WILSONWERKS ARCHIVES

AIRES

VISCOUNT

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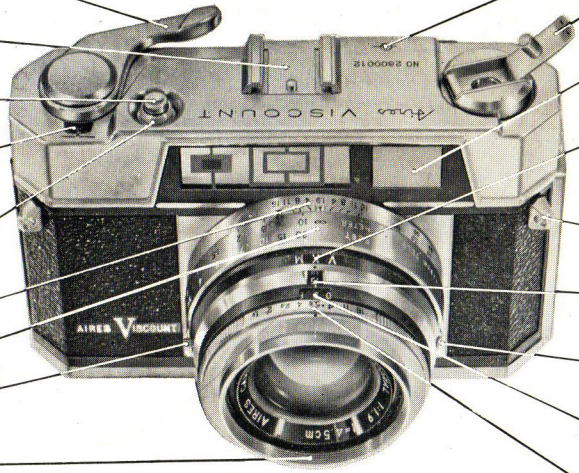
AIRES VISCOUNT Description of Parts



Rapid Advance Lever

Accessory Shoe

Shutter Release

Exposure Counter

Cable Release Screw

Depth of Field Ring

Distance Ring

Pin

Screw Mount for Filter or Supplementary Telephoto

Focusing Base Line

Rewind Crank (extended)

Range-Viewfinder Window

Synchro-Self-timer Ring

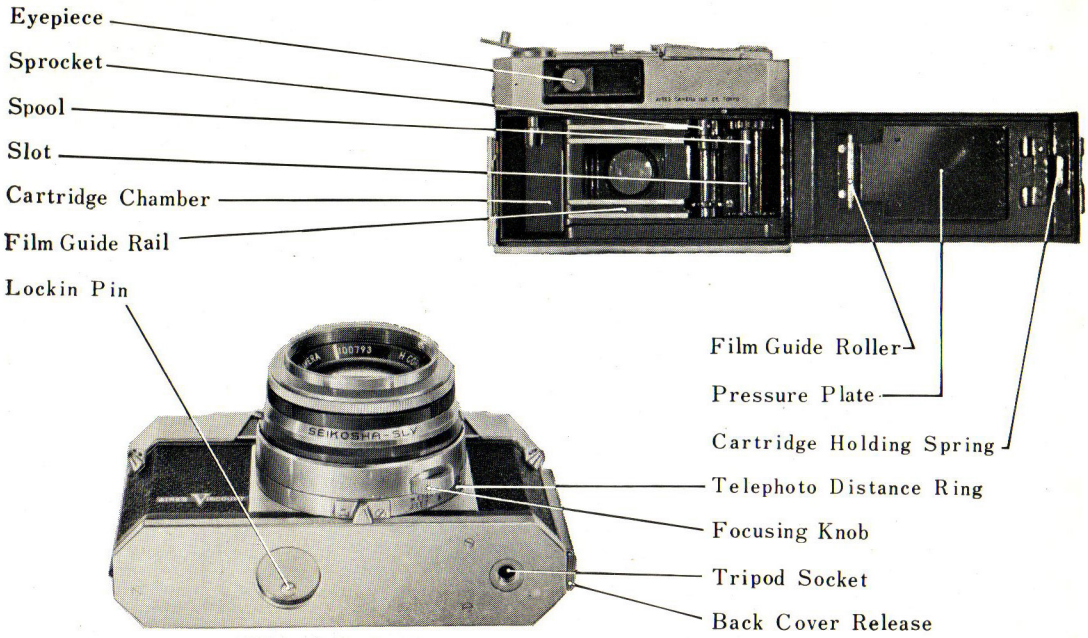
Neck Strap Eyelet

Shutter Speed Ring

Button

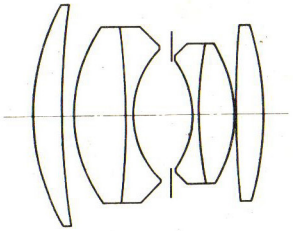
Light Value Number

Diaphragm Ring


Eyepiece
Sprocket
Spool
Slot
Cartridge Chamber
Film Guide Rail
Lockin Pin
Film Guide Roller
Pressure Plate
Cartridge Holding Spring
Telephoto Distance Ring
Focusing Knob
Tripod Socket
Back Cover Release
SEIKOSHA-SLV

