

Ricoh XR-2s

This camera manual library is for reference and historical purposes, all rights reserved.

This page is copyright by mike@butkus.org, M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer
I have no connection with any camera company.

On-line camera manual library

If you find this manual useful, how about a donation of \$3 to:

M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701

**This will help me to continue to host this site,
buy new manuals, and pay their shipping costs.**

**It'll make you feel better, won't it?
If you use Pay Pal, use the link below.**

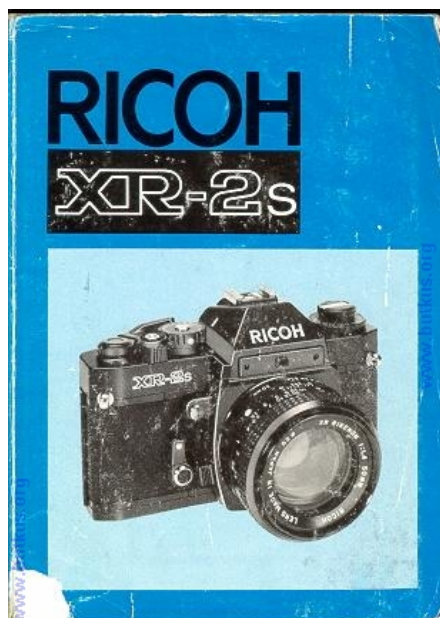
Use the above address for a check, M.O. or cash.

www.PayPal.me/butkus

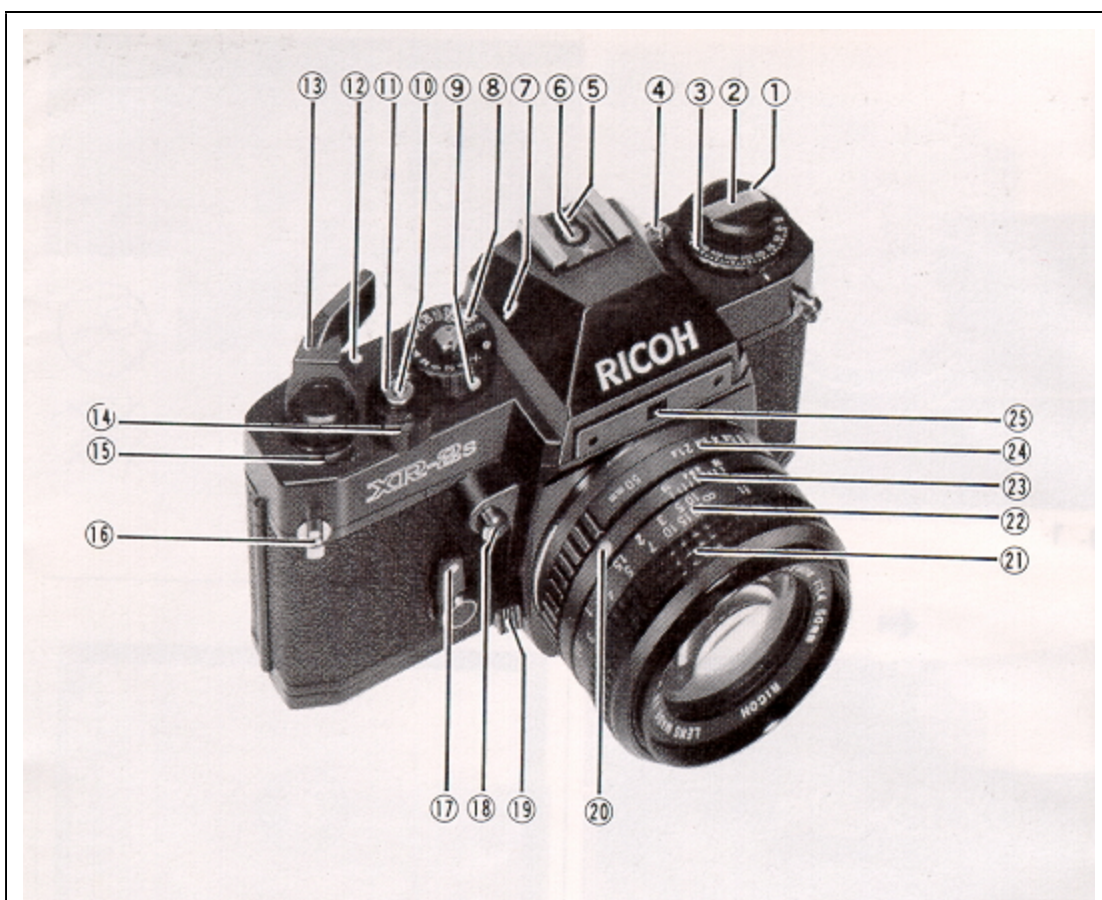
Venmo @mike-butkus-camera

**<<< [IF YOU WOULD LIKE THIS OR ANY PDF FILE PRINTED, BOUND AND
MAILED TO YOU, SEE THIS OUTSIDE COMPANY'S OFFER](#) >>>**

[Back to main camera manual page](#)



