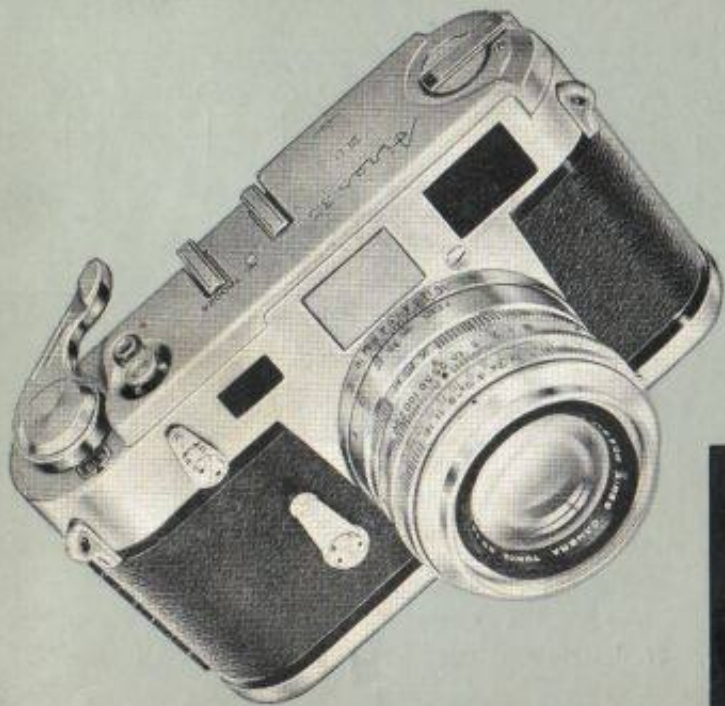




INSTRUCTIONS
FOR USING
AIRES 35III
1:1.9 $f=4.5\text{cm}$

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AIRES 35 III C Description of Parts

1. Film Winding Lever
2. Accessory Shoe
3. Socket for Cable Release
4. Film Counter
5. Shutter Release Button
6. Rangefinder Window
7. Combined Intentional Double Exposure and Rewind Lever
8. Luminous Frame Window
9. Self-timer Lever
10. Starter Button for Self-timer
11. H-Coral Lens
12. Focusing Base Line
13. Rewinding Crank (closed)
14. Film Winding Indicator
15. Finder Window
16. Neck Strap Eyelet
17. Depth of Field Scale (with infra-red marking, red R)
18. Distance Scale Ring
19. Synchro Switch Ring



- | | |
|--|-----------------------------------|
| 20. Shutter Speed Scale Ring | 23. Index Mark for Lens Apertures |
| 21. Index Mark for Shutter Speed and Light Value | 24. Flash Contact |
| 22. Combined Lens Aperture Scale and LVS Ring | 25. Focusing Knob |

26. Back Panel Lock Key

27. Film Cartridge
Chamber

28. Film Guide Rail

29. Sprocket

30. Groove for Inserting
Film Tip

31. Film Takeup Shaft

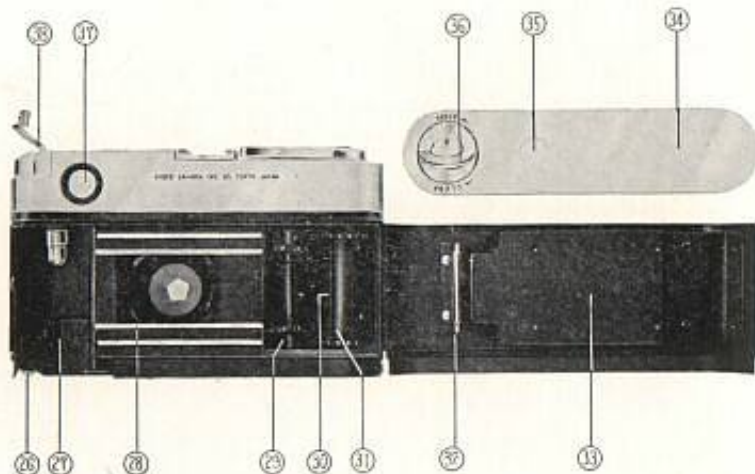
32. Film Guide Roller

33. Pressure Plate

34. Bottom Cover

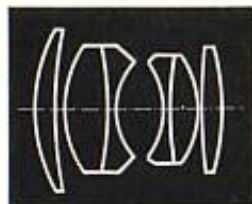
35. Tripod Socket Opening

36. Opening Knob



37. Eyepiece

38. Rewinding Crank (extended)



LENS: Aires H-Coral, F 1.9/4.5 cm., 4-cell, 6-element, amber-coated anastigmat

SHUTTER: Seikosha MXL fully-synchronized with cross-coupled Light Value Scale
Speeds: B, 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/250 and 1/500 sec.
with built-in MFX synchronization with automatic time lag
adjusting mechanism.

