35mm f : 3.2 Wide Angle Lens

Canon

Canon Camera Co., Inc.

Ginza, Tokyo, Japan

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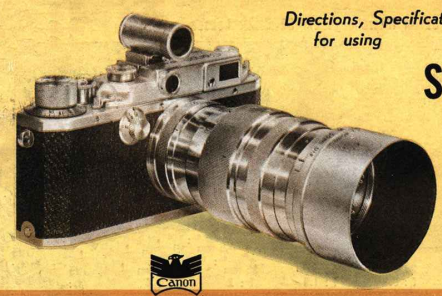
Directions, Specifications, and Tables for using

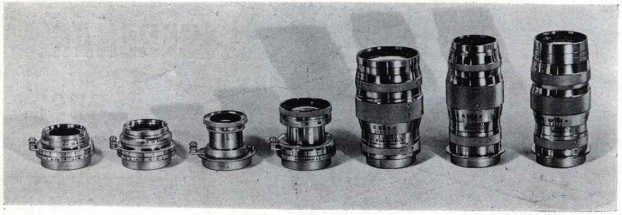
SERENAR Lenses



Canon

85 mm f : 2 Long Focal Lens

Canon Interchangeable SERENAR Lenses



35 mm f : 3.5	35 mm f : 3.2	50 mm f : 3.5	50 mm f : 1.9	85 mm f : 2	100 mm f : 4	135 mm f : 4
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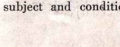
A series of these pictures are all taken from the same spot with lenses of different focal length. Notice the difference in field-of-view and size of building. For the best results select your lens according to a subject and condition in which you are situated. Before making the selection of which lens you should use determine the best field-of-view of the subject with the use of different Viewfinders or Universal Viewfinder by adjusting to various focal length markings.



35 mm f : 3.5
or
35 mm f : 3.2

50 mm f : 3.5
or
50 mm f : 1.9

85 mm f : 2

100 mm f : 4

135 mm f : 4

SERENAR lens is a fine piece of equipment. It is just as precision as a Canon camera and should be handled as such. Each element of the lens is accurately polished and carefully coated before it is set into a lens barrel. It is properly set and aligned by hand with an employment of microscopic alignment instruments. All lenses are rigidly tested by putting them through respective testing instruments for checking resolving power and lens aberrations — spherical aberration, coma, astigmatism, curvature of field, distortion, chromatic aberration and color definition. Lenses failed to pass any one of these factors are immediately cancelled and destroyed. A coating harder than optical glass surface — ultra hard-coating — is furnished on outer lens surfaces — the front and the rear — to protect against scratches, while soft-coating is furnished on all inner air-surfaces. Ultra hard-coating and soft-coating is performed on all lenses to eliminate flare and to increase sharpness of images.

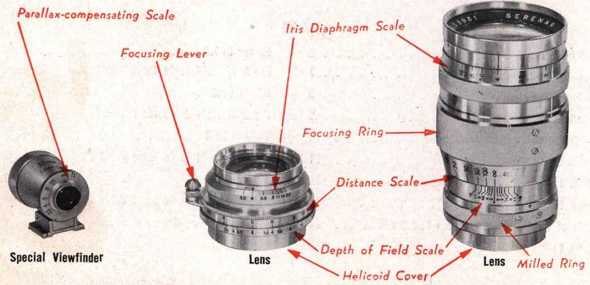
In order to expect satisfactory results at all times lens should be handled with extreme care. Lens surfaces should be free from dust, dirt, and fingerprints. The use of lens cap is recommended when the camera is not in use. Keep away from extreme and sudden temperature changes and, never store in hot or humid places.

For cleaning lens surfaces remove dust or grit by using fine soft brush or a reliable lens cleaning paper. If further cleaning is necessary for removing fingerprints etc. use a drop of reliable lens cleaner on the cleaning paper or clean lint-free cloth. Always wipe very lightly and gently in a circular motion.

If there is any doubt as to the performance of the lens or any repair required for the lens it should be returned to the manufacturer immediately.

