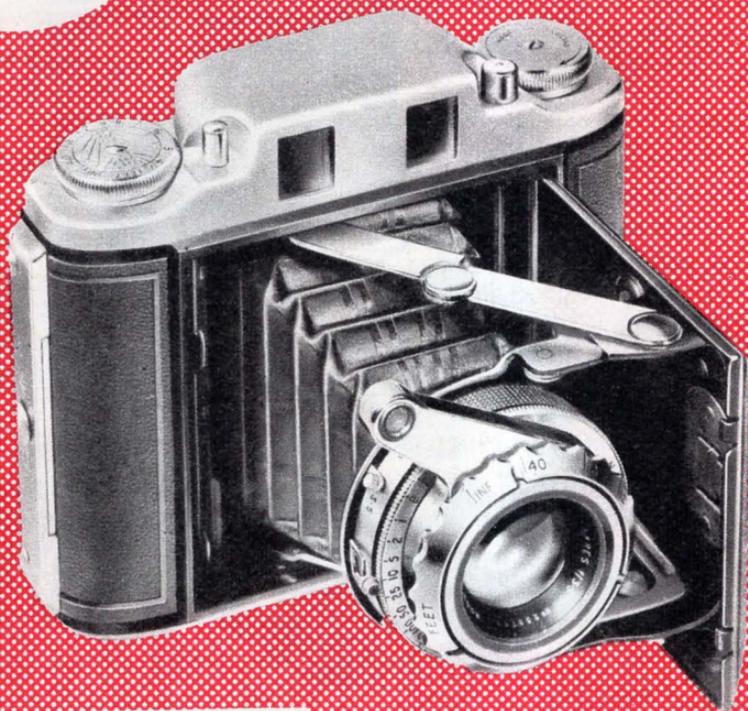
The actual size of picture taken with the Autorange 820 camera is shown on the opposite page. When looking through the viewfinder, the rangefinder images appear in the centre rectangle and the illuminated frame indicates the area for $2\frac{1}{4}$ in. square and $2\frac{1}{4} \times 3\frac{1}{4}$ in. pictures, as superimposed on this illustration.



**AUTORANGE
820**



**AUTORANGE
16-20**



HERE is a camera which will excite envy and admiration wherever it is used. In design, performance and finish it is at the top of the luxury class. Truly miniature in size, with none of the usual projections normally found on this type of camera, it is quite small enough to slip easily into your pocket. But



its real claim to serious consideration by keen miniature enthusiasts is its outstanding optical system. On the Autorange 16-20 there is no mechanical coupling between the lens and the body of the camera, and there are, therefore, no mirrors or moving parts to go out of adjustment. The compact layout of lenses and prisms is, in fact, one of the outstanding features frequently praised by experienced photographers.

The viewfinder and rangefinder have been combined to provide a most convenient method of composing a picture using only one eyepiece. The rangefinder images appear in the centre of the picture, while the illuminated frame superimposed over the complete scene indicates the precise picture area.

The lens is a colour-corrected Ross Xpres mounted in an Epsilon nine-speed shutter: a valuable combination on any camera, but one which makes the Autorange 16-20 one of the best in our range.

Anyone who can appreciate a precision-made instrument of the highest quality will obtain great pleasure and lasting satisfaction from using this beautifully made miniature camera.

S P E C I F I C A T I O N

75 mm. Ross Xpres f/3.5 colour-corrected and coated lens.

Epsilon nine - speed shutter, 1-1/400 sec., Time and Bulb.

Built-in coaxial-type flash socket.

Prismatic rangefinder coupled to an Albada direct-vision viewfinder. A unique feature.

Double - exposure prevention device.

Built-in depth-of-field calculator. Finished in black leather and satin chrome.

Lens mount adaptor supplied for 37 mm. filters.

Dimensions of camera closed: 4½ × 4 × 1½ in.



The actual size of picture taken with the Autorange 16-20 camera. The small illustration at the top of this page shows how the rangefinder images appear in the centre of the viewfinder with an illuminated frame superimposed over the complete scene to indicate the precise picture area.