DESCRIPTION OF PARTS



1. Film Rewind Knob/Back Cover Lock Release Knob

2. Film Rewind Crank

3. Film Speed Dial (ASA)/Exposure Compensation Dial

4. Film Speed Lock Button

5. Flash Ready Signal Contact

6. Hot Shoe/Flash Contact

7. Shutter Speed Index Line

8. Shutter Speed Dial

9. Automatic Exposure Lock Button

10. Cable Release Socket

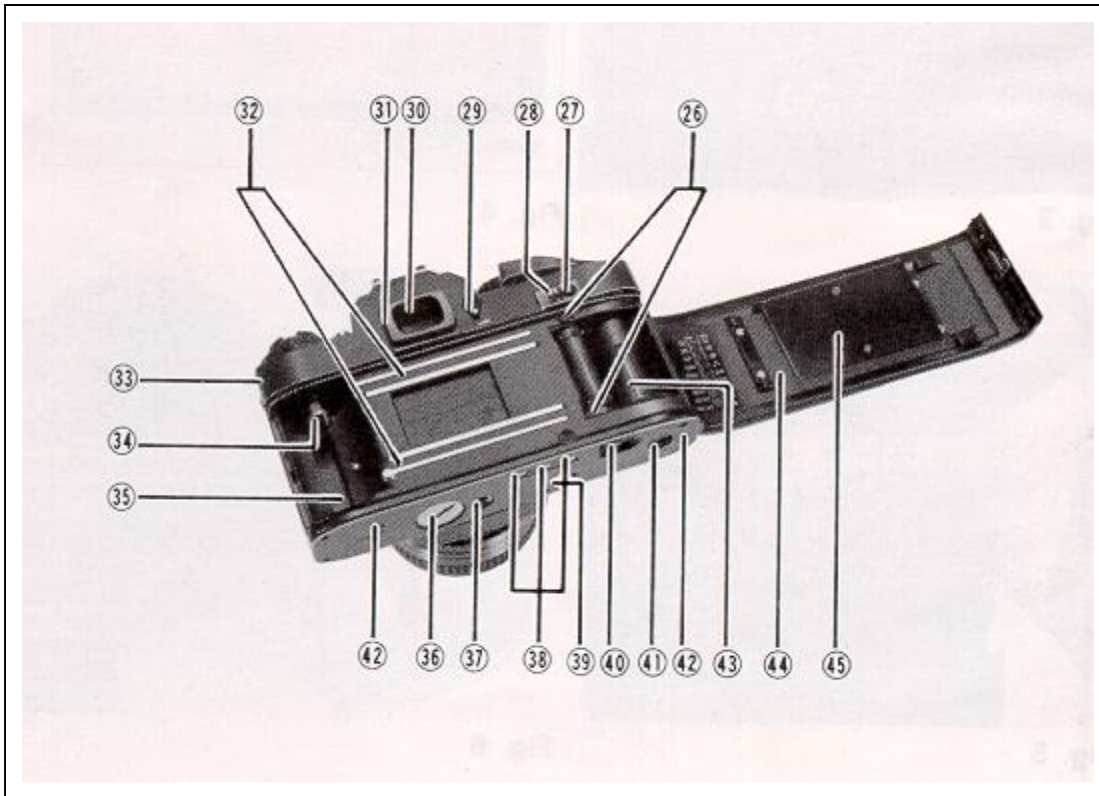
11. Shutter Release Button

12. Shutter "ON-OFF" Index Mark

13. Film Advance Lever

14. Battery Check Ring

15. Exposure Counter



16. Neck Strap Eyelet

17. Self-timer Lever

18. Depth of Field Preview Button

19. Lens Release Lever

20. Lens Locator Node

21. Focusing Ring

22. Distance Scale

23. Depth of Field Scale

24. F-Stop Ring

25. Aperture Relay Port

26. Sprocket Teeth

27. Multi-exposure Button

28. Multi-exposure Lock Lever

29. Viewfinder Eyepiece Blind Lever

30. Viewfinder Eyepiece

<<< update - I have been told a Olympus or Pentax eyecup and other accessories will work on XR cameras >>>

31. Flash LED

32. Film Rail

33. "X" Flash Terminal

41. Winder Coupler

42. Positioning Hole

45. Film Pressure Plate

34. Film Rewind Shaft	43. Film Take-up spool
35. Film Chamber	44. Back Cover
36. Battery Compartment Cover	46. Microprism-image Band
37. Tripod Socket	47. Split-image Spot
38. Winder Contacts	48. Exposure Meter Needle
39. Shutter Release Connection	49. Shutter Speed Indicator
40. Film Rewind Release Button	50. Battery Power Check Zone
	51. Aperture Readout Window

We are most gratified that you have selected the XR-2s which we are sure will give you many delightful! years of picture-taking pleasure.

The XR-2s is a 35 mm fully automatic electronically controlled exposure system (aperture-priority) SLR camera which assures you of superb optics and outstanding mechanical performance and reliability and which will justify your choice for years to come.

Before Using Your XR-2s

Please read this instruction booklet carefully and familiarize yourself with the equipment and its features thoroughly. Your pleasure in using your XR-2s will be greater if you know your camera properly.

If you press a shutter release button without batteries in the camera, a mirror will stay up. Therefore, please do not forget to insert batteries into the camera first.

BATTERY LOADING

The built-in through-the-lens CdS exposure metering system of your XR-2s operates on power activated by two 1.5V LR-44 alkaline batteries. which are supplied together with your camera.

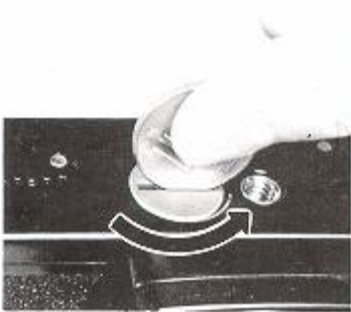


Fig. 1




Fig. 2

1. Remove Battery Compartment Cover (36) by unscrewing it counterclockwise with a coin (**Fig. 1**)

2. Place the two batteries into the compartment with the plus (+) side down, as illustrated in the battery holder of Battery Compartment Cover (36) (**Fig. 2**). Make sure that the batteries are correctly placed. If incorrectly placed, Exposure Meter Needle (48) in the viewfinder will not move at all.

3. Replace Battery Compartment Cover (36) by screwing it clockwise until it stops but do not force. Tips for Better Results

* If the shutter release button is pressed when there are no batteries or they are worn out, the mirror will stay up and the shutter cannot be released. To put the mirror back to its proper position, turn the shutter speed dial to "X" or "B", and be sure to insert new batteries immediately. If you wish to take pictures without using batteries, use "X" (1/90 sec.) or "B".

* Before loading, wipe off the surfaces of the batteries with a clean and dry cloth to ensure they are free of fingerprints or stains.


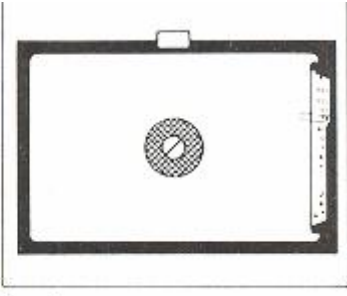
* When your camera is not used for a long period, remove the batteries and keep them in a cool, dry place.

* The batteries will last for about half a year in normal use.

* The batteries may explode if disposed of in fire.

BATTERY CHECK

Check the power of the silver-oxide batteries after loading them.

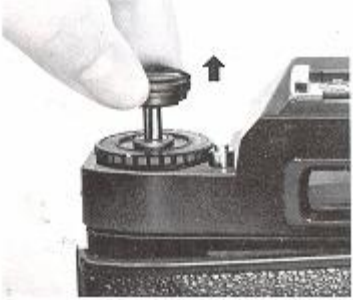
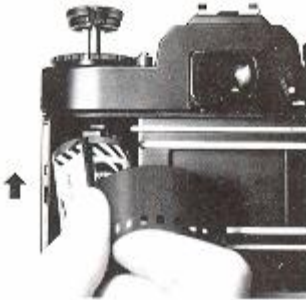
 <p>Fig. 3</p>  <p>Fig. 4</p>	<ol style="list-style-type: none">1. Turn Battery Check Ring (14) clockwise until it stops (Fig. 3)2. If Exposure Meter Needle (48) in the viewfinder swings into Battery Power Check Zone (50), the batteries have sufficient power (Fig. 4).
---	---

3. If Exposure Meter Needle (48) does not move or stays below Battery Power Check Zone (50), the batteries must be replaced. For replacement, use two new Mallory MS76, Eveready S76 or equivalent.

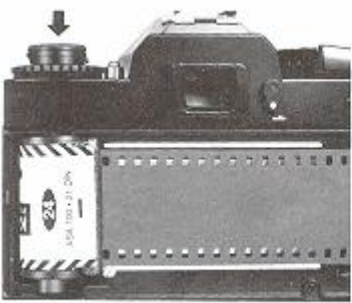

Tips for Better Results * Do not turn Battery Check Ring (14) often in order to avoid unnecessary consumption of the batteries.

