

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

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

**This page may not be sold or distributed without the expressed
permission of the producer**

I have no connection with any camera company

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your E-mail address too so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy. These donations allow me to continue to buy new manuals and maintain these pages. 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. Use the E-mail of butkusmi@ptd.net for PayPal.



[back to my "Orphancameras" manuals /flash and light meter site](#)

Only one "donation" needed per manual, not per multiple section of a manual !

The large manuals are split only for easy download size.

YASHICA

INSTRUCTION BOOKLET
GEBRAUCHSANWEISUNG
MODE D'EMPLOI
FOLLETO DE INSTRUCCIONES

FR



● This instruction booklet is common to chrome- and the black-finish models.

The Yashica FR of which you have just become a proud owner is a high precision SLR incorporating the most sophisticated electronic systems. It features the Contax/Yashica mount affording perfect coordination of the optical, mechanical and electronic systems and permitting use of a wide range of Yashica ML and Zeiss T* lenses. It also offers countless advantages in photography by virtue of such systems as,

- **Electromagnetic Release** This feather-touch release effectively prevents camera shake at the critical moment of exposure and at the same time permits use of various remote control accessories, such as the cable switches and infrared controller set.

- **LED Exposure Readout** This comprehensive read-out system assures precision and versatility of exposure setting. Correct exposure can be set through preselection of either the shutter speed or lens aperture.

- **Winder Coupling System** A coupling system is featured on the camera base to permit most effective and efficient use of the exclusive winder (compact motor drive unit). Precise synchronization is assured at all shutter speeds owing to an original system incorporated in the electromagnetic release system.

- **Interchangeable Camera Back** The standard camera back can be interchanged with the exclusive data back.

Bei der Yashica FR, deren stolzer Besitzer Sie soeben geworden sind, handelt es sich um eine einäugige Präzisions-Spiegelreflexkamera, die die hochentwickeltesten elektronischen Systeme enthält. Sie weist die Contax/Yashica-Fassung auf, die eine perfekte Koordination der optischen, mechanischen und elektronischen Systeme bietet und die Verwendung einer großen Anzahl von Yashica-ML- und Zeiss-T*-Objektiven ermöglicht. Sie bietet außerdem beim Photographieren dank der nachstehend aufgeführten Systeme unzählige Vorteile.

- **Magnetischer Auslöser** Dieser durch federleichten Druck zu bedienende Auslöser verhindert auf wirksame Weise ein Verwackeln der Kamera im kritischen Augenblick der Verschlussauslösung und ermöglicht gleichzeitig die Verwendung verschiedener Fernauslösungs-Zubehörteile wie die Kabelauslöser und den Infrarot-Fernauslöser.

- **LED-Belichtungsanzeige** Dieses umfassende Anzeigesystem gewährleistet Präzision und Vielseitigkeit bei der Belichtungseinstellung. Die richtige Belichtung kann durch Vorwahl entweder der Verschlusszeit oder der Objektöffnung eingestellt werden.

- **Winder-Kupplungssystem** Ein Kupplungssystem an der Kameraunterseite ermöglicht die wirksamste und zweckmäßigste Verwendung des exklusiven Winders (kompakter Motorantrieb). Dank eines in das magnetische Auslösesystem eingegliederten Originalsystems ist eine genaue Synchronisierung bei sämtlichen Verschlusszeiten gewährleistet.

- **Auswechselbare Kamerarückwand** Die Standard-Kamerarückwand kann gegen die exklusive Datenrückwand ausgetauscht werden.