IT would be hard to imagine a camera better suited to advanced amateur or professional needs than the Selfix 820 Special. This is the model used by the well-known photographic journalist, J. Allan Cash, F.R.P.S., F.I.B.P.

It is fitted with a four-component 105 mm. Ross Xpres f/3.8 colour-corrected and coated lens of similar construction to the famous Ross lenses used in professional studios. A single eyepiece on this camera combines the rangefinder and viewfinder images as shown in the accompanying illustration, and the distance scale is conveniently located on top of the camera where it may be easily seen. An adjustable mask, which can be moved across the front of the viewfinder, enables the precise field of view for two picture sizes to be accurately determined.



The keen photographer will find that the use of what is a relatively long focal length lens on a $2\frac{1}{4}$ in. square (6×6 cm.) camera gives far better perspective than when the more usual 75 mm. lens is fitted.

S P E C I F I C A T I O N

105 mm. Ross Xpres f/3.8 colour-corrected and coated lens.

Epsilon eight - speed shutter, 1-1/250 sec., Bulb and Time.

Built-in synchronisation for electronic or expendable flash.

Built-in uncoupled rangefinder and viewfinder combined.

Built-in viewfinder for $2\frac{1}{4}$ in. square or $2\frac{1}{4} \times 3\frac{1}{4}$ in. (6×6 or 6×9 cm.) pictures.

Double - exposure prevention device.

Built-in depth-of-field calculator. Accessory shoe.

Pressure die-cast aluminium body.

Lens mount takes 42 mm. filters.

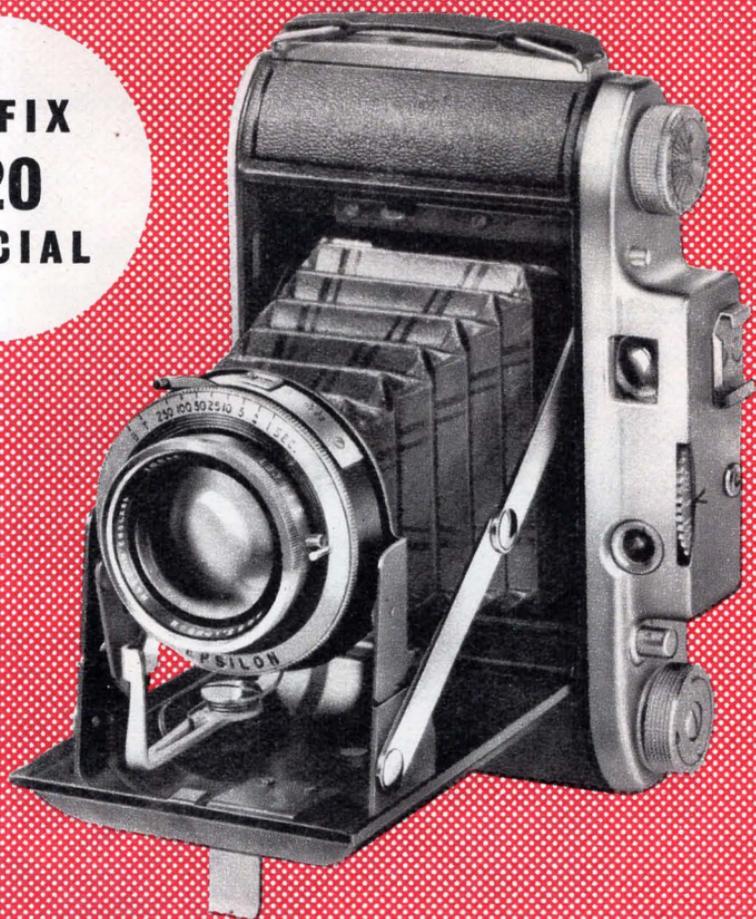
Takes twelve pictures $2\frac{1}{4}$ in. square (6×6 cm.) on 120 or 620 roll film.

Dimensions of camera closed: $6\frac{1}{2} \times 4\frac{1}{2} \times 2$ in.