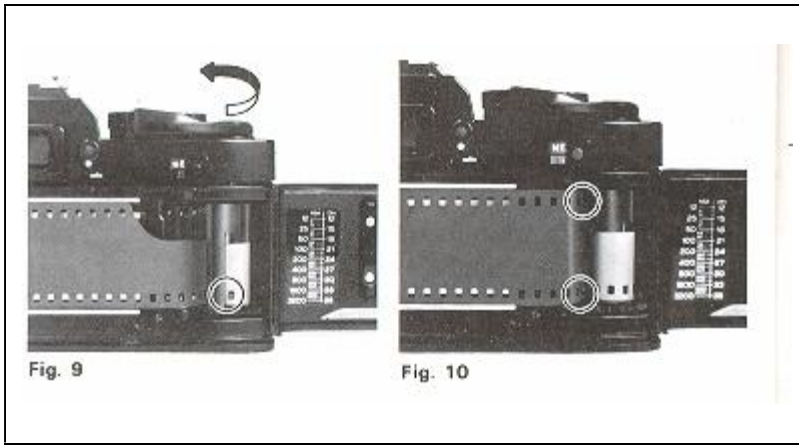
FILM LOADING

Your XR-2s is designed to accept any standard 35 mm color or black and white film roll in cartridge. (12, 20, 24 or 36 exposures).

 	<p>1. First of all, press Shutter Release Button (11) to see that the shutter has been released. (Refer to "METER/SHUTTER ON/OFF CONTROL").</p> <p>2. Pull up Film Rewind Knob (1) until Back Cover (44) snaps open (Fig. 5). Then, pull it out all the way to allow for insertion of the film cartridge.</p>
---	--

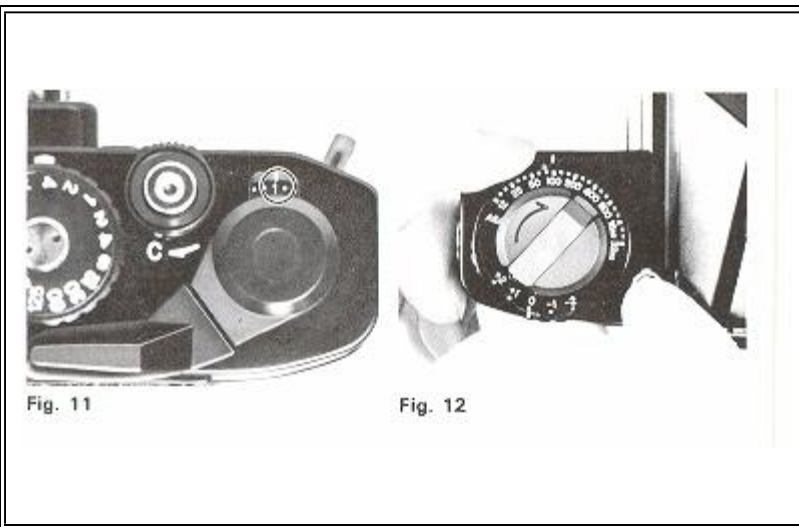
3. Swing open Back Cover (44) and place a film cartridge into Film Chamber (35) (**Fig. 6**).

 	<p>4. Push down Film Rewind Knob (1) to its original position by turning Film Rewind Crank (2) clockwise or counterclockwise so that Film Rewind Shah (34) engages the film cartridge and that the film cartridge is seated in place (Fig. 7).</p> <p>5. Draw the film leader across the camera back and insert it into one of the slits of Film Take-up Spool (43) (Fig. 8). To bring the slit into a convenient position, rotate Film Take-up Spool (43) in the direction of arrow with your finger.</p>
---	--



6. Rotate Film Take-up Spool (43) by advancing Film Advance Lever (13) to take up any slack in the film and check to see that the film tip is firmly hooked onto Film Take-up Spool (43) (**Fig. 9**) and that sprocket holes on the film are fully engaged on Sprocket Teeth (26) (**Fig. 10**).

7. Close and press Back Cover (44) firmly until it snaps shut.



8. Advance Film Advance Lever (13) two or three times, after depressing Shutter Release Button (11) each time, until the number "1" is opposite the index line in Exposure Counter (15) (**Fig. 11**), because the first portions of the film can not be used for picture taking as they have already been exposed to light and two or three blank exposures should be made before taking your first picture. Now it is ready for your first picture.

Tips for Better Results

- * Always load your camera in the shade or in a poorly-lit place, never in direct sunlight or other bright light.
- * As you advance the Film Advance Lever (13), the Film Rewind Knob (1) will simultaneously rotate counterclockwise indicating that the film is advancing properly.
- * When making blank exposures with Shutter Speed Dial (8) set at "AUTO", set F-Stop Ring (24) to the smallest f-stop (the largest lens opening) so that you can make next blank exposure quickly, otherwise a slower shutter speed will be result which could be an annoyance.

SETTING FILM SPEED

Each type of film, color or black and white. has its own sensitivity to light. This sensitivity is assigned by a numerical value described as an ASA rating (U.S.A. Standard) or a DIN rating (Europe and most other countries). In most cases. both ASA and DIN ratings are imprinted on the film package, as well as the data sheet packed with the film and the film cartridge itself. The higher the film speed rating. the more sensitive the film is to light: that is, less light is required for a proper exposure. The film speed. therefore. is an important element in insuring that the through-the-lens metering system of your camera determines the correct shutter speed and f-stop combinations for a given lighting situation.

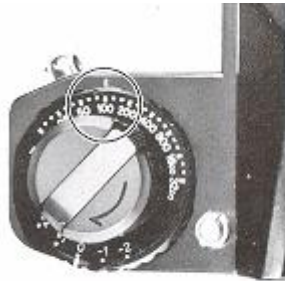


Fig. 13

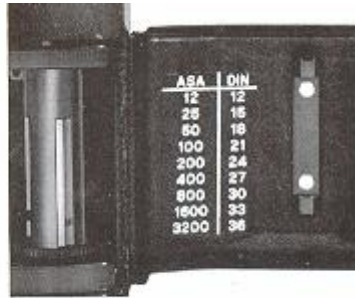


Fig. 14

1. Depress Film Speed Lock Button (4) (**Fig. 12**) and rotate Film Speed Dial (3) until the ASA number of your film is exactly opposite the index line and click stops. For example, if the film is ASA 100, make the correct setting at "100" (**Fig. 13**).

2. Take your finger off Film Speed Lock Button (4) to lock the film speed setting in the camera.

Tips for Better Results

* Each time a film with a new film speed rating is loaded in you camera, the film speed must be set to assure accurately expose photographs,

* The scale represents the relation between ASA and DIN number is illustrated on the inside of Back Cover (44) (**Fig. 14**).

METER/SHUTTER "ON-OFF" CONTROL

Film Advance Lever (13) controls shutter release "LOCK-UNLOCK" to protect your camera from accidental shutter release when not taking pictures and Shutter Release Button (11) controls exposure meter

"ON-OFF" to avoid unnecessary depletion of the batteries.