Technical Data

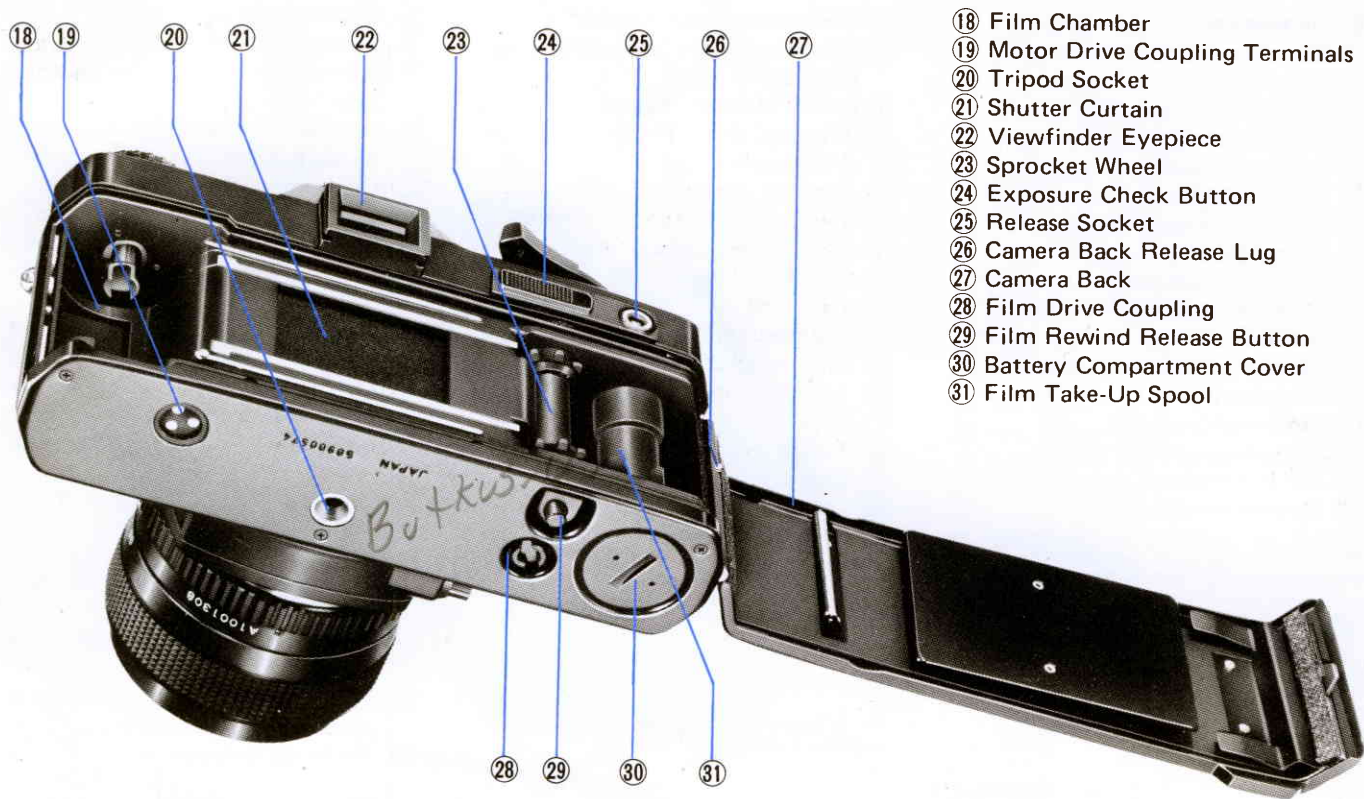
Lens Mount	Contax/Yashica mount (three-claw bayonet mount) with internal linkage system (aperture scale coupling lever, aperture keying lever and automatic diaphragm action lever).
Lens	Yashica Lens ML f/1.4 50 mm standard lens interchangeable with a wide range of Yashica ML and Zeiss T* lenses.
Shutter	Electronically controlled horizontal run focal plane shutter with speeds from 1 to 1/1000 sec. (11 settings), plus B; built-in self-timer and X sync.
Shutter Release	Feather-touch electromagnetic release triggers the mirror flip-up and shutter operation through electrical switching; features release socket on camera body.
Exposure Control	Through-the-lens full aperture light reading with CdS sensors positioned in the pentaprism with the shutter speed pointer to indicate correct exposure and red dots warning against over/under-exposure; LED display button with self-locking system provides exposure readout before or after film wind; ASA range from 12 to 3200; EV range from EV 1 to 18 at f/1.4 (ASA 100).
Viewfinder	Through-the-lens reflex viewfinder shows a field approx. 92% of the actual picture area and provides image magnification of 0.87X; LED display (green for correct exposure and red for over/under-exposure), aperture display and shutter speed scale visible in the finder.
Focusing	Convenient focusing with diagonal split-image center spot and micropism collar.
Film Advance	Film advance lever advances the exposed frame, registers count of exposure on the exposure counter and charges the shutter with a single 140 degree stroke or several short ratchet actions; auto-resetting exposure counter; easy load take-up spool; manipulation of film rewind release button permits intentional multiple exposure; foldaway film rewind crank-handle.
Power Source	6 V silver oxide battery (Eveready 544, Ucar 544, Mallory PX-28 or equivalent).
Other Features	LED battery checker display; Depth-of-field preview button; Lens release button; Interchangeable camera back; Coupling system on camera base permitting use of exclusive winder (compact motor drive unit); Direct X contact shoe.
Size & Weight	142.5 x 87 x 50 mm; approx 650 grams (body only).