Lens—H Coral, f=4.5 F 1 : 1.9, 6 elements 4 groups

This lens combines high speed and resolving power to cover a wide range of everyday photography. It is extremely useful in available light photography or for sports where high shutter speeds require a large diaphragm opening. Its superb definition makes it an excellent lens for general photography



Other data on the lens are as follows :

Sharp Image Field : 50°30′

Perpendicular Angle of View : 29°

Horizontal Angle of View : 43°

Diaphragm Openings : 1.9, 2, 2.8, 4, 5.6, 8, 11, 16

Lens Front Attachment Size : Filter screw 49 P=0.75

Shutter : Seikosha SLV fully-synchronized with cross coupled Light Value Scale and with selftimer

Speeds : B, 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{15}$, $\frac{1}{30}$, $\frac{1}{60}$, $\frac{1}{125}$, $\frac{1}{250}$, $\frac{1}{500}$

INTRODUCTION TO THE AIRES VISCOUNT

Behind any new camera lies a world of experience in a variety of fields—optics, metallurgy, designing, precision machining, tooling, testing techniques, packaging, etc.—all of these are part of the story behind the Aires Viscount.

The Viscount features a high precision Seikosha SLV shutter which gives consistant exposures over the entire scale—action stopping 1/500 to the slow full second for night scenes and available light photography—all of this and full synchronization for electronic or standard flash.

Other features arising from experience include the dependable accurate, coupled "trimming" range-viewfinder for standard lens, supplementary telephoto lens, with its "golden" bright-frame and its provision for parallax correction at close distances down to 2 2/3 feet. Smooth, jar-free, shutter release allows hand held exposures at slower speeds. Rapid advance lever and rewind crank provides fast shooting plus speedy reloading. Handy drop-out film loading chamber. Engraved depth of field scale. Double exposure prevention is automatic. In addition the Viscount has a self locking back cover and built-in self timer.

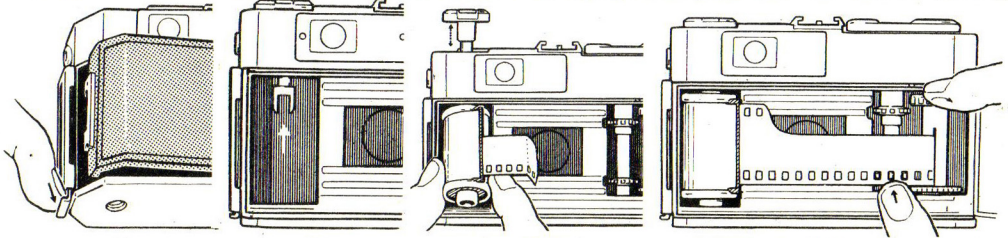
All these features plus the outstanding performance of the 6-element H-Coral f/1.9 lens make the Viscount a noteworthy addition to the precision Aires camera line.

OPERATING INSTRUCTIONS

Please read the following instructions carefully at least once to familiarise yourself with the Aires features. Handle the camera carefully and operate the various operating parts at least once before loading your first roll of film.

Loading

Place the camera face down on a table or other solid support and release the back cover lock by pulling down the lock release bar. The back cover will spring part-way open and may be opened fully by hand (A). Push upward on the slotted rewind shaft (B) and insert a standard roll of 35mm cartridge film with tip bent about $\frac{1}{8}$ inch from the end. (C) Push the rewind shaft down until it engages the rewind slot in the cartridge spool. Insert the film tongue in the slot of the take up spool making sure the film is securely



(A) (B) (C) (D)

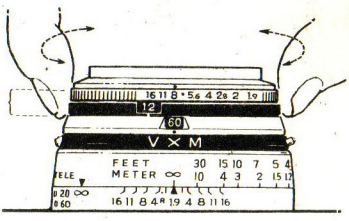
fastened and that the sprocket gears fit the perforations (D). Secure the film on the takeup spool by 1½ turn of the take up spool and close back of the camera.
Locking is automatic. Now take up the slack by turning rewind lever clockwise until tension is felt. Advance the exposed portion of the film by winding the advance lever and tripping the shutter twice or until the counter registers 1. When you wind the advance lever check to see that the rewind lever is turning counter-clockwise indicating that the film is advancing properly. Your Viscount is now loaded.