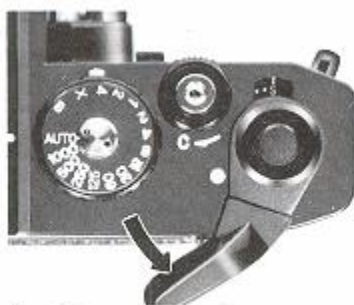


Fig. 15

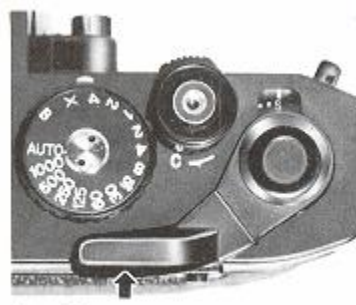


Fig. 16

1. When Film Advance Lever (13) is moved to "ON" position (**Fig 15**). Shutter Release Button (11) is unlocked.

2. When Shutter Release Button (11) is pressed half way down, the electric circuit is switched on and Exposure Meter Needle (48) in the viewfinder starts to move.

Tips for Better Results * Whenever picture-taking is completed, be sure to move Film Advance Lever (13) to "OFF" position (**Fig. 16**).

- * To prevent unnecessary consumption of the batteries, do not press Shutter Release Button (11) often.
- * The Film Advance Lever can be set at two angles in click stage positions. Choose the one suitable for your own shooting style.

SETTING SHUTTER SPEED DIAL

The shutter controls the length of time the light is allowed to strike the film. The speed at which the shutter opens and closes is measured by the numbers on Shutter Speed Dial (8). In automatic exposure operation, correct shutter speed is set automatically.

- * Simply turn Shutter Speed Dial (8) until the desired shutter speed is set opposite Shutter Speed Index Line (7).

(1) "AUTO" stands for AUTOMATIC. Setting the dial at "AUTO" makes the camera ready for automatic exposure control.

(2) The numbers 1000, 500 etc. to 2 stand for 1/1000 sec., 1/500 sec., etc. to 1/2 sec.

(3) The numbers 1, 2, 4, stand for 1 sec., 2 sec., and 4 sec.

(4) This button locks the dial at 'AUTO" setting. When you move the dial off AUTO", press the button and rotate the dial.

(5) "X" stands for mechanical shutter for the speed of 1/90 sec. This setting is used when the batteries have not sufficient power or taking picture without batteries. Flash photography is also possible at this setting.

(6) "B" stands for Bulb. The "B" setting is used for long night exposure using street lights or electric signs as a light source, or under poor lighting conditions when flash can not be used. When set at "B", the shutter will remain open as long as Shutter Release Button (11) is depressed (preferably by a cable release).

Tips for Better Results

- * Do not set Shutter Speed Dial (8) between marked speeds, but at a click stop in accordance with indicated speeds only.
- * Shutter Speed Dial (8) does not revolve between "AUTO" and "B"
- * When Shutter Speed Dial (8) is set at "B" or "X", set the desired f-stop and expose manually because metering with the built-in exposure meter is not possible.
- * When making extremely long time exposure at "B" setting, remove the batteries to avoid unnecessary consumption of the batteries.

SETTING APERTURE

The lens opening determines the amount of light entering the lens and exposing the film. The smaller the f-stop (f/2.0, f/2.8 etc.), the wider the lens opening and the greater the amount of light entering the lens. The larger the f-stop (f/16, f/11 etc.), the smaller the lens opening and the smaller the amount of light entering the lens. As the lens opening is moved from F/16 to f/11, the amount of light entering the lens is doubled. As the lens opening is moved from f/2.0 to f/2.8, the amount of entering light is cut in half (**Fig. 17**).

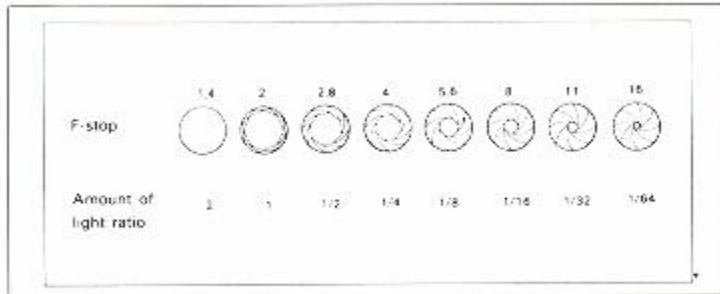
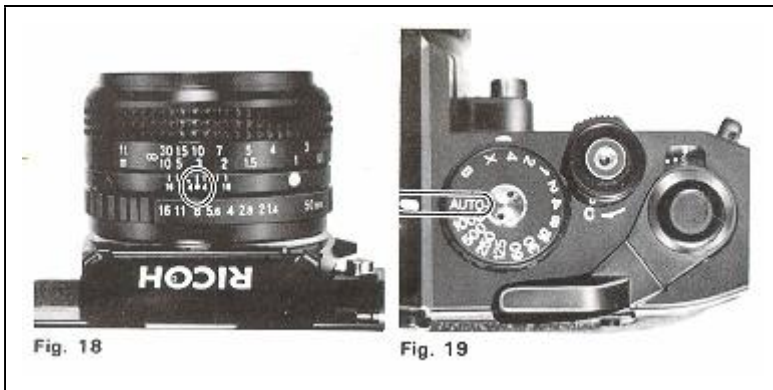


Fig. 17

Tips for Better Results



* Rotate F-Stop Ring (24) until the desired f-stop is opposite the aperture index line (**Fig. 18**). Click stops are provided to prevent accidental movement from the setting made.

* If necessary, you may set F-Stop Ring (24) between two f-stops.

CORRECT EXPOSURE

Automatic Exposure

Your XR-2s has a built-in through-the-lens full aperture CdS exposure meter coupled to aperture-priority automatic exposure control system which selects and sets correct shutter speed automatically for correct exposure.

Set the camera to "AUTO"

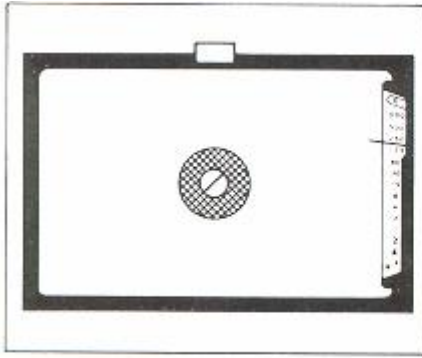


Fig. 20

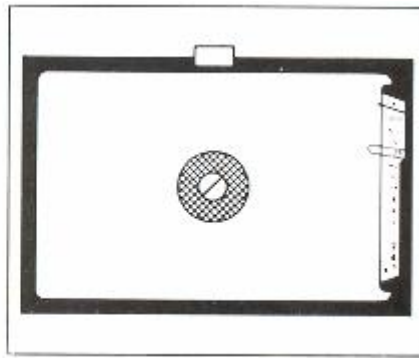


Fig. 21

1. Turn Shutter Speed Dial (8) until the "AUTO" is set opposite Shutter Speed Index Line (7) (**Fig. 19**). Shutter Speed Indicator (49) in the viewfinder indicates "A", showing that the camera is set for automatic exposure control (**Fig. 20**).

Preselect the aperture

2. Preselect the desired aperture by rotating F-Stop Ring (24). Fstop is visible through Aperture Readout Window (51). For preselecting the aperture, refer to the following rough guide when using ASA 100 film.