Description of Parts



- ① Exposure Counter
- ② Magnetic Release Button
- ③ Film Advance Lever
- ④ Shutter Speed Control Dial
- ⑤ Direct X Contact
- ⑥ Accessory Shoe
- ⑦ Battery Checker Button
- ⑧ LED Battery Checker Display
- ⑨ Film Rewind Crank-Handle
- ⑩ Film Rewind Knob
- ⑪ ASA Film Speed Dial
- ⑫ Lens Release Button
- ⑬ Aperture Ring
- ⑭ Self-Timer Lever
- ⑮ Self-Timer Start Lever
- ⑯ Depth-of-Field Preview Button
- ⑰ Focusing Ring

● Exterior design may be subject to change without prior notice.



1

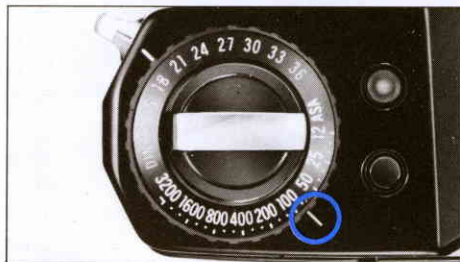
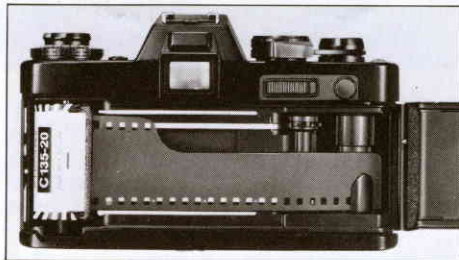
- Open the camera back and load the film. (Page 20)
- Öffnen Sie die Kamerarückwand und legen Sie den Film ein. (Seite 21)
- Ouvrir le dos de l'appareil et insérer le film. (Page 21)
- Abra el respaldo de la cámara y cargue la película. (Página 21)

2

- Set the ASA film speed dial according to the speed rating of the film in use. (Page 24)
- Stellen Sie die ASA-Filmempfindlichkeitskala gemäß der Filmempfindlichkeit des verwendeten Filmes ein. (Seite 25)
- Ajuster la molette de sensibilité de films sur le nombre d'ASA requis, en fonction de la sensibilité du film. (Page 25)
- Ajuste el dial de velocidades ASA de la película de acuerdo a la velocidad de la película en uso. (Página 25)

3

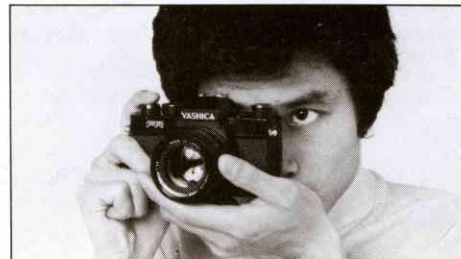
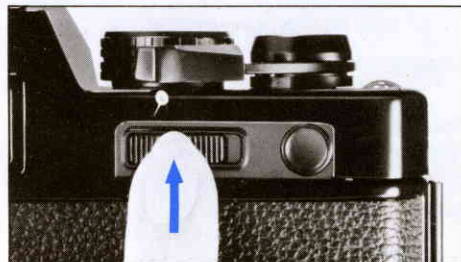
- Advance the film. (Page 26)
- Transportieren Sie den Film. (Seite 27)
- Avancer le film. (Page 27)
- Avance la película. (Página 27)



- 4
- Secure precise focus. (Page 36)
 - Nehmen Sie eine genaue Scharfeinstellung vor. (Seite 37)
 - Faire la mise au point précise. (Page 37)
 - Enfoque con precisión. (Página 37)

- 5
- Make exposure adjustment. (Page 40)
 - Regeln Sie die Belichtung. (Seite 41)
 - Faire la correction d'exposition. (Page 41)
 - Realice los ajustes de exposición. (Página 41)