Contents

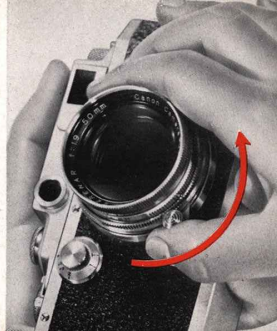
DESCRIPTIONS



TO DISMOUNT LENS

Place the camera on its back in your hand and unsrew the lens by grasping its base. This can be done with the lens in either the extended or retracted position. Give a slight jerking motion at first to loosen the lens as it is firmly screwed into the lens flange. After loosened, unscrew gently from the camera. The use of Focusing Lever will be helpful by locking it into the Infinity Catch for those with focal length of 50mm or less.

Avoid turning any other part of the lens but its base only, for if disregarded the lens will be thrown completely out of alignment. Oiling or greasing the fine thread should also be avoided. Do not tamper with the lens under any circumstances.



TO MOUNT LENS

Unscrew the helicoid cover from the rear of a lens intended to use. Next hold the camera in the same manner as described in the preceding page and introduce the lens to the lens flange of the camera. Search the entrance of the thread at first by turning the lens counter-clockwise slightly and then screw into the camera until you come to a stop. When reaching this point, force fraction of an inch farther by grasping the base of the lens so that it will be mounted firmly. Should the thread of the lens turn hard or bind, remove the lens and correct the trouble.

Do not attempt to tighten the lens into the flange by grasping any other part but its base only.

NOTE :

1. Do not face the lens flange of the camera to strong light during the interchange of lenses. It is advisable to shield it immediately with your body or by some other means while the other lens is being prepared.

Lens Flange

Plastic Lens Case

Helicoid Cover

2. In order to keep foreign matters such as dust, sand, or lint away and, to protect the fine precision thread from being damaged screw the dismounted lens into the Plastic Lens Case or cover it with the Lens Cap and Helicoid Cover.

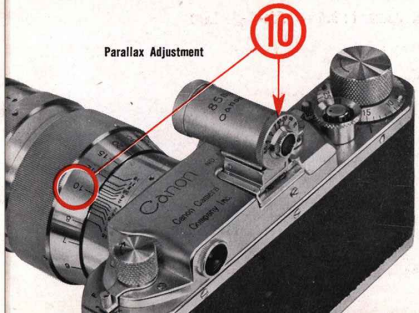
VIEWFINDER vs PARALLAX ADJUSTMENT

Inasmuch as the built-in viewfinder of the camera has no device for parallax adjustment the use of Special Viewfinder or Universal Viewfinder is recommended for all lenses except those with standard focal length (50mm).

When the Special Viewfinder or the Universal Viewfinder is used the Parallax-compensating Scale must be adjusted in order to have the optical axis of the Viewfinder intersect with that of the lens at the focused subject.

> If, for instance, the reading of the Distance Scale of the lens is 10 feet after accurate focusing (see next page), set the Parallax-compensating Scale of the Viewfinder to 10 by which the field you see through the Finder will be identical to what the lens will register on a film frame.

Since the lens and the Viewfinder are not mechanically connected the latter must be adjusted independently each time after the focusing is done.



SUNSHADE & FILTER

The use of sunshade is recommended at all times — indoors or outdoors — to keep undesirable light from striking the lens.

For better results the use of filter is effective also in certain occasion. To use filters correctly, however, filter and film manufacturers' recommendations should be followed.

SERENAR 35mm f : 3.5 — Wide-Angle Lens

Specifications :

Lens Element : 4

Lens Mount : Non-collapsible.

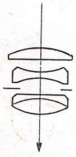
Lens Head : Non-revolving.

Marked Apertures : f : 3.5, 4, 5.6, 8, 11, 16, and 22.

Focusing Range : 3.5 ft to infinity. Marked distances- 3.5, 4, 5, 6, 8, 10, 15, 25, 50, and ∞.

Angle of View : When focused for infinity 64°.

Attachment Size : 36mm Slip-on Adapter Ring; Series VI Attachment.



Note : Use Special Viewfinder or Universal Viewfinder.

SERENAR 35mm f : 3.2 — Wide-Angle Lens

Specifications :

Lens Element : 6.

Lens Mount : Non-collapsible.

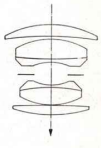
Lens Head : Non-revolving.

Marked Apertures : f : 3.2, 4, 5.6, 8, 11, 16, and 22.

Focusing Range : 3.5 ft to infinity. Marked distances — 3.5, 4, 5, 6, 8, 10, 15, 25, 50, and ∞.

Angle of View : When focused for infinity 64°.