Important : ***When using the camera without flash equipment set the flash synchro switch to X.***

Setting the Cross-coupled Seikosha SLV Shutter

Light Value Mechanism is a new system of connecting the shutter speed and aperature setting rings (both adjust the amount of light reaching the film) making it possible to set combinations of proper exposures with speed and accuracy. Light value is the measure of available light for correct exposure with a given film speed expressed in single figures. For instance, if film with speed of ASA 100 is used one combination of lens openings and shutter speeds would be f/11 and 1/30 for correct exposure. This combination is represented by the number 12 which is the light value. Other combinations (f/16 at 1/15, f/8 at 1/60, f 5.6 at 1/125, f/4 at 1/250, f/2.8 at 1/500) may be made without upsetting this balance. The light value for all of these combinations is the same 12. As the Aires Viscount is equipped with the new Seikosha SLV shutter with the geometric progressions in multiples of two in shutter

speeds and evenly spaced diaphragm openings, simply set the LV number reading from an exposure meter or a light value table to the LV ring and several combinations of diaphragm and shutter speeds are coupled within a certain range. With the LV number determined you have only to change the shutter speed according to your different picture taking needs. For instance, when you need to take fast moving action you may set to 1/500 sec. by turning the coupled LV to this speed and the diaphragm will be set to f/2.8, automatically. (LV 12) The coupled diaphragm setting ring may be moved independently.

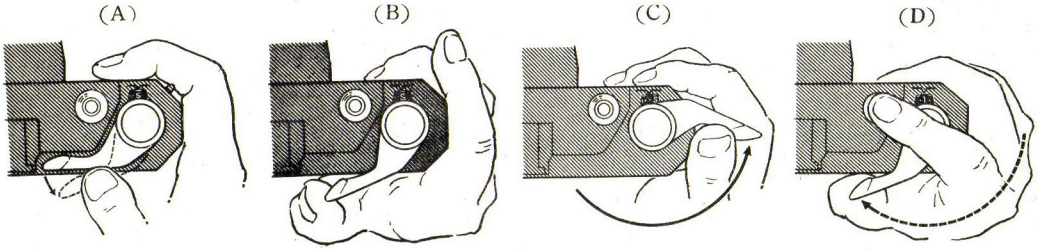


Rapid Winding and Cocking of Shutter

The Aires Viscount is so designed that both film advance and shutter cocking can be performed at the same time, very rapidly, by means of the Rapid Advance Lever used as follows.

1. Pull out Rapid Advance Lever with ball of thumb (A) until you reach operation position (B).
2. Place your thumb alongside Lever and push to the right until it stops as in illustration (C).

3. Let your thumb swing back with the Lever to position (D) ready for the next picture. The film has now been advanced one frame and the shutter cocked. Since the shutter cannot be released if you stop the Lever halfway, it is necessary that it be turned until it goes no further. Double exposures are prevented. The shutter release is conveniently located so the index finger of the right hand fits over it naturally when you hold the Viscount. You can wind the film and release the shutter very rapidly, at the rate of 12 exposures per 10 seconds.



"Trimming" Coupled Range-viewfinder

The Aires Viscount is equipped with a "trimming" coupled range-viewfinder mechanism of the super-imposed image type, with a single eyepiece. As the illuminated frame of the viewfinder is brilliant and as the two rangefinder images are very clear, it is easy to coincide

them and to focus as close as 32 inches with the standard lens. The illustration shows the wide field that can be seen through the viewfinder eyepiece and the illuminated frames. With the supplementary telephoto lens the closest distance is 8 feet.

The "trimming" range-viewfinder has the following 5 advantages ;

1) With the Aires viewfinder mechanism, the subject shown in the frame beyond 8 feet is recorded by the lens exactly as it is seen by the eye.
2) As only the subject within the illuminated frame is recorded by the lens and as the actual view seen through the full viewfinder is much larger in area, the photographer can frame and compose his picture very easily.
3) Fast moving objects passing through the field of view can be seen an instant before they enter the illuminated frame itself, thus permitting the photographer to capture the subject at just the right instant.
4) The illuminated frame will allow accurate composition in even the poorest light.
5) It enables the photographer to see the entire image accurately even if he wears spectacles.