- 6
- Hold the camera steady and press the magnetic release button. (Page 38)
 - Halten Sie die Kamera ruhig und drücken Sie den magnetischen Auslöser nieder. (Seite 39)
 - Tenir l'appareil fermement et presser le bouton déclencheur magnétique. (Page 39)
 - Sostenga la cámara firmemente y oprima el botón disparador magnético. (Página 39)



How to Mount and Remove the Lens

How to Mount the Lens

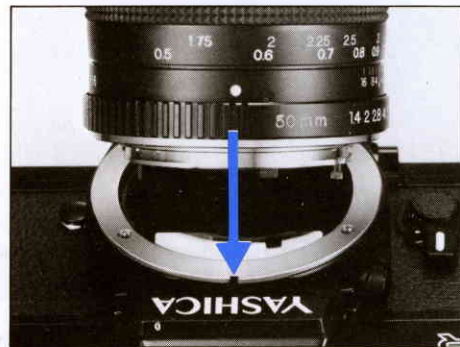
After removing the camera body cap, set the lens in the mount by matching the red dot on the lens barrel with that on the camera body. Then, while gripping the lens barrel firmly, give it a right turn until it self-locks with a click.

The method of mounting is the same with all lenses. Improper mounting will result in poor focus and/or exposure.

How to Remove the Lens

While keeping the lens release button depressed, turn the lens barrel all the way to the left and lift the lens straight out of the lens mount.

- Avoid touching the linkage systems on the camera body and the lens.
- Avoid direct sunlight when interchanging lenses.
- To remove or reset the lens cap, press the knobs on both sides of the cap. The lens cap can be set even when a filter is in use.



Lens mounting



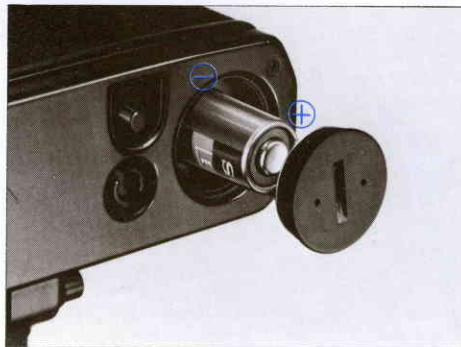
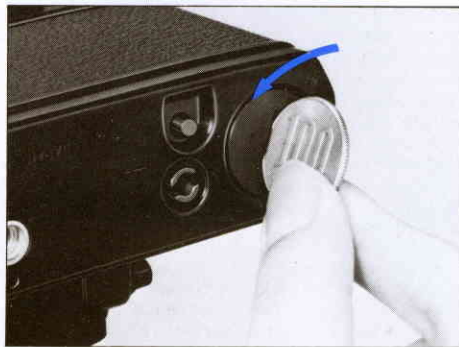
Lens removing

Installing the Battery

Make sure the battery is installed properly. Without the battery, the shutter system and the exposure control of your Yashica FR will not function.

- 1 Open the battery compartment cover on the camera base by turning it in the direction of the arrow with the edge of a coin.
- 2 Install the battery properly by matching its polarity with the diagram.
- 3 After ascertaining that the battery is installed properly, close the battery compartment cover securely.

● Always use a 6 V silver oxide (Eveready 544, Ucar 544, Mallory PX-28 or equivalent) or 6 V alkaline (Eveready 537, Ucar 537 or equivalent) battery.



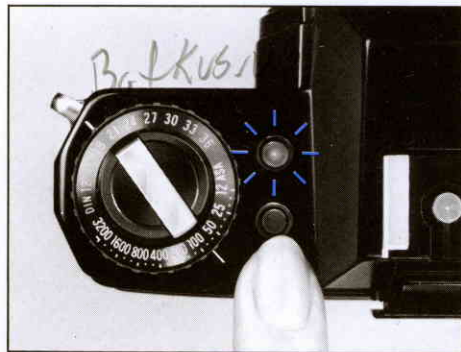
Battery Checking

To check the battery power, press the battery checker button. If the LED battery checker display comes on, it is an indication that there is sufficient battery power. If it fails to come on, replace the battery with a new one.

- The LED battery checker display may sometimes come on instantly when the battery checker button is depressed but later fade out. This is an indication that the battery power is low and therefore the battery must be replaced.