Attachment Size : 36mm Slip-on Adapter Ring; Series VI Attachment.



Note : Use Special Viewfinder or Univesral Viewfinder.

Depth of Field: Serenar 35mm f : 3.5 and f : 3.2

Distance Focused on (Ft)	Circle of Confusion = 0.035mm																	
	f : 3.2			f : 3.5			f : 4			f : 5.6			f : 8			f : 11			f : 16			f : 22		
	ft-in	to ft-in		ft-in	to ft-in		ft-in	to ft-in		ft-in	to ft-in		ft-in	to ft-in		ft-in	to ft-in		ft-in	to ft-in		ft-in	to ft-in	
∞	37- 2	∞	33-11	∞	29- 9	∞	21- 3	∞	15-	∞	10-11	∞	7- 7	∞	5- 7	∞	4- 1	∞
50	21- 4	∞	20- 3	∞	18- 8	∞	14-11	∞	11- 6	∞	8-11	∞	6- 6	∞	4-11	∞	3- 8	∞
25	15-	76- 9	14- 5	94-	13- 7	155-	10- 4	∞	9- 4	∞	7- 7	∞	5- 5	∞	4- 6	∞	3- 4	∞
15	10- 9	24-11	10- 5	25- 7	10-	29-11	8-10	49-10	7- 6	∞	6- 4	∞	5-	∞	4- 1	∞	3-	∞
10	7-11	13- 6	7- 9	14-	7- 6	14-10	6-10	18- 6	6-	29- 4	5- 3	110-	4- 4	∞	3- 7	∞	2-10	∞
8	6- 7	10- 1	6- 6	10- 4	6- 4	10- 9	5-10	12- 7	5- 3	16- 5	4- 8	28- 7	3-11	∞	3- 4	∞	2- 9	∞
6	5- 2	7- 1	5- 1	7- 2	5-	7- 5	4- 8	8- 2	4- 4	9- 9	3-11	12-10	3- 5	27-	3-	2-11	∞	
5	4- 5	5- 8	4- 4	5- 9	4- 3	5-11	4- 1	6- 5	3- 9	7- 4	3- 6	8-10	3- 1	13-10	2- 8	43- 9		
4	3- 7	4- 5	3- 7	4- 5	3- 6	4- 6	3- 5	4-10	3- 1	5- 3	2-11	6- 1	2- 8	8-	2- 4	13- 1		
3.5	3- 2	3-10	3- 2	3-10	3- 2	3-11	3-	4- 1	2-10	4- 5	2- 8	4-11	2- 5	6- 2	2- 2	8- 9		

35 mm

S. T.

SERENAR 50mm f : 3.5 — Standard Lens

Specifications:

Lens Element: 4.

Lens Mount: Collapsible.

Lens Head: Revolving.

Marked Apertures: f : 3.5, 4, 5.6, 8, 11, and 16.

Focusing Range: 3.5 ft to infinity. Marked distances — 3.5, 4, 5, 6, 8, 10, 15, 25, 50, and ∞.

Angle of View: When focused for infinity 46°.

Attachment Size: 36mm Slip-on Adapter Ring; Series VI Attachment.

SERENAR 50mm f : 1.9 — Standard Lens

Specifications :

Lens Element : 6.

Lens Mount : Collapsible.

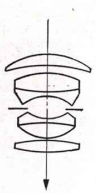
Lens Head : Non-revolving.

Marked Apertures : f : 1.9, 2.8, 4, 5.6, 8, and 11.

Focusing Range : 3.5 ft to infinity. Marked distances — 3.5, 4, 5, 6, 8, 10, 15, 25, 50, and ∞.

Angle of View : When focused for infinity 46°.

Attachment Size : 42mm Slip-on Adapter Ring; Series VI Attachment.