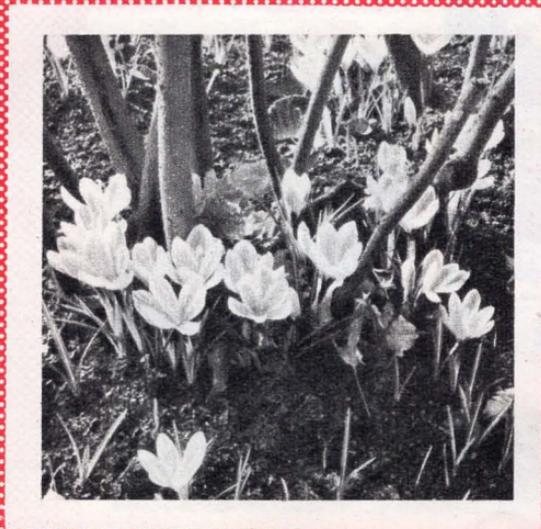
Here are the two picture sizes which can be taken with the Selfix 820 Special.



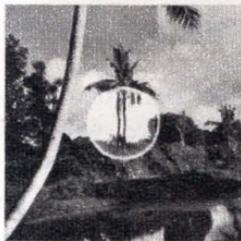
**SEFIX
820
SPECIAL**



**SELFIX
12-20
SPECIAL**



MANY photographers prefer to decide their final composition of a picture in the enlarger from a $2\frac{1}{4}$ in. square negative. Cameras taking this picture size are also popular for other reasons, however, as they are economical in the use of film and allow an instrument of pleasing shape and compact dimensions to be produced.



The fact that the square negative will almost certainly be subjected to considerable enlargement demands a lens of exceptional quality giving crisp definition and a high general performance. The Selfix 12-20 Special is fitted with a four-component Ross Xpres lens which has been specially

computed for the camera with these objects in mind. When used with the built-in rangefinder, this lens gives negatives of a quality which will satisfy the most discriminating worker. A depth-of-field scale is engraved on the top of the camera, which is also provided with streamlined finger-tip controls for erecting the camera automatically and operating the shutter.

The rangefinder and viewfinder images are combined in a single eyepiece, thus enabling the composition and focussing of a picture to be carried out in one operation.

The eight-speed shutter is synchronised for electronic or expendable flash and a double-exposure preventive device is included in the specification of this advanced model.

S P E C I F I C A T I O N

75 mm. Ross Xpres f/3.5 colour-corrected and coated lens.

Epsilon eight - speed shutter: 1-1/300 sec.

Built-in uncoupled rangefinder and viewfinder combined.

Internal synchroflash contacts for electronic and expendable flash.

Double - exposure prevention device.

Streamlined finger-tip controls.

Safety cord.

Built-in depth-of-field calculator.

Shoe for accessories.

Finest quality black morocco and satin chrome finish.

Lens mount takes 32 mm. filters.

Takes twelve pictures $2\frac{1}{4}$ in. (6 × 6 cm.) square on 120 or 620 roll film.

Dimensions closed: $6\frac{1}{2}$ × 5 × 2 in.

Here is the actual size of picture taken with the Selfix 12-20 Special. The small illustration at the top of this page shows how the rangefinder and viewfinder images are combined: an optical refinement of great value.





THESE two cameras of well tried and proved design are most popular for colour photography. Both take 16 pictures on 120 or 620 film, thus ensuring reasonable economy when using expensive colour materials. Both models are extremely light and compact enough to be easily carried in the pocket.

The Selfix 16-20 Model IV, illustrated here, is fitted with a 75 mm. Rosstar f/4.5 coated lens and eight-speed Epsilon shutter synchronised for flash.

Those who want a camera which affords the utmost economy in film, combined with an excellent optical performance, will find their requirements amply satisfied in this well-made instrument. It is so well balanced that even at slow shutter speeds it can be held steadily in the hand. A press-button self-erecting front and a body shutter release are two additional features of this very popular instrument.

LUXURY MODEL

The Selfix 16-20 Model II is similar in design to the Model IV, but it is fitted with a 75 mm. Ross Xpres f/3.5 colour-corrected lens and an Albada viewfinder: a wonderful optical combination which places few limitations on subject or lighting conditions. It would be hard to imagine a better example of the camera designer's craft than this luxury instrument.