- The shutter will fail to function when the battery power drains below the required level. Make it a rule to check the battery power in the following instances:

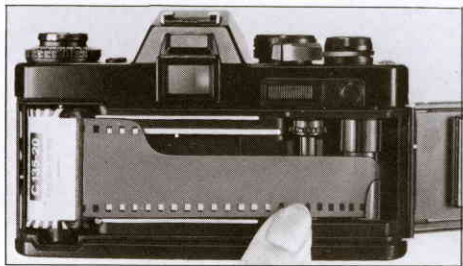
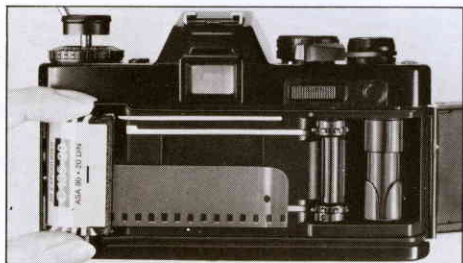
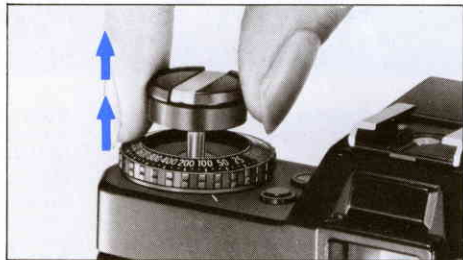
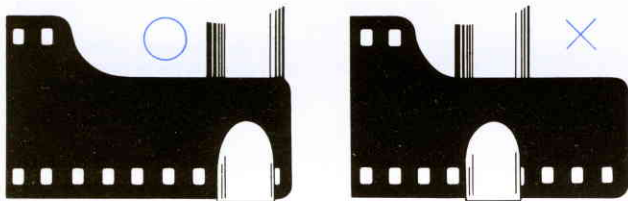
- a. After installing a fresh battery.
- b. In case the camera has been left unused over some length of time.
- c. In case there is a need for checking the battery power.



Film Loading

Avoid direct sunlight when loading film. Always use a standard 135 film cassette (12, 20 or 36 exposure load).

- 1 Open the camera back by pulling the film rewind knob all the way out. As soon as the camera back is opened, the exposure counter will reset to 'S' (start) position.
- 2 Install the cassette in the film chamber and push in the film rewind knob to its original position. If it fails to reset, turn the knob in either direction while pushing it in.
- 3 Introduce the tip of the film leader securely into any one of the slots on the take-up spool. Avoid inserting it as far in as illustrated.

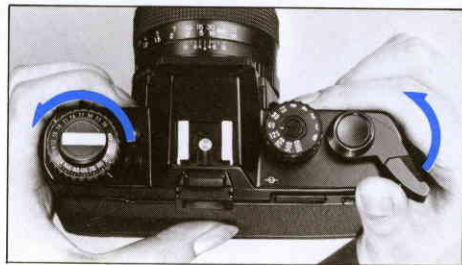
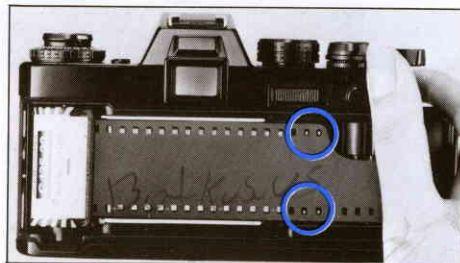


4 Manipulate the film advance lever and, after ascertaining that the sprocket teeth properly engage the perforations on the edges of the film, close the camera back.

5 Fold out the film rewind crank-handle and turn it gently in the direction of the arrow to take up the film slack.

6 Trip the shutter and advance the film alternately until the exposure counter registers the figure '1'.

If the film rewind knob rotates in the direction of the arrow when the film advance lever is manipulated, it means that the film is advancing properly.



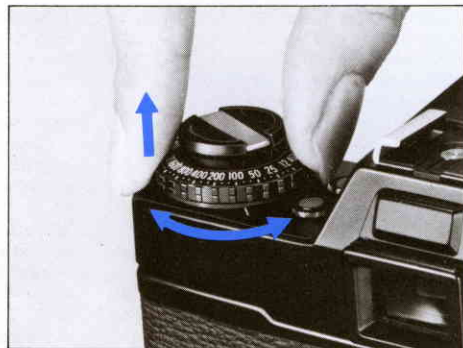
Setting the Film Speed

To set the film speed, lift and turn the collet around the ASA film speed dial until the figure corresponding to the speed rating of the film in use is brought in alignment with the index. Unless the film speed is set properly, correct exposure will not be assured.