Outdoors in bright sunlight f/8.0 ~ f/16
 Cloudy weather or in shade f/2.8 ~ f/5.6
 Indoors f/1.4 ~ f/4.0

Exposure checking

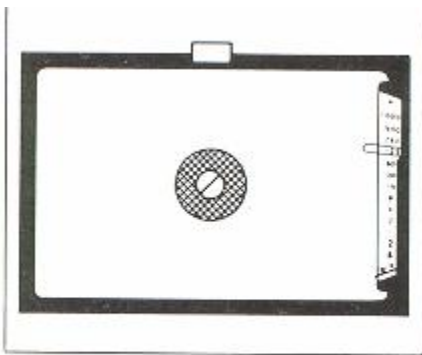


Fig. 22

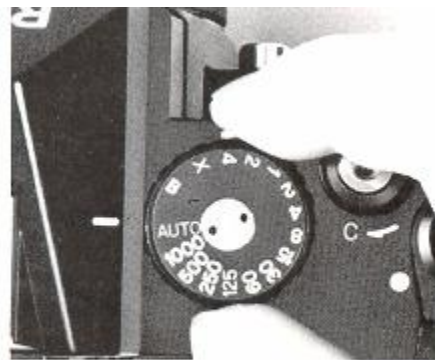


Fig. 24

3. After moving Film Advance Lever (13) to "ON" position. press Shutter Release Button (11) lightly half way down until the Exposure Meter Needle (48) begins to move. The Exposure Meter Needle (48) in the viewfinder indicates the shutter speed you will be shooting at. ["1000" is 1/1000 sec., "125" is 1/125 sec., "4" is 1/4 sec., "1" is one full second and "2" is 2 seconds.].

If the needle goes above "1000" (Fig. 21), close down the aperture until the needle moves below "1000". If the needle goes below "B.X." (Fig. 22), open up the aperture until the needle moves above "B.X.". Tips for Better Results

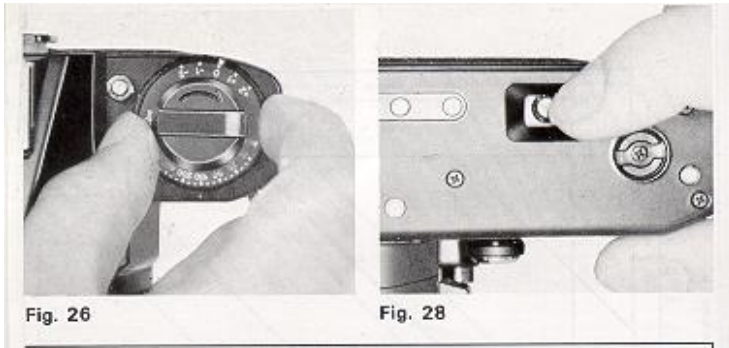
* At slow speeds (below 1/30 sec.), use a tripod or other firm support to prevent camera movement and blurred pictures. In shooting with a telephoto lens, be careful to minimize the camera shake especially. When using telephoto lenses, a good rule of thumb is "use a shutter speed faster than 1/focal length of the lens". For example, with a 135 mm lens, use a shutter speed faster than 1/125 sec. Otherwise, a tripod is suggested.

Tips for Better Results

* Do not make an exposure setting by pressing Depth of Field Preview Button (18) or turning Battery Check Ring (14) because these will incorrectly influence the meter's reading.

EXPOSURE COMPENSATION DIAL

The dial is used when exposure compensation (intentional over- or under-exposure) is necessary in AUTOMATIC EXPOSURE operation. In unusual lighting conditions, the desired effect or the correct exposure will not be obtained in the final picture and exposure compensation is necessary.



* Lift up the outer ring of Exposure Compensation Dial (3) and rotate it until the index line on the ring is opposite the corresponding number (+2, +1, -1, -2) and click stops (**Fig. 26**).

When the light is behind the subjects Set the dial at +1 or +2. Spot-lighted subjects and dark backgrounds Set the dial at -1 or -2.

Tips for Better Results * When exposure compensation is unnecessary, be sure to set Exposure Compensation Dial (3) at "0".

* Do not set Exposure Compensation Dial (3) between marked numbers, but at a click stop in accordance with indicated numbers only.

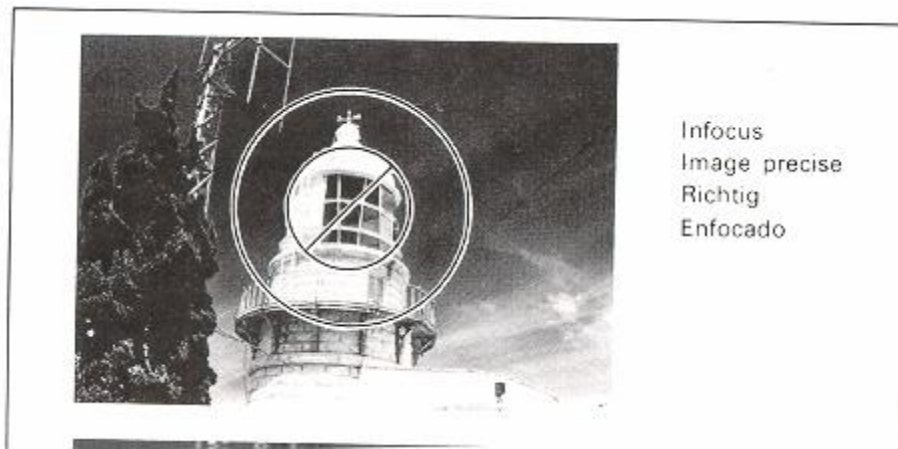
VIEWING AND FOCUSING

Since you are viewing through the lens, there is no parallax problem.....

What you are viewing in the viewfinder will exactly appear in your picture. This enables you to determine the exact composition of your subject before pressing Shutter Release Button (11). Even when you shoot close-ups, there is no danger of accidentally cutting off a portion of your subject. To assure the sharpest possible pictures, your XR-2s has a three way focusing screen with diagonal Split-image Spot (47), Microprism-image Band (46) and Fresnel field, and you can select three way focusing according to your subject.

1. Look into Viewfinder Eyepiece (30) to compose your picture.
2. Split-image Focusing is helpful for the subject with either vertical or horizontal lines.

Rotate Focusing Ring (21) until the split image in Split-image Spot (47) forms a single image. When it is out of focus, your subject is split into two parts (**Fig. 27**).



3. Microprism Focusing is good for the subject which lacks clear vertical or horizontal lines.

Rotate Focusing Ring (21) until the image in Microprism-image Band (46) appears sharp (**Fig. 27**).