Depth of Field : Serenar 50mm f : 3.5 and f : 1.9

Distance Focused on (ft)	Circle of Confusion = 0.035mm															
	f : 1.9		f : 2		f : 2.8		f : 3.5		f : 4		f : 5.6		f : 8		f : 11		f : 16	
	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in
∞	132-	∞	125-	∞	89-	∞	72-	∞	63-	∞	44- 9	∞	31- 4	∞	22-11	∞	15- 8	∞
50	36- 4	80-	35-10	83-	32- 2	113-	29- 6	165-	27-11	245-	23- 9	∞	19- 5	∞	15- 9	∞	12- 1	∞
25	21- 1	30-9	20-11	31- 1	19- 7	34- 6	18- 7	36- 2	18-	41- 3	16- 2	56-	14-	119-	12- 1	∞	9- 9	∞
15	13- 6	16-10	13- 5	16-11	12-11	17-11	12- 6	18-10	12- 2	19- 7	11- 4	22- 3	10- 3	28- 2	9- 2	42- 1	7- 9	247-
10	9- 4	10- 9	9- 3	10-10	9-	11- 2	8-10	11- 6	8- 8	11-10	8- 3	12- 9	7- 8	14- 5	7- 1	17- 4	6- 3	26-
8	7- 6	8- 5	7- 6	8- 6	7- 4	8- 8	7- 2	8-11	7- 1	9- 1	6-10	9- 7	6- 6	10- 7	6-	12-	5- 5	15- 7
6	5- 9	6- 3	5- 9	6- 3	5- 7	6- 4	5- 6	6- 6	5- 6	6- 7	5- 4	6-10	5- 1	7- 3	4-10	7-11	4- 5	9- 4
5	4-10	5- 2	4- 9	5- 2	4- 9	5- 3	4- 8	5- 4	4- 8	5- 4	4- 6	5- 6	4- 4	5-10	4- 2	6- 3	3-10	7-
4	3-10	4- 1	3-10	4- 1	3-10	4- 2	3- 9	4- 2	3- 9	4- 2	3- 8	4- 4	3- 7	4- 6	3- 5	4- 8	3- 3	5- 2
3.5	3- 5	3- 7	3- 5	3- 7	3- 4	3- 7	3- 4	3- 7	3- 4	3- 8	3- 3	3- 9	3- 2	3-10	3- 1	4-	2-11	4- 4
50 mm																	5. T.	

SERENAR 85mm f : 2 — Long Focal Lens

Specifications :

Lens Element : 6.

Lens Mount : Non-collapsible.

Lens Head : Revolving.

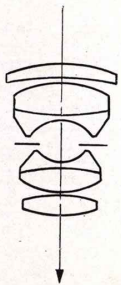
Marked Apertures : f : 2, 2.8, 4, 5.6, 8, 11, and 16.

Focusing Range : 3.5 ft to infinity. Marked distances — 3.5, 4, 5, 6, 7, 8, 10, 12, 15, 20, 30, 50, 100, and ∞.

Angle of View : When focused for infinity 29°.

Attachment Size : 50mm Slip-on Adapter Ring; Series VII Attachment.

Note : Use Special Viewfinder or Universal Viewfinder.



Depth of Field : Serenar 85mm f : 2

Distance Focused on (Ft)	Circle of Confusion = 0.035mm											
	f : 2		f : 2.8		f : 4		f : 5.6		f : 8		f : 11		f : 16	
	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in
∞	330-	∞	236-	∞	166-	∞	118-	∞	83-	∞	60-6	∞	41- 9½	∞
100	76-11	143-	70-5	173-	62- 6	252-	54- 4	640-	45- 5½	∞	37- 9½	∞	29- 5½	∞
50	43- 6½	58- 9	41-4½	63- 3	39- 5½	71- 4	35- 3½	86-	31- 4½	125-	27- 6½	284-	22-10½	∞
30	27- 6½	32-11	26-8½	34- 3	25- 6	36- 5	24- 4½	39-11	22- 2	46- 6	20- 2½	58- 9	17- 7½	104-
20	18-10½	21- 2	18-5½	21- 9½	17-11	22- 7	17- 2½	23-11	16- 2½	26- 1½	15- 2	29- 6	13- 8	37- 7½
15	14- 4½	15- 8½	14-1½	15-11½	13- 9½	16- 5	13- 4½	17- 1½	12- 9½	18- 1½	12- 1½	19- 8½	11 2	22-11½
12	11- 7½	12- 5½	11- 5½	12- 7½	11- 2½	12-10½	10-11½	13- 3½	10- 6½	13-10½	10- 1½	14- 9½	9- 5½	16- 6
10	9- 8½	10- 3½	9- 7½	10- 4½	9- 5½	10- 7½	9- 4	10-10½	9-	11 3½	8- 8½	11 9½	8- 2½	12-10½
8	7-10	8- 2½	7- 9½	8- 3	7- 8	8- 4½	7- 6½	8- 6½	7- 4½	8- 9½	7- 1½	9- 1½	6- 9½	9- 8½
7	6-10½	7- 1½	6- 9½	7- 2½	6- 9	7- 3½	6- 7½	7- 4½	6- 6½	7- 6½	6- 4½	7- 9½	6- 1	8- 3
6	5-11	6- 1½	5-10½	6- 1½	5- 9½	6- 2½	5- 9	6- 3½	5- 7½	6- 4½	5- 6½	6- 6½	5- 4	6-10½
5	4-11½	5- ½	4-11	5- 1½	4-10½	5- 1½	4-10	5- 2½	4- 9½	5- 3½	4- 8½	5- 4½	4- 6½	5- 6½
4	3-11½	4- ½	3-11½	4- ½	3-11½	4- 1	3-10½	4- 1½	3-10½	4- 2	3- 9½	4- 2½	3- 8½	4- 4½
3.5	3- 5½	3- 6½	3- 5½	3- 6½	3- 5½	3- 6½	3- 5	3- 7	3- 4½	3-7½	3- 4½	3- 8	3- 3½	3- 9