Focusing

Looking through the Aires "trimming' range-viewfinder you will see two bright illuminated frames with a bright square in the center. Inside the bright square two images will be seen of the subject as illustrated in the left illustration below. By turning the focusing knob these two images can be made to merge as illustrated at right below. The procedure is the same with the supplementary telephoto lens available as an accessory EXCEPT that the distance focused on MUST be transferred (compensated) to the telephoto focusing scale. Closest usable distance with the supplementary telephoto lens is 8 feet. At infinity no adjustment is necessary. At all other distances reset telephoto scale's red triangular indicator to the distance indicated by red triangle for the normal 4.5cm. lens.

Framing

With the standard lens the outer bright illuminated frame is used to compose the picture. For subjects between 3 1/2 feet and 2 2/3 feet use the parallel correction marks at top and left side of frame to outline the top and side of pictures within these distances. The red center frame is for the supplementary telephoto lens. No parallax correction marks are provided for the telephoto frame since no appreciable amount of parallax will be encountered when using this lens.

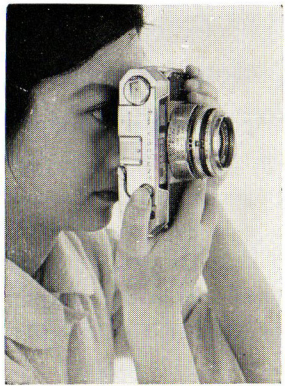
Holding the Camera when taking pictures

(A) Ordinary Horizontal Position

Hold the camera in both hands using right index finger to operate the shutter release and left index or middle finger to adjust focusing. To look through the viewfinder either the left or the right eye will do. Use whichever is convenient to you. Stabilize the camera by holding it so that the left hand thumb is pressed against your cheek.

(B) **Vertical position**

There are two ways to hold the camera for shooting vertical pictures. One is with shutter release above your eyes, (that is with your right hand above the camera). The other is with the shutter release below eyelevel. When the camera is held in the former way, the shutter release can be pressed with your right index or middle finger and film winding done without moving the camera from its shooting position. However, since the camera is held high, it is somewhat unstable especially for slow shutter speeds. If the camera is held in the latter manner, the shutter release is pressed with your thumb. When winding the film, your thumb is also used and has to be moved away from shutter release each time you wind the film. This position, however, is the more stable. Both ways have merits and there are pros and cons on them even among professionals. You must choose for yourself which suits you better. It is also up to you to decide which eye you can use more conveniently.

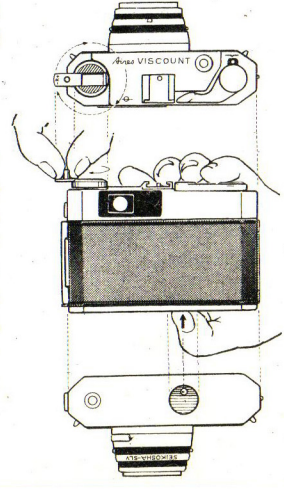


Taking the Picture

With the subject in sharp focus and properly framed you are ready to take the picture. Press gently, the shutter release on the top right of the camera, something like the trigger of a rifle. Press downward until release is flush with camera top and then at the precise moment of best expression or of peak action press all the way. A quiet click will be heard and you'll know the film has been exposed. Do not advance the rapid advance lever immediately unless you want to take another picture in the next few moments. By not winding the film immediately you preserve the life of the shutter mechanism.

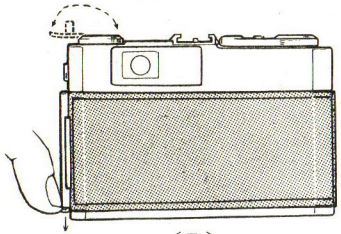
Unloading the Camera

As each picture is taken it is recorded in the film exposure counter window. When the counter reaches 20 or 36, depending upon the length of roll, press the locking pin on base of camera and fold out the rapid rewind crank. Rewind the film into the film cartridge by turning the crank clockwise (in direction of the arrow on the crank) until no tension is felt on the crank. (A) The film is now fully rewound. Unlock the back cover (B) and pull up the rewind crank shaft (C) With the back fully open and the rewind crank and shaft in the "up" position the

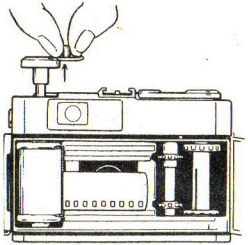


A)

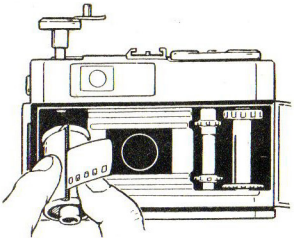
camera is turned over and the film will drop out of its own accord or it may be taken out as shown in (D).