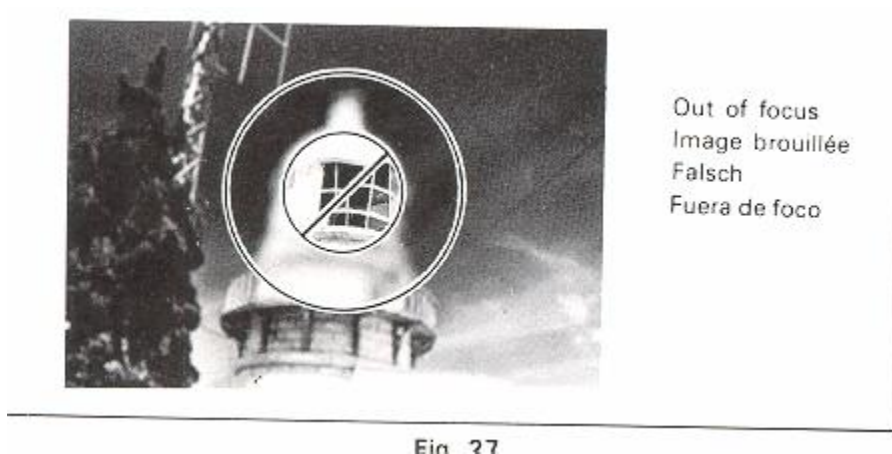


Fig. 27

4. You can also focus with any part of the area surrounding Microprism-image Band (46). This is most useful when taking pictures with ultra telephoto lenses or in close-up photography with bellows unit, macro lenses or extension rings because the other focusing aids may darken appreciably.

UNLOADING FILM

After the last picture on the roll of film has been taken, rewind the film and unload your camera.

1. Press Film Rewind Release Button (40) (**Fig. 28**).
2. Lift up Film Rewind Crank (2) and turn it clockwise until Film Rewind Release Button (40) stops revolving and you feel the film tension released (**Fig. 29**). This indicates that the film has been completely rewound into the cartridge.
3. Open Back Cover (44) by pulling up Film Rewind Knob (1).
4. Remove the film cartridge and have the film processed as soon as possible.

Tips for Better Results * Always unload your camera in the shade or in a poorly-lit place, never in direct sunlight or other bright light.

* When you reach the end of the roll film, Film Advance Lever (13) will tighten and refuse to advance. If this happens, do not advance Film Advance Lever (13) by force for "just one more shot", otherwise the film will be torn out of the cartridge.

* Film Rewind Release Button (40) will remain in place once it is pressed, and return automatically to its original position when Film Advance Lever (13) is advanced.

MULTI-EXPOSURE



Fig. 29



1st Lady: f/8, 1/125 with strobo
2nd Buildings: f/8, 1sec.

Fig. 30

Your XR-2s has a multi-exposure device which will give you a lot of creative fun (**Fig. 30**).

1. Make the first picture in the normal way.

2. Release the lock by sliding the Multi-exposure Lock Lever (28) to the left until the red dot appears. (**Fig. 31**)



Fig. 31



Fig. 32

3. For the second exposure, advance Film Advance Lever (13) while keep pressing Multi-exposure Button (27) firmly with the other hand (**Fig. 32**). This will set the shutter for the second exposure without advancing the film and Exposure Counter (15).

Tips for Better Results

- * Good results in multi-exposure depend on careful shutter speed and lens opening setting. This means, in order to prevent overexposure of the final picture, we suggest that the first picture should be underexposed by adjusting either shutter speed or lens opening.
- * If you want, repeat the same action for the third exposure or afterwards.
- * Whenever advancing the Film Advance Lever (13) for second exposure or afterwards, make sure that the Multi-exposure Button (27) is pressed firmly with the other hand and watch to see that Exposure Counter (15) is not advanced, indicating that multi-exposure picture is ready to be taken.
- * When multi-exposure shots are not required, be sure to lock the Multi-Exposure Button by sliding the Multi-Exposure Lock Lever (28) towards the right until the red dot disappears.

Take practice shots to get yourself accustomed to the multi-exposure technique and take creative pictures of your own.

TAKING FLASH PICTURES

You can use a flash at night or in a dimly lit room as well as for supplementary lighting in outdoor photography. The camera and electronic flash will be fully synchronized with the shutter speed at "B", "X" and 4 sec. to 1/125 sec. Since proper flash exposure may not be obtained by automatic exposure setting, always override Shutter Speed Dial (8) from "AUTO" setting.

The RICOH XR Speedlite 240 is available exclusively for use with the RICOH XR-2s.

How to Use the RICOH XR Speedlite 240

1. Attach XR Speedlite 240 to the XR-2s.
2. Turn on the power source switch on the flash unit.
3. When the flash unit is fully charged, the FLASH LED (31) on the frame of the view-finder eye-piece will turn red indicating it is ready for use.
4. When the shutter speed on the camera is set to "AUTO", it is automatically synchronized at 1/90 sec. This avoids the trouble of having to set the correct speed yourself.
5. With ASA 100 film, the F-stop should be set at 5.6, and the flash unit will automatically control the amount of light to give the correct exposure.

Tips For Better Results * Do not use other makes of flash units that have a special signal pin exclusively for their cameras, as this will result in incorrect exposure or may even damage the circuitry.

- * The XR Speedlite 240 has a range of synchronization of "AUTO", "B", "X", and from 4 sec. to 1/125 sec.

IN CASES WHERE YOU DO NOT USE THE XR SPEEDLITE 240

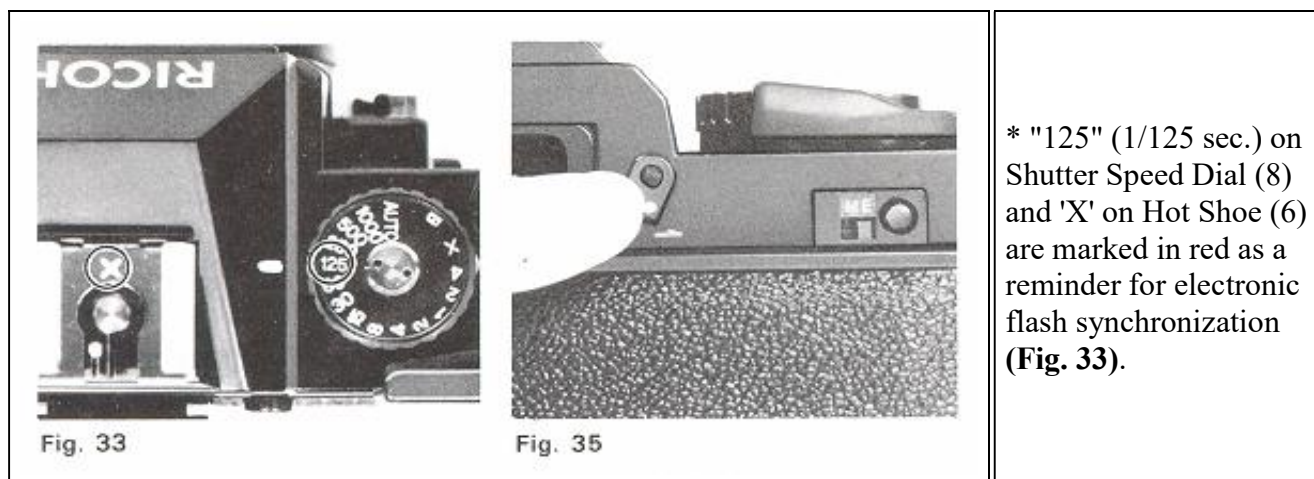
A. Cordless Electronic Flash Unit

If you are using an electronic flash unit with a built-in hot shoe contact, it can be attached directly to Hot Shoe (6) on top of the camera pentaprism.