85 mm

S 7

SERENAR 100mm f : 4 — Long Focal Lens

Specifications :

Lens Element : 3.

Lens Mount : Non-collapsible.

Lens Head : Revolving.

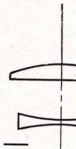
Marked Apertures : f : 4, 5.6, 8, 11, 16, and 22.

Focusing Range : 3.5 ft to infinity. Marked distances —3.5, 4, 5, 6, 7, 8, 10, 12, 15, 20, 30, 50, 100, and ∞.

Angle of View : When focused for infinity 25°.

Attachment Size : 36mm Slip-on Adapter Ring ; Series VI Attachment.

Note : Use Special Viewfinder or Universal Viewfinder.



Depth fo Field: Serenar 100mm f : 4

Distance Focused on (Ft)	Circle of Confusion = 0.035mm											
	f : 4		f : 5.6		f : 8		f : 11		f : 16		f : 22	
	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in
∞	235-	∞	168-	∞	118-	∞	85-10	∞	59- 3	∞	43-3	∞
100	70- 4	173-	62-10	246-	54- 3	656-	46- 4	∞	37- 3	∞	30- 2	∞
50	41- 4	63- 3	38- 8	70- 9	35- 3	86- 2	31- 9	118-	27- 3	316-	23- 3	∞
30	26- 8	34- 3	25- 6	36- 3	24- 1	39-11	22- 4	45- 7	20- 1	59-10	17-10	95-11
20	18- 6	21- 9	17-11	22- 7	17- 2	23-10	16- 4	25- 9	15- 1	29- 8	13-10	36- 4
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10	9- 7	10- 4	9- 5	10- 6	9- 3	10-10	9- 1	11- 2	8- 8	11-10	8- 3	12- 8
8	7- 9	8- 3	7- 8	8- 4	7- 6	8- 6	7- 4	8- 8	7- 1	9- 1	6-10	9- 7
7	6- 9	7- 2	6- 9	7- 3	6- 7	7- 4	6- 6	7- 6	6- 4	7- 9	6- 1	8- 2
6	5-10	6- 1	5- 9	6- 2	5- 9	6- 3	5- 8	6- 4	5- 6	6- 6	5- 4	6- 9
5	4-11	5- 1	4-10	5- 1	4-10	5- 2	4- 9	5- 3	4- 8	5- 4	4- 5	5- 6
4	3-11	4- 1	3-11	4- 1	3-10	4- 1	3-10	4- 1	3- 9	4- 2	3- 8	4- 3
3.5	3-5	3- 6	3- 5	3- 6	3- 5	3- 6	3- 4	3- 7	3- 4	3- 7	3- 3	3- 8

100 mm S. T.

SERENAR 135mm f : 4 — Telephoto Lens

Specifications :

Lens Element : 4.

Lens Mount : Non-collapsible.

Lens Head : Revolving.

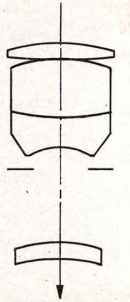
Marked Apertures : f : 4, 5.6, 8, 11, and 16.

Focusing Range : 5 ft to infinity. Marked distances — 5, 6, 7, 8, 10, 12, 15, 20, 30, 50, 70, 100, 200, and ∞.