(B)



(C)



(D)

Cable Release

If the shutter speed is slower than 1/25 sec. use of cable release is advisable. The cable release should be screwed onto the cable release screw surrounding the shutter release before the shutter is cocked. If screwed on after the shutter has been cocked you might accidently trip the shutter.

Infrared Marking (The Red R)

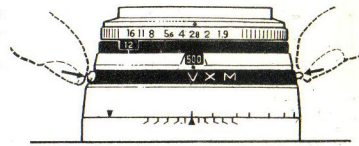
Infrared film takes pictures by infrared waves invisible to human eyes. Focusing with this film is different from regular film and the lens must be focused slightly in front of the visible subject. A red mark is provided on the depth of field scale ring to compensate for

this difference. Focus the camera in the regular way with the rangefinder and set the distance focused upon to this compensating mark before shooting with infrared film.

Flash Synchronization and Self-timer

The Seikosha SLV shutter has built-in synchronization for standard medium peak flash bulbs of the M class and electronic flash units having zero delay. Flash terminal is located on left end of camera body and accepts European (RC) type synchro plugs.

The flash synchro setting ring is marked with VXM in white, red and green and indicates self-timer, X synchro setting for electronic flash units and M setting for medium peak M-type flash bulbs respectively. All have click stops.



Setting Indicator :

Grasp the projecting button and pin opposite each other on the synchro ring with thumb and forefinger, depress pin and turn ring in either direction until desired setting is in line with red dot.

Self-timer :

The white V on the flash synchro ring is set to the red dot when you want to use this delayed action feature of the Viscount. It may be set before or after film is wound and shutter cocked. It provides a delay of approximately 11 seconds after body release is pressed before shutter is tripped. After use reset the synchro ring to the red X position.

Fixed Focus

In taking fast action pictures and snap shots there are times when you have no chance to set the focus. It is at such situation Fixed Focus setting can be of help to you. Have the distance scale and diaphragm stop set at the Fixed Focus markings (the red 30 feet or 10 meter and the red dot half way between f/5.6 and f/8) and all your objects from about 15 feet (4 meters) to infinity will be in focus. With this setting you can take pictures during daylight hours of most objects by simply adjusting the shutter speed.

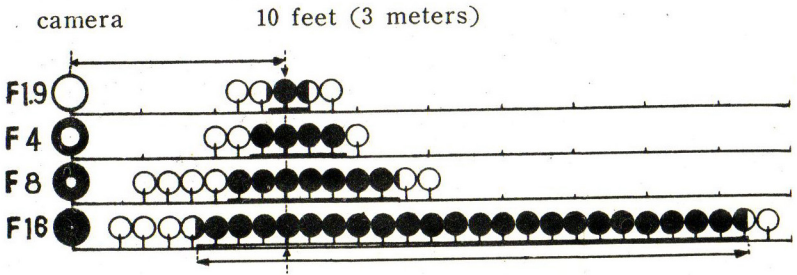
Depth of Field of Photographic Lenses and their Utilization

Photographic lenses have a tendency to be in focus in front of and behind the subject focused on. For instance, if you focus on a person 10 feet (3 meters) away a dog closer than 10 feet (3 meters) and flowers further than 10 feet (3 meters) may also be in acceptable sharp focus. The range from the front limit to the rear limit in acceptable sharp focus is called the Depth of Field of a lens. This range is shallow in the foreground and deep in the background and the limits varies with different lenses and also with the different apertures and distances as you can see from the Depth of Field Chart found elsewhere in this booklet.

In actual work the control of the Depth of Field serves as a tool to achieve desired effects and is utilized in the following two ways.

1. To get a sharp image of subjects located at different distances from the camera. Using a Depth of Field Chart will enable you to control what will or what will not be sharp in your picture.
2. To limit sharpnesss, to concentrate attention on a certain part of the picture by having it sharp, making everything else blurred. Practice will teach you how to use and control this feature of the lens' depth of field.