Photographers who take a pride in their equipment will also appreciate the fine quality satin chrome and morocco grain finish on these two cameras.

SPECIFICATIONS

MODEL II

75 mm. Ross Xpres f/3.5 coated lens.

Epsilon eight-speed shutter; 1-1/300 sec., Bulb and Time.

Internal synchroflash contacts.

Double - exposure prevention device.

Self-erecting Albada viewfinder.

Lens mount takes 32 mm. filters.

Takes sixteen pictures $1\frac{5}{8} \times 2\frac{1}{4}$ in. (4.5 x 6 cm.) on 120 or 620 roll film.

Dimensions closed: $5 \times 3\frac{3}{4} \times 1\frac{1}{2}$ in.

MODEL IV

75 mm. Rosstar f/4.5 coated lens.

Epsilon eight-speed shutter: 1-1/300 sec., Bulb and Time.

Internal synchroflash contacts.

Direct-vision finder.

Finished in fine quality leatherette and satin chrome.

Lens mount takes 32 mm. filters.

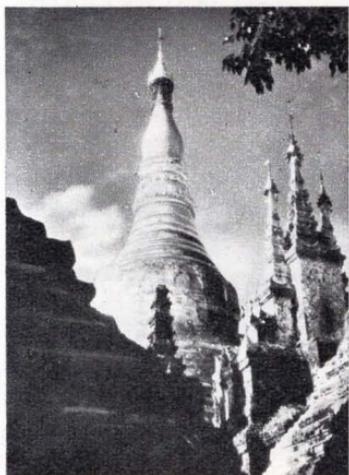
Takes sixteen pictures $1\frac{5}{8} \times 2\frac{1}{4}$ in. (4.5 x 6 cm.) on 120 or 620 roll film.

Dimensions closed: $5 \times 3\frac{3}{4} \times 1\frac{1}{2}$ in.

This is the actual size of picture taken with the Selfix 16-20 Models II and IV.



**SELFIX
16-20
MODELS
II and IV**





IN the design of these models maximum value has been provided in the lens and shutter system. Any refinements not essential to successful photography have been omitted.

A modern streamlined die-cast body is a distinguishing feature of both cameras, which have built-in optical viewfinders for use at eye level.

For the less experienced photographer, the Snapper, with its simplified focussing system and ever-set shutter, provides the ideal folding camera. It gives a $2\frac{1}{4} \times 3\frac{1}{4}$ in. picture and has a special adjustment for taking pictures on dull as well as bright days. As on all our cameras, the shutter is also synchronised for flash photography.

A MORE ADVANCED MODEL

The Clubman finds its greatest appeal among members of photographic societies. To the more experienced photographer this model offers an unusually high performance not usually found in cameras at such a modest price. The superb Rosstar lens is capable of giving pictures of excellent definition which can be enlarged to exhibition size.

A shoe is fitted above the viewfinder to take accessories such as a rangefinder or flash unit, and the shutter release is on the body. The synchronised flash socket is situated on the side of the shutter and the Synchrolux flash unit described on page 23 is recommended for use with this model.

SNAPPER SPECIFICATION

Shutter for Instantaneous and Time exposures.

Lens scaled in yards/metres; focussing from 2 yards to infinity.

Cable release socket.

Built-in synchroflash contacts.

Optical direct-vision finder.

Precision die-cast body.

Takes eight pictures $2\frac{1}{4} \times 3\frac{1}{4}$ in. (6×9 cm.) on standard 620 roll film.

CLUBMAN SPECIFICATION

105 mm. Rosstar f/4.5 coated lens.

Epsilon four-speed shutter.

Synchroflash socket.

Optical finder.

Accessory shoe.

Pressure die-cast body.

Body shutter release.

Slip-in or ever-ready case extra.

Takes eight pictures $2\frac{1}{4} \times 3\frac{1}{4}$ in. (6×9 cm.) on 620 roll film.