Angle of View : When focused for infinity 19°.

Attachment size : 42mm Slip-on Adapter Ring ; Series VI Attachment.

Note : Use Special Viewfinder or Universal Viewfinder.



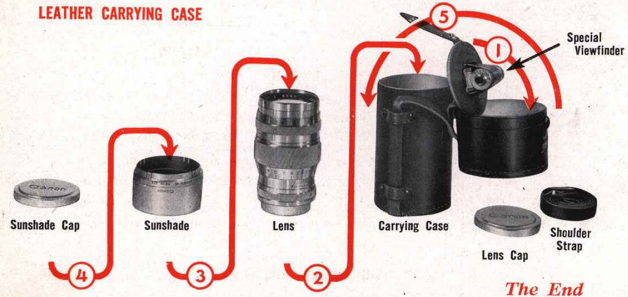
Depth of Field : Serenar 135mm f : 4

Distance Focused on (Ft)	Circle of Confusion = 0.035mm											
	f : 4		f : 5.6		f : 8		f : 11		f : 16			
	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in	ft-in	to ft-in		
∞	425-	∞	302-	∞	212-	∞	154-	∞	106-	∞		
200	136-	378-	121-	581-	103-	3321-	87-	4 ∞	69-	7 ∞		
100	81-	1 131-	75-	5 149-	68-	3 188-	61-	281-	51-	10 1629-		
70	60-	3 83-	7 57-	1 90-	8 52-	10 104-	48-	5 127-	43-	6 202-		
50	44-	10 56-	6 43-	1 59-	8 40-	8 65-	38-	73-	3 34-	3 93-		
30	28-	1 32-	2 27	4 33-	1 26-	5 34-	8 25-	36	0 23-	7 41-	2	
20	19-	1 20-	1 18-	10 21-	1 18-	4 21-	1 17-	10 22-	9 17-	1 24-	5	
15	14-	6 15-	6 14-	4 15-	8 14-	1 16-	1 13-	9 16-	5 13-	3 17-	2	
12	11-	8 12-	3 11-	7 12-	5 11-	5 12-	7 11-	2 12-	10 10-	10 13-	4	
10	9-	9 10-	2 9-	9 10-	3 9-	7 10-	5 9-	5 10-	7 9-	3 10-	10	
8	7-	10 8-	1 7-	10 8-	2 7-	9 8-	3 7-	8 8-	4 7-	6 8-	6	
7	6-	10 7-	1 6-	10 7-	1 6-	9 7-	2 6-	9 7-	3 6-	7 7-	4	
6	5-	11 6-	1 5-	10 6-	1 5-	10 6-	1 5-	9 6-	2 5-	9 6-	3	
5	4-	11 5-	1 4-	11 5-	1 4-	11 5-	1 4-	10 5-	1 4-	10 5-	2	

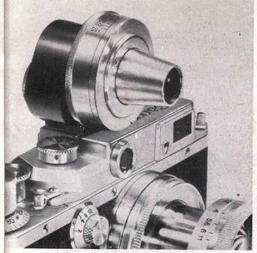
135 mm

S. T

LEATHER CARRYING CASE



The End



lenses of different focal length.

Canon accessories

Canon UNIVERSAL VIEWFINDER

The Canon UNIVERSAL VIEWFINDER is a precision instrument through which an exceptionally sharp and erect image can be viewed. Field of view is variable for lenses with focal lengh of 35mm to 135mm. Click stops offer positive setting at any particular focal length marking. Parallax compensating scale enables accurate parallax correction. The Canon UNIVERSAL VIEWFINDER is an indispensable item for one having

(will be available later)

Canon AUTO-UP

The Canon AUTO-UP is a close-up lens for use with the Serenar 50mm f : 1.9 lens. Subject lying between 22 inches and 40 inches can be accurately focused with the rangefinder of the camera. Unscrewing the lens for inserting intermediate ring is not necessary; simply mount the AUTO-UP onto the lens.

Ideal for photographing flowers, insects and other small objects.

Canon CAMERA HOLDER

The Canon CAMERA HOLDER is designed to hold the camera sturdy in a balanced position when using a tripod. The camera can be easily seated either vertically or horizontally. Spirit Level assures accurate composition of subject. Additional tripod sockets may be used for mounting the Canon Side Lighting Units.

An ideal accessory for close-up, telephoto and time exposure shots.