Standard Lens Depth of Field at 10 feet (3 meters)



Depth of Field Chart

(AIRES H CORAL 1 : 1.9 f=4.5cm)

(FEET)

F	Dist. / Depth	$2^2/_3$	3	$3^1/_3$	4	5	7	10	15	30	∞
1.9	Front	2 $7^3/_8$	2 $11^1/_8$	3 $2^7/_8$	3 $10^1/_2$	4 $9^5/_8$	6 $7^3/_8$	9 $2^3/_4$	13 4	24 0	119 11
	Rear	2 $8^5/_8$	3 $^7/_8$	3 $5^1/_8$	4 $1^5/_8$	5 $2^5/_8$	7 $5^1/_4$	10 $10^7/_8$	17 $1^3/_4$	40 0	∞
2	Front	2 $7^3/_8$	2 $11^1/_8$	3 $2^7/_8$	3 $10^3/_8$	4 $9^5/_8$	6 $7^1/_8$	9 $2^3/_8$	13 3	23 9	113 11
	Rear	2 $8^3/_4$	3 $^7/_8$	3 $5^1/_8$	4 $1^3/_4$	5 $2^3/_4$	7 $5^1/_2$	10 $11^1/_2$	17 3	40 9	∞
2.8	Front	2 7	2 $10^3/_4$	3 $2^1/_2$	3 $9^3/_4$	4 $8^5/_8$	6 $5^3/_8$	8 $10^7/_8$	12 8	22 0	81 6
	Rear	2 9	3 $1^3/_8$	3 $5^5/_8$	4 $2^1/_2$	5 $3^7/_8$	7 $7^7/_8$	11 $4^3/_4$	18 4	47 5	∞
4	Front	2 $6^5/_8$	2 $10^1/_4$	3 $1^7/_8$	3 $8^7/_8$	4 $7^1/_4$	6 $2^7/_8$	8 $6^1/_8$	11 11	19 8	57 2
	Rear	2 $9^1/_2$	3 2	3 $6^3/_8$	4 $3^5/_8$	5 $5^3/_4$	7 $11^3/_4$	12 $1^3/_8$	20 4	63 2	∞
5.6	Front	2 6	2 $9^5/_8$	3 1	3 $7^3/_4$	4 $5^1/_2$	5 $11^3/_4$	8 $^1/_2$	11 0	17 4	40 11
	Rear	2 $10^1/_4$	3 $2^3/_4$	3 $7^1/_2$	4 $5^1/_8$	5 $8^1/_4$	8 $5^1/_4$	13 $2^3/_4$	23 8	112 8	∞
8	Front	2 $5^3/_8$	2 $8^5/_8$	2 $11^7/_8$	3 $6^1/_8$	4 3	5 $7^5/_8$	7 5	9 11	14 8	28 9
	Rear	2 $11^1/_4$	3 $4^1/_8$	3 $9^1/_4$	4 $7^3/_4$	6 $^5/_8$	9 3	15 $4^1/_8$	31 5	∞	∞
11	Front	2 $4^3/_8$	2 $7^1/_2$	2 $10^5/_8$	3 $4^3/_8$	4 $^3/_8$	5 3	6 $9^1/_4$	8 9	12 4	21 0
	Rear	3 $^5/_8$	3 6	3 $11^1/_2$	4 $11^1/_4$	6 $6^3/_4$	10 6	19 $1^1/_2$	52 9	∞	∞
16	Front	2 $3^1/_8$	2 $5^7/_8$	2 $8^1/_2$	3 $1^5/_8$	3 $8^5/_8$	4 $8^3/_4$	5 11	7 5	9 10	14 6
	Rear	3 $3^1/_8$	3 $9^3/_8$	4 $3^7/_8$	5 $6^1/_4$	7 $7^1/_2$	13 6	32 $2^1/_2$	∞	∞	∞

Depth of Field Chart

(AIRES H CORAL 1 : 1.9 f=4.5cm)

(METERS)