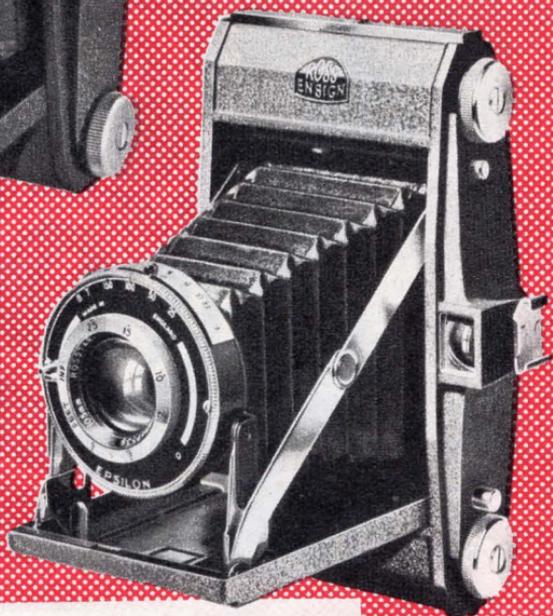
Dimensions closed $6\frac{1}{2} \times 4 \times 2$ in.

The actual size of picture taken with the Snapper and Clubman cameras.



SNAPPER

GLUBMAN





**FUL-VUE
SUPER**



ALL the improvements suggested by the manufacture of over a million earlier Ful-Vue cameras have been incorporated in this latest model. It is simpler to use than any other box camera on the market and takes far better pictures, as the lens was specially designed by our opticians to give sharper negatives from which excellent enlargements can be made. The fine results obtained with this simple camera have surprised even professional photographers.

The lens can be adjusted to take close-up as well as distant views, and the giant viewfinder shows clearly and, almost as large as the finished print, exactly what you will get in your pictures. The shutter sets itself and it is synchronised for flash.

The Ful-Vue Super camera looks like an expensive twin-lens reflex camera and it is, in fact, built in the same style, with a precision die-cast body, normally used only on far more expensive instruments. It weighs only 16 oz. (560 grams) and measures $3\frac{1}{4} \times 3\frac{1}{4} \times 4$ in. ($8 \times 8 \times 10$ cm.).

A beautifully made ever-ready case, illustrated on page 22, may be obtained to protect the fine finish of this model, and pictures can be taken without removing the camera from its case.

For taking pictures in dull light or indoors, a simple flash unit may be obtained which is described on page 23. This unit operates on the capacitor principle and many thousands of flash bulbs may be fired from the same battery over a period of up to twelve months.

The Ful-Vue Super is not only a strong and very well made instrument, but it is also capable of producing first-class pictures.

S P E C I F I C A T I O N

Giant reflex viewfinder with retractable hood.

High-grade lens in focussing mount.

Flash-synchronised shutter.

Precision die-cast body.

Swing cradle loading.

Safety cover for ruby window.

Tripod bush.

Supplied complete with plaited neck cord.

Ever-ready case and flash unit extra.

Takes twelve pictures $2\frac{1}{4}$ in. square (6×6 cm.) on standard 620 roll film.

This is the actual size of picture taken with the Ful-Vue Super. A free 16-page booklet describing this camera will be sent on request

STANDARD ENLARGER



SPECIFICATION

Built-in $f/4.5$ coated projection lens.

Frame type negative carrier of optical glass for negatives up to $2\frac{1}{4} \times 3\frac{1}{4}$ in. (6×9 cm.).

$4\frac{1}{2}$ in. optically ground condenser system.

Rapid adjustment by large easy-grip controls.

Fine micrometer focussing on lens mount.

Lens mount engraved to show relative exposures for each of six stops.

Baseboard of seasoned timber.