★ HOW TO TAKE PICTURES BY THE USE OF DIFFERENT FEATURES



"Trimming" Coupled Range Viewfinder

The Aires 35III C is equipped with a "trimming" coupled range viewfinder mechanism of the super-imposed image type, with 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 automatically as close as 32 inches.

The illustration shows the wide field that can be seen through the viewfinder eyepiece and the brilliantly illuminated frame. All subjects within this frame will be recorded on your film, down to a distance of $2\frac{3}{4}$ feet. This model is equipped with an automatic parallax correcting mechanism thereby eliminating the faults found with range viewfinders in taking pictures at close distances.

In addition, this "trimming" range viewfinder has the following 5 advantages:

- 1) The viewfinder on an ordinary camera gives a very different image depending on how the photographer holds the camera to his eye. With the Aires "trimming" viewfinder mechanism, however, there is no such difficulty. A subject shown in the brilliant frame of the finder is recorded by the lens exactly as it is seen.

- 2) As only the object within the illuminated frame is recorded by the lens and as the actual view seen through the eyepiece 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 through the eyepiece for an instant before they enter the illuminated frame itself, thus permitting the photographer to capture the subject at just the right instant.
- 4) The brilliantly illuminated frame will allow accurate composition in even the poorest light.
- 5) For those photographers who wear spectacles and who in the past have had difficulty in using a 35 mm camera, this new type of "trimming" viewfinder will solve all their problems.

Light Value Scale and Its Use

Your Aires 35-III C incorporates the new Light Value Scale, which is cross-coupled to lens opening and shutter speed settings. This has eliminated the use of two scales and two setting rings. With this cross-coupling feature, both aperture and shutter speed are set by one action. Light Value is the measure of available light for correct exposure with a given film speed expressed in single figures. It represents a combination of lens opening and shutter speed.

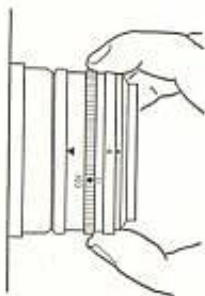
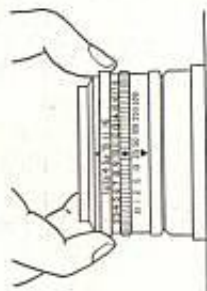
The use of Light Value Scale is as follows:

- 1) Find out by means of an exposure meter, or from the information sheet usually in the package, the Light Value of your film. Typical LVS settings appear on page 22 of this booklet.

- 2) Set the Light Value to the index mark by turning the LVS Ring.
- 3) Set the shutter speed in the following manner.

Turn the Shutter Speed Scale Ring together with the LVS Ring by holding on to both rings and the LVS Ring will synchronize within a certain range. Set the shutter to your desired speed within this range. When the Rings pass the end of this effective range the Rings will slip and thereby not synchronize. Since the shutter speed and aperture are cross-coupled, a change of the shutter speed (except for 1/500 sec.— when taking pictures at 1/500 sec. set the light value one reading higher: e. g. 14 when it is 13) automatically changes the aperture, so that the correct amount of light is admitted into the lens. In other words, the exposure always remains the same under a given lighting condition. With light value set at 8, for instance, you have 6 speeds, 1, 1/2, 1/5, 1/10, 1/25, and 1/50

sec. and as your speed is made higher from 1 to 1/50 sec. the aperture changes from 16 to 1.9. Discriminating photographers were quick to recognize the value of a system which allow both aperture and shutter speed change with a quick flick of the finger, and yet gives identical exposures at each setting. The Seikosha MXL shutter on your Aires 35-III C has this feature, yet allows you to set your camera in the conventional manner, independent of the LVS scale.