F	R	0.8	0.9	1.0	1.2	1.5	2.0	3.0	4.0	10.0	∞
1.9	Rv	0. 78	0. 88	0. 98	1. 16	1. 44	1. 90	2. 77	3. 61	7. 86	36. 57
	Rh	0. 81	0. 92	1. 03	1. 24	1. 56	2. 11	3. 27	4. 49	13. 76	∞
2	Rv	0. 78	0. 88	0. 97	1. 16	1. 44	1. 89	2. 76	3. 59	7. 77	34. 75
	Rh	0. 81	0. 92	1. 03	1. 24	1. 56	2. 12	3. 28	4. 52	14. 04	∞
2.8	Rv	0. 78	0. 87	0. 96	1. 15	1. 42	1. 85	2. 68	3. 45	7. 13	24. 90
	Rh	0. 82	0. 93	1. 04	1. 26	1. 59	2. 18	3. 41	4. 76	16. 73	∞
4	Rv	0. 77	0. 86	0. 95	1. 12	1. 38	1. 79	2. 56	3. 25	6. 35	17. 40
	Rh	0. 83	0. 95	1. 05	1. 29	1. 64	2. 42	3. 89	5. 61	23. 50	∞
5.6	Rv	0. 75	0. 84	0. 93	1. 10	1. 34	1. 72	2. 42	3. 03	5. 55	12. 50
	Rh	0. 85	0. 97	1. 09	1. 32	1. 70	2. 38	3. 95	5. 89	50. 50	∞
8	Rv	0. 73	0. 82	0. 90	1. 06	1. 28	1. 63	2. 23	2. 74	4. 67	8. 76
	Rh	0. 88	1. 00	1. 13	1. 39	1. 81	2. 59	4. 56	7. 36	∞	∞
11	Rv	0. 71	0. 79	0. 86	1. 01	1. 22	1. 52	2. 04	2. 46	3. 90	6. 39
	Rh	0. 91	1. 04	1. 19	1. 47	1. 96	2. 91	5. 66	10. 70	∞	∞
16	Rv	0. 68	0. 75	0. 82	0. 95	1. 12	1. 38	1. 79	2. 10	3. 07	4. 42
	Rh	0. 98	1. 13	1. 29	1. 64	2. 27	3. 66	9. 34	42. 10	∞	∞

Supplementary Telephoto Lens

Attaching : Attach supplementary telephoto lens by screwing it into thread provided inside front lens retaining ring. Make sure lens mounts are flush and tight.

Focusing: Focus with rangefinder as in the ordinary way by turning focusing knob until two images of subject are merged. Obtain the footage (meter) reading from the distance scale ring and set the triangle on the telephoto focusing scale to the corresponding footage (meter) scale on the depth of field scale ring. The telephoto lens covers distances between eight feet and infinity. Photo should not be taken closer than eight feet. Effective aperture of the Aires supplementary telephoto lens is f/5.6. Camera aperture (diaphragm) should be set to openings between f/5.6 and f/16 according to light conditions. For general use and maximum resolution diaphragm should be set at f/8. ***Important*** : ***The above procedure of transferring the reading MUST be followed each time rangefinder is used to obtain distance reading for accurate focusing.***

Exposure Meter

Attaching: Attach exposure meter by inserting clip into accessory shoe from rear of camera.

Reflected Light Reading

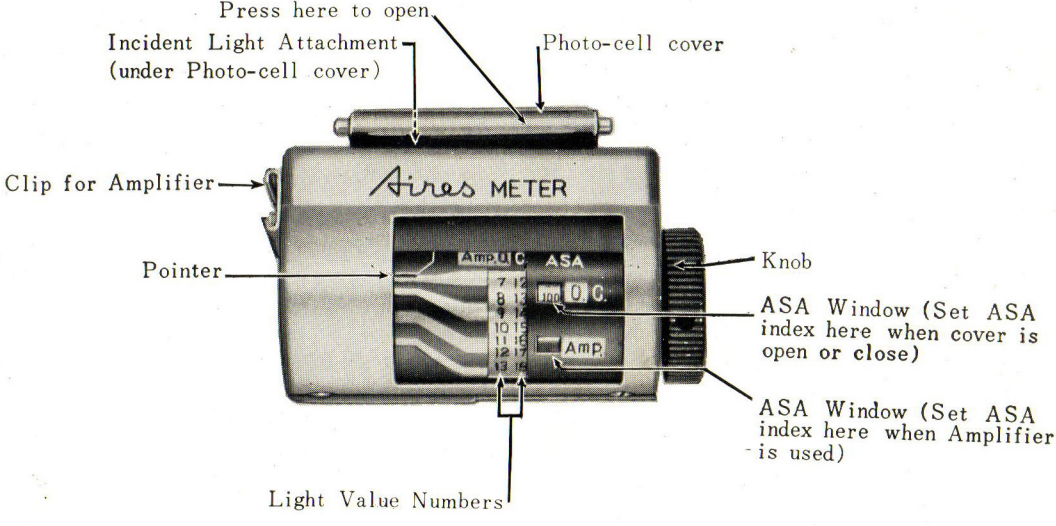
(1) Open photo-cell cover by pressing down on top of hinge.
(2) Remove incident light attachment from photo-cell and close cover.
(3) Set the ASA index of the film in use at the opening under letters ASA by turning the knob.