B. Electronic Flash Unit with Connecting Cord

If your flash unit does not have a built-in hot shoe contact, attach it to Hot Shoe (6) and plug the flash cord into the 'X' Flash Terminal (33).

Tips for Better Results



* When using FP, M or ME class bulb, refer to the Chart (Fig. 34), showing the synchronizing ranges of shutter speeds.

		SHUTTER SPEEDS															
CONTACT		8	$\frac{1}{30}$	$\frac{1}{25}$	4	2	1	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{15}$	$\frac{1}{30}$	$\frac{1}{60}$	$\frac{1}{125}$	$\frac{1}{250}$	$\frac{1}{500}$	$\frac{1}{1000}$
X		Electronic Flash															
		M Class															
		MF Class															
		FP Class															

Fig. 34

C. Exposure for Flash Photography

The exposure is determined by the guide number of the flash bulb or electronic flash unit. The guide number represents a relationship between the light output of the flash and the speed of the film. Guide numbers for flash bulbs can be found on the package and guide numbers for electronic flash units are found in the technical

specifications. Using the guide number, you can determine the correct f-stop for a given flash situation using the following formula:

$$\text{F-stop} = \text{Guide number} / \text{Flash-to-subject distance}$$

For example, if your flash unit has a guide number of 16 (m) or 52.8 (ft.) for the type of film you are using, and your subject is 2 meters (6.6 h.) from the flash unit as indicated on Distance Scale (22) after focusing, divide 16 (52.8) by 2 (6.6).

The answer is 8: set F-Stop Ring (24) to 8 (f/8).

Tips for Better Results

- * If you are using an auto electronic flash unit with power ratio control. follow the instruction sheets packed with the flash unit.
- * Most electronic flash units have a built-in dial or exposure table which enables you to quickly compute f-stops based on flash-to-subject distances.

VIEWFINDER EYEPIECE BLIND

When shooting with the self-timer or cable release where you v be viewing through Viewfinder Eyepiece (30) at the time the exposure is made, viewfinder eyepiece blind should be used to prevent stray light from entering through the eyepiece and affecting the automatic exposure system.

- * Move Viewfinder Eyepiece Blind Lever (29) in the direction of arrow (**Fig. 35**).

USING SELF-TIMER

Your XR-2s has a built-in self-timer which delays the shutter release about maximum of 10 seconds. This enables you to include yourself in your own picture and is also of benefit in taking close-ups or photomicrographs where camera movement must be avoided.

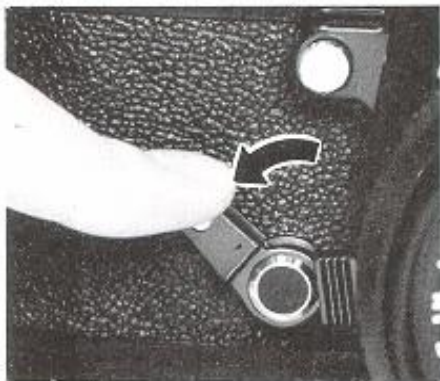


Fig. 36

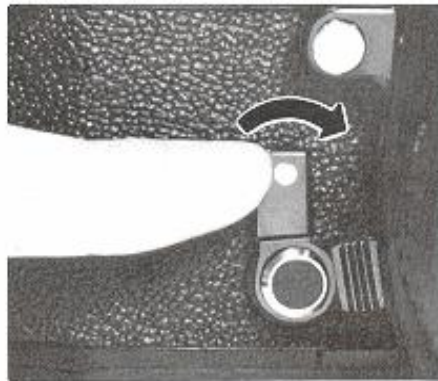


Fig. 37

1. First, advance Film Advance Lever (13).
2. Merely move Self-timer Lever (17) counterclockwise (**Fig. 36**). According to the degree you have moved it down, you can adjust the operating time. For the maximum delay, move it until it stops.
3. Press Shutter Release Button (11) to start the self-timer moving.

Tips for Better Results

- * To clear the self-timer setting, turn the lever back to its former position with your finger. **(Fig. 37)**
- * You can set Self-timer Lever (17) firstly and then advance Film Advance Lever (13).
- * The camera should be placed on a tripod or other firm support when using self-timer.
- * When using a tripod with a long thread length (more than 5 7 mm), be careful not to forcibly screw in the thread further than the depth of the socket

If you press a shutter release button without batteries in the camera, a mirror will stay up. Therefore, please do not forget to insert batteries into the camera first.

- * Shield the Viewfinder Eyepiece (30) by viewfinder eyepiece blind when using self-timer.
- * Please do not try to turn a shutter speed dial while a self-timer is working.

CHANGING LENSES

To mount the lens on the camera



To remove the lens from the camera



Fig. 40



Fig. 41

1. Grasp the lens firmly around the lens barrel in one hand.

2. With the other hand, hold camera body and press Lens Release Lever (19) and turn the lens counterclockwise until it stops (**Fig. 40**). The lens now can be removed.

You can also change lenses without looking even in the dark by means of Lens Locator Node (20). Line up Lens Locator Node (20) with Lens Release Lever (19) and turn the lens clockwise for mounting the lens. For removing the lens, press Lens Release Lever (19) and turn the lens counterclockwise until Lens Locator Node (20) and Lens Release Lever (19) line up.

Tips for Better Results

- * Whenever a lens is mounted on the camera, make sure that the lens is perfectly mounted, and clicks into position.
- * Do not touch any of the internal parts or permit dust or dirt to enter the camera body when removing or attaching lenses.
- * Protect the inside of the camera by putting on the body cap whenever the camera is carried or kept with the lens removed

DEPTH OF FIELD

When you focus on a specific subject, an area in front of and behind the subject will appear acceptably sharp in your picture. This area of acceptable sharpness is called "Depth of Field". The depth of field is determined by the f-stop you select and the distance from the in focus subject to the film plane. As you get closer to your subject, or as you open your lens (for example, from f/16 to f/2.8), the depth of field becomes shallower. By stopping the lens down (for example, from f/2.8 to f/16), the depth of field becomes deeper. The depth of field can be pre-determined in the following ways:

A. Depth of Field Preview Button

Pressing Depth of Field Preview Button (18) (**Fig. 41**) will set the lens at the corresponding opening you previously set on F-Stop Ring (24). This will enable you to preview the area of acceptable sharpness in the picture you take. The viewfinder will become dark corresponding to the f-stop you previously set on F-Stop Ring (24). Depth of Field Preview Button (18) will automatically return to its original position when you release it and the viewfinder will become as bright as before.

B. Depth of Field Scale

After you have set the lens opening and have focused the camera, the area of acceptable sharpness in front of and behind your subject can be also determined on Depth of Field Scale (23).

Locate on Depth of Field Scale (23) the two numbers corresponding to the f-stop you have set on F-Stop Ring (24). The distance between these two f-stops on Distance Scale (22) will be an area of acceptable sharpness in your picture. For example, if your lens is focused at 2 meters (6.7 ft.) and you shoot at 16 (f/16), the area of acceptable sharpness will be from 1.5 m (5 ft.) to 3.2 m (10.7 ft.), by reading Distance Scale (22) opposite the both sides of the "16" numbers on Depth of Field Scale (23) (**Fig. 42**).