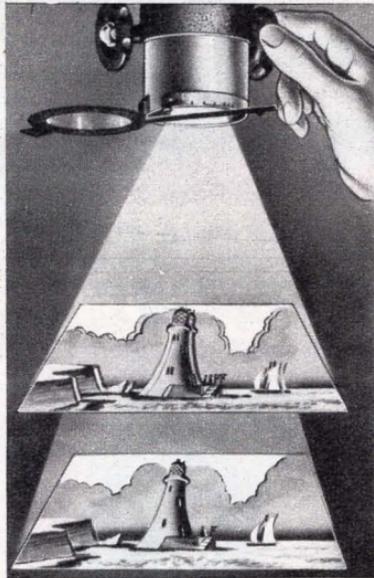
Column rotates through 180 deg.

IN keeping with the high optical performance of Ross Ensign cameras, this enlarger is capable of producing prints up to the best professional standard. Enlargements up to 15×12 in. may be made on the baseboard, but simply by rotating the column, prints of any size can be made by projecting beyond the base.

The unusually large lamp-house and $4\frac{1}{2}$ in. (10.5 cm.) optical condensers, combined with a specially computed 105 mm. Ross $f/4.5$ coated enlarging lens in micrometer focussing mount, give results which are far superior to any other $2\frac{1}{4} \times 3\frac{1}{4}$ in. (6×9 cm.) enlarger at a similar price. Large easy-grip controls are provided, which are simple to operate and allow the instrument to be adjusted and locked in any position, while a number of entirely original refinements will be found on this latest model.

The Defino focussing device, fitted exclusively to this enlarger, provides a particularly convenient method of obtaining critical focus at any degree of enlargement. This invaluable aid to enlarging shows clearly when the picture is out of focus by an amount which could not otherwise be detected by examining the projected image.

Defino focussing is simpler to use than the so-called rangefinder methods of focussing, as no adjustment of the negative carrier is involved. The accompanying illustration shows how simple and certain it is to obtain critical focus by the exclusive Defino method.



The Defino focussing aid, shown in position across the centre of the enlarging lens, produces a double image when the picture is out of focus. The two images merge into one, as shown in the lower picture inset, as soon as the negative is correctly focussed.

ADDITIONAL REFINEMENTS

Another feature of this latest model is the improved negative carrier. This is of the frame type using a single sheet of optical glass, thus preventing any possibility of damage to the negative. Special holders on either side of the carrier enable the full roll of uncut film to rest neatly at the sides of the carrier, clear of the work and away from solutions.

Several extra items are provided, including an adjustable paper holder, focussing chart and line switch, all of which make this enlarger such excellent value for money.

ROSS RESOLUX LENSES



The 5 cm. Ross Resolux f/3.5, designed for enlarging negatives on 35 mm. film, will screw into any enlarger with Leica fitting



The 11 cm. Ross Resolux f/4 is recommended for enlarging negatives of any size up to $2\frac{1}{4} \times 3\frac{1}{4}$ in.

TESTS made by Ross opticians and confirmed by independent photographic consultants have shown that any lens designed for use in a camera is normally unsuitable for enlarging.

A camera lens is designed for taking pictures at distances of approximately 4 ft. to infinity, and if such a lens is fitted to an enlarger the projected image will be affected by distortions and various aberrations.

If loss of definition is to be avoided a lens for use in an enlarger must be computed to work at the shorter distances normally necessary when making projection prints. The results obtained when using a lens of this type are far superior to those which are possible when a camera lens is used for the purpose.

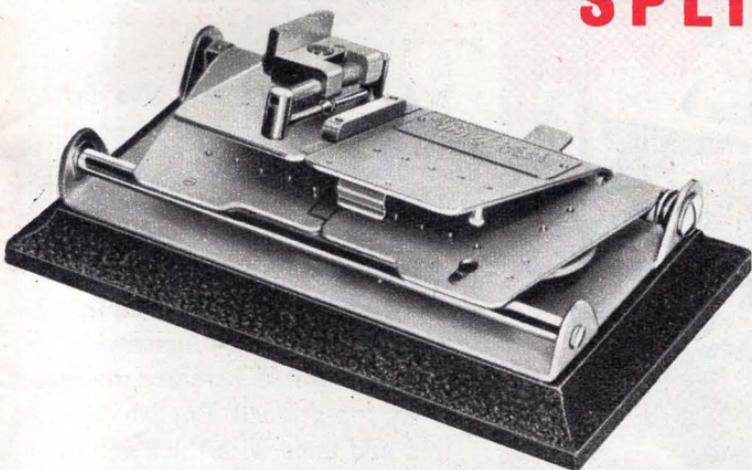
Ross Resolux lenses satisfy all these conditions. All internal surfaces are coated to improve light transmission and contrast, and the "click" stops are particularly useful in the darkroom. A Ross Resolux lens allows enlargements to be made which are frequently difficult to distinguish from contact prints.