Focusing

As you look through the eyepiece and adjust the distance setting by means of the focus knob you will see two images of the same object in the small bright rectangle. The images move apart or together as you move the Focus Knob. Adjust it until the two images of the object on which you are focusing coincide exactly. At the same time, all objects in the range shown on the Depth of Field Chart found at the latter part of this booklet will also be in focus at the lens opening you select for your exposure.

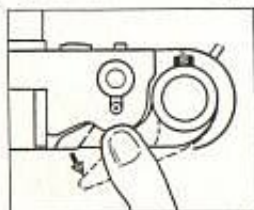


Winding of Film and Cocking of Shutter

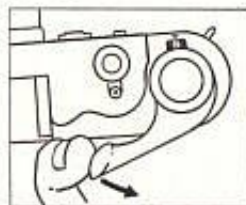
The Aires 35III C is so designed that both film advance and shutter cocking can be performed at one and the same time, very rapidly, by means of a single-action lever as follows:

- 1) Put your thumb on the top surface of the Film Winding Lever and pull it towards you as shown in illustration (A).
- 2) Put your thumb alongside the Lever as in illustration (B) and turn it to the right until it stops (C).
- 3) Let your thumb slip off the Lever and it will return to position (B), ready for next picture.

The film has now been advanced one exposure and the shutter cocked. Since the shutter cannot be released if you stop the Lever halfway, it is necessary that the Lever should be turned until it goes no further. Double exposures are perfectly prevented. Since the Shutter Release Button is so conveniently located the index finger of your right hand fits over it naturally when you hold the camera. You can wind the film and release the shutter very rapidly, at the rate of 12 exposures per 10 seconds.



(A)



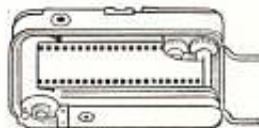
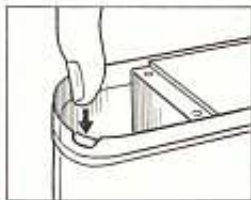
(B)



(C)

Film Loading

- 1) Lift the Bottom Cover Knob and turn until the arrow on the base stops at the word "OPEN"
- 2) Pull up on the Knob and the Bottom Cover will come off.
- 3) Push Back Panel Lock Key as shown in the illustration and the Back Panel snaps open.
- 4) Place the film magazine in the Cartridge Chamber.
- 5) Insert the tip of the film into the Groove of the Film Takeup Shaft. (The film can be inserted more easily if you bend its tip $1/8$ " from the end) If the Groove is not in the right place, move it by turning the Film Takeup Shaft with your thumb. When the tip is in the Groove be sure that the perforations of the film engage the gears on both ends of the Sprocket.



- 6) Give the Film Takeup Shaft a few forward turns with your left thumb or turn the Winding Lever to wind the film one or one and a half times around the shaft.
- 7) Close the Back Panel after ensuring that the film will wind correctly.
- 8) Put the Bottom Cover into place and turn the arrow in the direction of the word "Close" until it stops. Fold the Knob flat against the Bottom Cover. Now the film has been loaded and Bottom Cover locked.
- 9) Turn the Winding Lever until it will go no further and the film is advanced and the shutter cocked. Take blank shots until numeral 1 appears in the Film Counter. The blank shots are in order not to use the section of film which was exposed to light.
- 10) This number 1 is your first picture when you release the shutter. The Film Counter shows how many pictures you have taken. On the camera top beside the Rewind Crank you will find a small red checked indicator which will turn to show that the film is advancing properly.

Aires Film Magazine

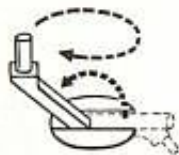
The magazine is constructed to hold about $5\frac{1}{2}$ feet of 35 mm film which is sufficient to make up to 36 exposures. The Cylindrical Magazine contains 3 parts, the spool and 2 shells. When the Bottom Cover of the camera is closed by turning the knob the magazine will automatically open and send out the film smoothly. After the film is rewound and the knob is turned to open the Bottom Cover the magazine will automatically close. Because of the wide rectangular opening there is no fear of causing scratches on the film, therefore the use of Aires Film Magazine is highly recommended.