(4) Point the photo-cell of the meter toward the scene to be photographed.
(5) Note position of red pointer and read the black number under "C". This is the light value (LV) number used to set your camera to obtain correct exposure.
   a. Should the light fail to move red pointer (indoors or outdoors under unfavorable light conditions) open front cover of meter and take reading from red scale under "Amp.O"
   b. Should you be unable to get a reading with the cover open then use the amplifier (booster cell) by clipping it to side of meter and remove incident light attachment. With the amplifier (booster cell) in place, reset the ASA index to the opening marked "Amp." Front photo-cell cover should be open when using amplifier (booster cell).

Incident Light Reading

(1) Insert the incident light attachment to the photo-cell and keep cover open.
(2) Set the ASA rating of the film in use as explained in (3) page 20.
(3) Take reading from subject position, pointing photo-cell toward camera. (If this is inconvenient, reading may be made at camera position if the light at that position is equal to that reaching subject. Face of meter should be perpendicular to subject.) Read black numbers.
(4) When taking dark subjects or in dimly lighted interiors, clip amplifier (booster cell) onto the meter and take reading as described in preceding paragraph. Read numbers in red under "Amp.O". Remember to reset ASA index to the slot opposite "Amp", When light value reading has been taken by the above method, set the number to the light value (LV) scale on your camera.

Description of Parts



THE CARE OF YOUR CAMERA

The accuracy of the shutter mechanism will be effected if you leave the shutter cocked for long periods of time. With the Aires Viscount film winding and shutter cocking are done simultaneously, so you must be even more careful not to leave the shutter cocked, especially at a high speed.

After each shooting session the distance scale should be returned to infinity—∞—before front cover of eveready case is closed.

Even when the shutter is not cocked its auxiliary spring will be under pressure at 1/500 sec., so change the setting to other than 1/500 before storing the camera away.

When the camere is not in use the lens cap should be replaced. In use it is advisable to use a UV filter to protect the front element from scratches and oily fingerprint marks.

TABLE 1 Standard Exposures (Light Value on the basis of ASA 100)

Subject	Spring Mar. Apr. May	Summer June July Aug.	Autumn Sep. Oct. Nov.	Winter Dec. Jan. Feb.
Seascape, mountain and snow scenes, open landscape	16	17	16	15
Common scenes	15	16	15	14
Bright streets, snap-shooting	14	15	14	13
Outdoor crowd	13	14	13	12
Close-up of an outdoor person	12	13	11	10
Person in shade or by window	11	12	10	9

TABLE 2 Weather, Time and L. V. Coefficient

Weather	L. V. Coefficient	T i m e	L. V. Coefficient
Fine	± 0	Morning 10 o'clock Afternoon 3 〃	± 0
Slightly cloudy	− 1	Morning 9–10 〃 Afternoon 2–3 〃	− 1
Cloudy	− 1.5	Morning 8–9 〃 Afternoon 3–4 〃	− 1.5
Very cloudy	− 2		

TABLE 3 Film-Sensitivity and Filter Coefficients

Sensitivity	L. V. Coefficient	AIRES FILTER		L. V. Coefficient
		for black & white	for color	
ASA 800	+ 3	U. V.	Skylight	± 0
ASA 400	+ 2	Light Yellow	Cloudy	− 0.5
ASA 200	+ 1	Yellow and Green	Brown	− 1
ASA 50	− 1	Orange	Blue	− 1.5
ASA 25	−2.5	Light Red		− 2.5
ASA 12	− 3			

When you take a picture, with an XX film, of an outdoor crowd with ample sunshine about noon in April, the L. V. is 13 as shown under Spring in the Table 1. If you use a yellow filter in this instance, the L. V. coefficient is −1 as shown in the Table 3, so that the Light Value is to be 13 − 1 = 12.

AIRES
CAMERA

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