TABLE OF RESOLUX LENSES

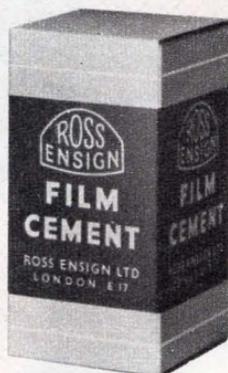
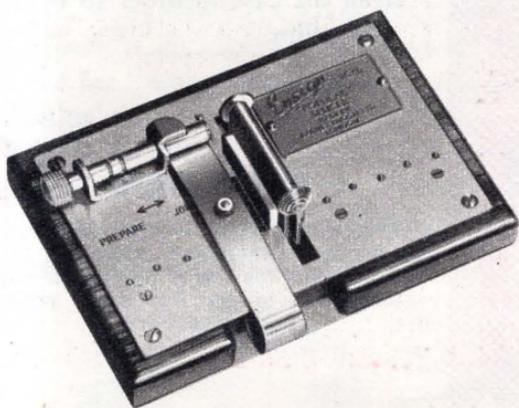
Focal length		Aperture	Negative size covered	Flange diameter
Nominal	cm.			
2 in.	5	f/3.5	$1 \times 1\frac{1}{2}$ in. or 24×36 mm.	*39 mm.
$3\frac{1}{8}$ in.	9	f/4	$2\frac{1}{4} \times 2\frac{1}{4}$ in. or 6×6 cm.	39 mm.
$4\frac{3}{8}$ in.	11	f/4	$2\frac{1}{4} \times 3\frac{1}{4}$ in. or 6×9 cm.	39 mm.

* Extension tubes are available for all 35 mm. enlargers if required. Flanges are supplied to special order only.

CINE FILM SPLICERS

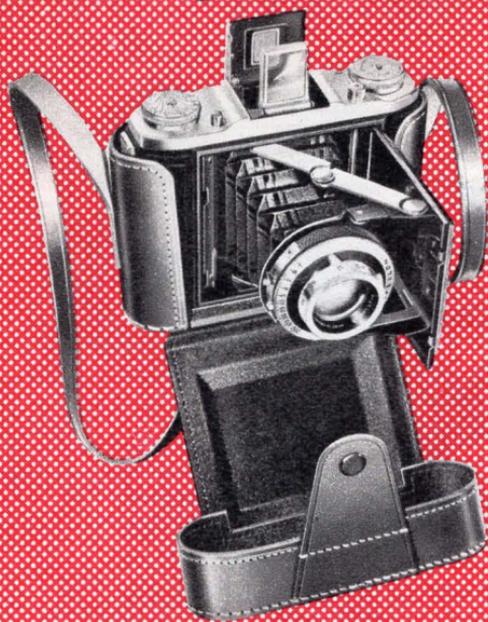


UNIVERSAL MODEL. A de luxe splicer which will allow any of the three narrow-gauge film sizes—8 mm., 9.5 mm. or 16 mm.—to be edited. It is robustly made and has a removable base, which enables it to be fitted directly to an editing bench. All parts are heavily plated and resistant to corrosion. This model is recommended when a lot of editing has to be carried out.



POPULAR MODEL. An inexpensive splicer which is ideal for those who edit only one size of cine film. It is supplied in any of the three narrow-gauge sizes—8 mm., 9.5 mm. or 16 mm.—and is provided with a built-in scraper accurately set for preparing the film. With the special Ross Ensign rapid-drying cement, neat, accurate joins can be made in a matter of seconds.