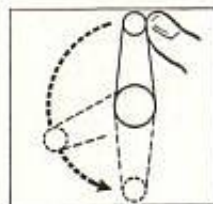
Film Rewinding

When you have exposed the entire roll, the Film Winding Lever will move no further. Now the film is to be rewound into the magazine in the following manner:

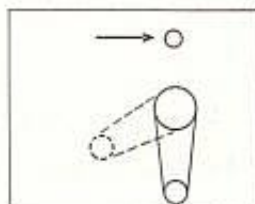
- 1) Lift the Rewind Crank to extended position as shown in the illustration,
- 2) Gently, move the Rewind Lever in the direction of the letter "R".
- 3) Turn the Rewind Crank in the direction of the arrow,
- 4) As you turn the Crank you can tell from the resistance on your fingers when the rewinding has been completed.
- 5) To take out the magazine open the Bottom Cover and Back Panel as you did when loading the camera.



Self-timer



The Self-timer is built into the camera. Set the Self-timer Lever as shown in the illustration and press the Starter Button you find under the Lever. In 12 seconds it will trip the shutter. This will give you ample time to get yourself into the picture.



Cable Release

If the shutter speed is slower than $1/25$ sec. use of cable release is advisable. The cable release is screwed into the Cable Release Socket just behind the Release Button.

Infra-Marking

Infra-red ray film takes pictures by the infra-red light invisible to human eyes. With this film the focus is different from that with visible light. After getting the right focus in the usual way, place the Distance setting at the infra-red ray marking (the red R on the Depth of Field Scale), instead of at the regular distance marking.

Intentional Multiple Exposures



When you want to take pictures of two different subjects on one negative push the Lever for Multiple Exposure in the direction of the letter "D", and turn the Film Wind Lever. This will cause the shutter to be cocked but the film will not advance.

Flash Synchronization

By simply inserting a European (RC) type Synchro Plug into the flash contact, you can get all types of flash bulbs synchronized at all speeds. There are two types of flash bulbs, the M class and the F. The M class takes longer to ignite and the light output is high, while with the F class the duration is short and the light output low. The time lag is slow with the M class and fast with the F. (Time lag means the time the bulb takes to ignite after the shutter has been released) If your bulb is of M class, all you have to do is to turn the ring over to the letter M, and if it is F to the letter F.

The X is for electronic flashes.

Important: When using the camera without flash equipment, set the ring at X.

★ HOW TO HOLD THE 35 III C CAMERA WHEN TAKING PICTURES

(A) Ordinary Horizontal Position



Hold the camera in both hands using the right index finger to operate the shutter button and the 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 so holding it that the left hand thumb is pressed against your cheek.

(B) Vertical Position



Almost all 35 mm cameras are made to take pictures in the ordinary horizontal position. There are two ways to hold the camera for shooting vertical pictures. One is with shutter button above your eyes, (that is with your right hand above the camera). The other is with the shutter button below eyelevel. When the camera is held in the former way, the shutter button 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 exposures. If the camera is held in the latter manner, the shutter button is pressed with your thumb. When winding the film, your thumb is also used and the camera has to be moved away from your eyes each time you wind the film. This position, however, is the more stable.

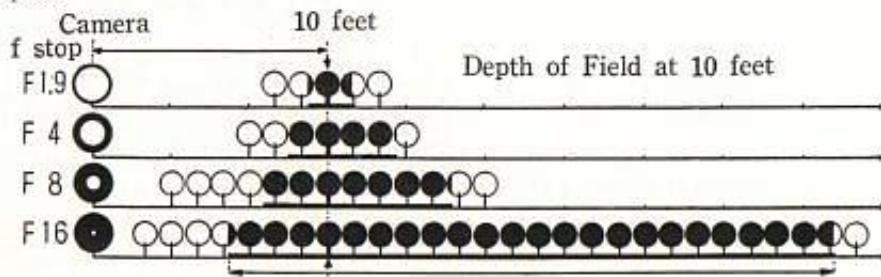
Both ways have merits and demerits even among professionals. You must learn for yourself which suits you better. It is also up to you to decide which eye you can use more conveniently.

should read "and distance"

★ MISCELLANEOUS INFORMATION

Facts About the Depth of Field

Lenses have a tendency to be in focus in front of and behind the subject focused on. This range is called Depth of Field. For instance, if you focus on a person 10 feet away a dog closer than 10 feet and flowers further than 10 feet may also be in focus. The Depth of Field is shallow in the foreground and deep in the background. (see illustration) The Depth of Field Chart shows you the Depth of Field of the Aires H Coral F 1.9/45mm at various apertures at 10 feet. Therefore if this principal is applied new fields of interest in picture taking will arise. In taking fast action pictures there are times when you have no time to set the focus. It is at such times that the Fixed Focus setting can be of help to you. Set the distance scale and aperture opening at the Fixed Focus markings (30 feet and the red dot half way between F: 5.6 and F: 8) and all objects from about 13 feet to infinity will be in focus. With this setting you can take pictures of most objects by simply adjusting the shutter speed.