Tips for Better Results

* Do not depress the Shutter Release Button (11) when depressing Depth of Field Preview Button (18).

INFRARED PHOTOGRAPHY

For infrared photography using infrared films, a correction of Distance Scale (22) is necessary because "infrared light rays" focus on a film plane slightly behind that of "visible light rays".



Fig. 42



Fig. 43

1. Normally focus on your subject and note the camera-to-subject distance opposite the distance index line on Distance Scale (22).

2. Turn Focusing Ring (21) until this camera-to-subject distance setting is opposite the infrared index line. For example, if Distance Scale (22) reads 5 m (16.5 ft.) after focusing, merely shift the "5" scale to the "a" (red) position (**Fig. 43**).

Tips for Better Results

- * Infrared radiation varies with the degree of infrared light rays in the atmosphere.
- * For exposure. follow the instruction sheets which are packed with the film, and expose manually because metering with the built-in exposure meter is not possible.

INTERCHANGEABLE LENSES AND ACCESSORIES

A wide range of XR RIKENON interchangeable lenses including extremely wide angle lenses, telephoto lenses, zoom lenses and various accessories are available to enable you to expand the pleasure of your picture-taking. XR RIKENON interchangeable lenses and accessories are made of selected high quality materials under strict quality control to assure you of high performance and full satisfaction. Select XR RIKENON interchangeable lenses and accessories that will meet your needs.

Since the camera is designed to accept any lens with the "K" type bayonet mount, your XR-2s affords you the opportunity to select any interchangeable lens or accessory of the "K" type bayonet mount available on the market.

RICOH XR WINDER-1:

The RICOH XR WINDER-1 can be used with the XR-1s and XR-2s. By operating the shutter release button on the winder, it can be used for rapid sequence photography at approximate 2 frames per second. (at shutter speed of 1/125 sec.) By just setting the selection switch you may choose frame-by-frame shots or rapid sequence shots according to your needs. You can for instance capture the rapid movement in sports. or the fleeting facial expressions that make your picture-taking a more enjoyable experience.

PROPER CARE OF YOUR CAMERA

- * Always carry your camera with its carrying case and neck strap.
- * Use the lens cap to protect the lens when not taking pictures.
- * Protect your camera from dust, dirt. water. rain, dampness. salt air and rough handling.
- * Never expose your camera to excessively high or low temperatures for an extended period of time. In extremely hot climates, do not leave your camera inside closed automobiles during the daytime or in direct sunlight. In extremely cold climates, expose your camera to the outer air only when in use When using, expose your camera gradually to the outer air to prevent the lens from clouding. If exposed to an extremely cold climate, the exposure meter batteries may fail to operate properly. Keep your camera inside your clothing until taking a picture.
- * Never touch the surfaces of the lens, metal focal plane shutter curtain. reflex mirror. etc. with your fingers.
- * To clean the lens, gently wipe it in a circular motion with a lens cleaning paper or a soft. clean and lintless cloth.
- * Do not wipe the camera body with chemicals, such as benzine. thinner. etc.. use only soft cloth or cotton swab sprinkled LIGHTLY with alcohol on the camera body. Do not use them on the lens because it can affect coating.

* When your camera is not in use for an extended period of time. put the lens cap, remove the batteries, place your camera in its carrying case together with silica gel or other desiccant and store it in a dry and cool place. Never store your camera in places where the temperatures are excessively high or low.

* Do not attempt to disassemble or repair your camera yourself. If service is necessary. get in touch with your dealer or authorized Ricoh service station.

* Do not leave your camera near the magnetic objects like radio, television set etc.

MAJOR SPECIFICATIONS OF XR-2s

Camera Type: 35 mm aperture-priority AE (automatic exposure) SLR with electronic metal focal plane shutter

Film Size and Capacity: 35 mm perforated film in 12,20,24 or 36 exposures

Film Format: 24x36mm

Standard Lenses:

50 mm XR Rikenon f/1.4 (multi-coated), 6 groups 7 elements 50 mm XR Rikenon f/1.7 (multi-coated), 5 groups 6 elements 50 mm XR Rikenon f/2.0, 5 groups 6 elements

Filter size: 52 mm screw-in type

Lens Mount: K type bayonet with 65° rotating angle

Shutter:

Vertically moving Copal CCS-E electronically controlled metal focal plane shutter

Automatic electronic shutter: continuously variable speeds from LT (approx. 8 sec.) to 1/1000 sec.

Manual electronic shutter: stepped speed from 4 to 1/1000 sec.

Manual mechanical shutter without batteries: "B" and "X" (1/90 sec.)

Viewfinder: Fixed eye-level pentaprism, F-stop, Shutter speeds, "A" (automatic), "B" (bulb), "X" (1/90 sec.), Exposure meter needle (also act as battery checker), Shutter speed indicator and battery check zone visible

Viewing magnification: 0.88X

Field of view: covers 93% of actual picture area Flash ready lamp (LED)

Focusing: Diagonal split-image spot in micoprism band surrounded by Fresnel field

Exposure Meter: Three CdS photocells TTL full open metering for center-weighted average light reading coupled to aperture-priority automatic exposure system

Exposure Coupling Range: EV O- 17 (ASA 100 film with 50mm f/1.4 lens)

Film Speed Range: ASA 12 ~ 3200 (DIN 12 ~ 36)

Exposure Meter Power Supply: Alkaline Battery (LR-44) duration about half a year

Silver-Oxide Battery (G13, MS76, S76) duration about a year

Mercury Battery (H-C, EPX675, PX675) duration about half a year

Flash Synchronization: X synchronization for electronic flash unit at "B", "X" (1/90 sec.) and 4 sec. to 1/125 sec.

Automatic Flash Control: With Ricoh XR Speedlite 240, set shutter speed dial at Auto, and it will set shutter speed 1/90 sec. automatically. Manually set the aperture ring to the same aperture set on flash.

Flash Terminal: 'X' flash terminal, 'X' contact (with electric shock prevention, mechanism) on hot shoe for cordless electronic flash unit

Film Loading: Multi-slit easy loading

Film Wind: Single stroke film advance lever with 135° winding angle (40° play)
Automatic winding possible by mounting Ricoh XR Winder-1.

Film Rewind: Film rewind crank by pressing film rewind button on base of camera.

Exposure Counter: Additive, automatic resetting

Other Features:

Plus/minus 2-stop exposure compensation dial (+2, + 1, 0, -1, - 2) Viewfinder eyepiece blind

Multi-exposure button

ASA/DIN conversion label (on back of back cover)

Multi-exposure lock button

Automatic exposure lock button

Self-timer

Hot shoe

Depth of field preview button

Shutter release lock (with film advance lever)

Meter on/off switch (with shutter release button)

Battery check ring (around shutter release button)

ASA dial lock

Cable release socket

Tripod socket

Dimensions: 139.9 (width) x 91.3 (height) x 48.0 (depth) mm (body only)

Weight: 560g (body only)