CAMERA CASES



ANY camera will give far better service if properly cared for, and a well-made carrying case is always a sound investment for the keen photographer who takes a pride in the appearance of his equipment. The folding-camera cases illustrated here are made from top-grained English leather and lined with thick velvet to protect the fine finish of your camera. Ever-ready cases are available for all Ross Ensign folding cameras, and the advantage of this design is that the camera need only be removed from the case in order to load a new film.

SLIP-IN CASES

This standard slip-in type carrying case gives maximum protection to the camera and can be supplied as an alternative to the ever-ready case illustrated above.

FUL-VUE SUPER EVER-READY CASE

This compact imitation leather case is specially made for the Ful-Vue Super camera. It is of the ever-ready type and slots are provided to allow access to the controls.

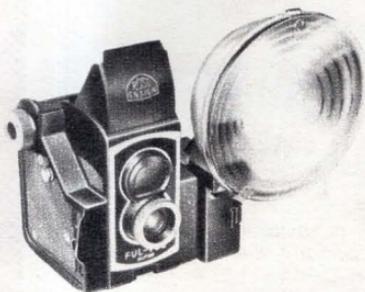


FLASH EQUIPMENT

SYNCHROLUX FLASH UNIT

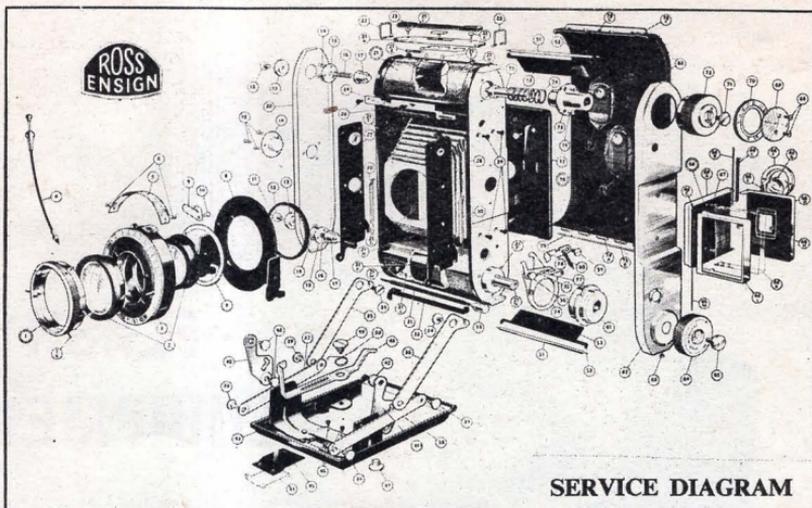
EVERY camera described in this catalogue is synchronised for flash photography. For owners of folding cameras the Synchronlux flash unit is recommended. It operates on the capacitor principle from a 22½-volt deaf-aid battery, which will last for twelve months or more and fire many thousands of flash bulbs.

The unit fits into the accessory shoe on the camera and the cable plugs into the socket on the shutter. It is particularly compact and the battery case packs inside the reflector. The entire unit will easily fit into the pocket.



FUL-VUE CAPACITOR FLASH UNIT

The special Ful-Vue flash unit fastens on the side of the camera and electrical contact is made automatically without any leads. It comprises a battery case, reflector, A.S.C.C. lamp holder and ejector. The same battery capacitor system is used as in the Synchronlux unit.



From this greatly reduced reproduction of a diagram in our Service Manual, it will be seen how any part of your camera can be identified and renewed if ever necessary. These diagrams are supplied to every leading photographic dealer.

AFTER-SALES SERVICE

A world-wide service has been built up which is exclusive to owners of Ross Ensign cameras. Any component part of your camera can be identified and renewed if ever necessary from the service diagrams supplied to all our leading agents.

The cameras described in this catalogue have wide differences in their design and scope, but whatever you pay for a Ross Ensign camera you may be sure that each model is the best that British optical design and long engineering experience can produce.

All goods described in this catalogue may be obtained from:

BRUNEL (THOMAS S. DAY)
 43, YORK STREET,
 POP 5440 TWICKENHAM,
 PHOTOGRAPHIC SUPPLIES