Depth of Field Chart
(AIRES H CORAL 1 : 1.9 f=4.5cm) (FEET)

F	Dist.	2 ² / ₃		3		3 ¹ / ₃		4		5		7		10		15		30		∞	
	Depth	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
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 ⁷ / ₈	3	5 ¹ / ₈	4	1 ⁵ / ₈	5	2 ³ / 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 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	0 ⁷ / ₈	12	8	22	0	81	6
	Rear	2	9	3	1 ³ / ₈	3	5 ⁵ / ₈	4	2 ¹ / ₈	5	3 ⁷ / ₈	7	7 ⁷ / ₈	11	4 ³ / ₄	18	4	47	5	∞	
4	Front	2	6 ³ / ₈	2	10 ¹ / ₄	3	1 ⁷ / ₈	3	8 ⁷ / ₈	4	7 ¹ / ₄	6	2 ³ / ₈	8	6 ¹ / ₈	11	11	19	8	57	2
	Rear	2	9 ¹ / ₂	3	2	3	6 ⁵ / ₈	4	3 ⁵ / ₈	5	5 ⁵ / ₈	7	11 ³ / ₄	12	1 ³ / ₈	20	4	63	2	∞	
5.6	Front	2	6	2	9 ¹ / ₈	3	1	3	7 ³ / ₄	4	5 ¹ / ₂	5	11 ³ / ₄	8	1 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 ⁵ / ₈	2	8 ³ / 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 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 ⁸ / ₈	4	3 ³ / ₈	5	3	6	9 ¹ / ₄	8	9	12	4	21	0
	Rear	3	5 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 ³ / 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	∞		∞		∞	

The Care of Your Camera

The durability of the shutter spring will be lessened if you leave the shutter cocked for long periods of time. With the Aires 35III C film winding and shutter cocking are done simultaneously, so you must be even more careful not to leave the shutter cocked, especially at a higher speed.

After each film is exposed and the camera is to be stored in its case, the distance scale should be returned to infinity. 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 sec, before storing the camera away.

Protection of the Lens

The exposed area of a wide-aperture lens is large. Since the Aires H-Coral F:1.9/4.5 cm. lens is made particularly big to ensure a greater light value of its edges and is a high speed lens, the unprotected area is very wide. By using a good filter of the proper color or density for the specific film in the camera, the lens will be protected from dust and water. The Aires filters are polished in the same way as optical lenses and are ultra-hard-coated. Use of the Aires filters along with the Aires lens-hood is recommended. There are 3 Aires filters for black and white pictures and 4 for color pictures available in the United States. They are of screw-in type.

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	(1 A) ± 0
ASA 400	+ 2	Light Yellow	Cloudy	(81 B) - 0.5
ASA 200	+ 1	Yellow and Green	Brown	(85 & 85 C) - 1
ASA 50	- 1	Orange	Blue	(80 A) - 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 $13 - 1 = 12$.

FILTERS FOR AIRES 35 CAMERA

For Black & White Film

Aires Yellow (K2) Used for increased contrast of subjects outlined against blue sky.

Aires Red (A) Used with pan film for moonlight effects.

Aires Green (X1) Used to obtain correct monochromatic rendering of natural color scene in taking with pan film.

For Color Film

Aires Skylight (1A) Prevents excessive blue and absorbs small amount of green with daylight color for far off scenery.

Aires Type F (85C) Conversion filter for tungsten color used in daylight.

Used in conjunction with Aires Cloudy for overcast days.

Aires Type A (85) Same as Type F but used with tungsten type film of 3400°.

Aires Clear Flash (80F) Used when taking flash photographs with daylight color using clear flash bulbs.

Note: The symbols in parenthesis are the Wratten designations.