ASA/DIN Film Speed Rating

The ASA or DIN film speed rating denotes the degree of sensitivity of the film emulsion to light. It is clearly indicated on the outer box or instructions accompanying the film.

ASA	12	16	20	25	32	40	50	64	80	100	125	160	200	250
DIN	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ASA	320	400	500	640	800	1000	1250	1600	2000	2500	3200			
DIN	26	27	28	29	30	31	32	33	34	35	36			

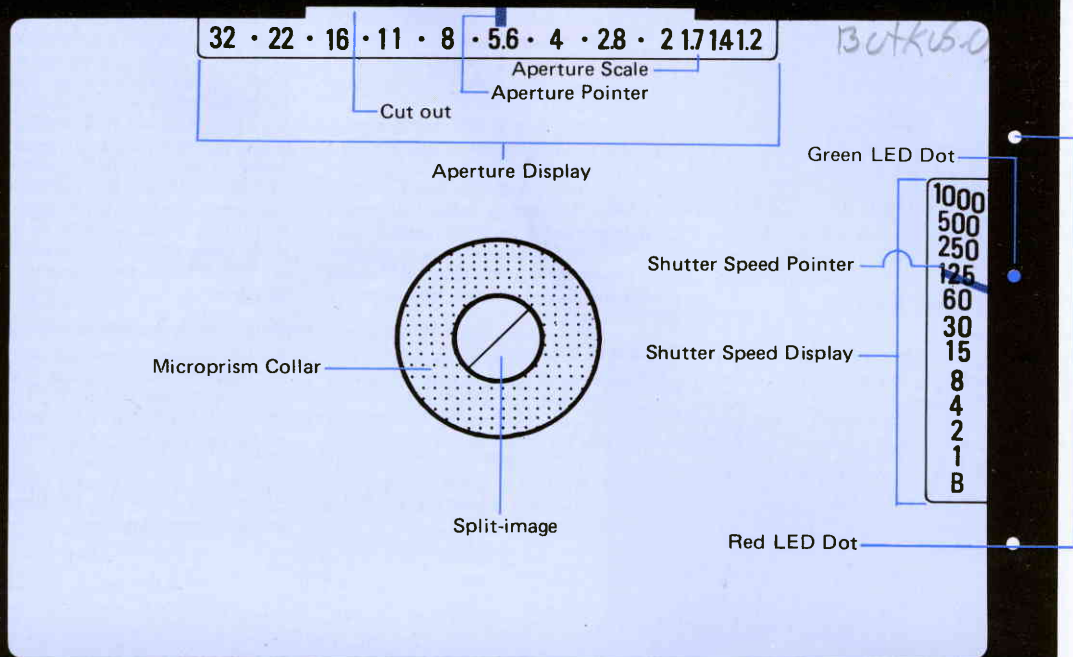


Draw out the film advance lever to where it will stop by itself (see illustration). Then, hook your right thumb on the lever and turn the lever all the way. This will advance the film and charge the shutter, simultaneously. With your Yashica FR, the film can be advanced by giving the lever one full stroke or several short ratchet actions. In either case, make sure the lever is manipulated until it goes no further. If the film advance is incomplete, the electromagnetic release will not function.

Exposure Counter

The exposure counter registers the number of exposed frames. It is calibrated from S, 1, 2 to 36, with dots denoting odd numbers. The figures '12', '20' and '36' are given in red to indicate the last frame of the film cassette of the corresponding exposure load.





The viewfinder of your Yashica FR affords viewing and focusing always at full aperture. It also shows all necessary exposure information.

Viewfinder Field

The viewfinder shows a field approximately 92% of the actual picture area. Whatever you see through the finder will be therefore reproduced on the film without the fear of head cropping, regardless of whatever lens is in use.

Focusing Spot

Your Yashica FR features a dual focusing spot consisting of the diagonal split-image center and microprism collar. Either one can be used for fast and accurate focusing. (See section dealing with 'Focusing' for further details.)

Aperture Display

The figures along the top edge of the finder frame consist of the aperture display. When the aperture ring is rotated, the pointer moves in coupled action to display the preset aperture. In the course of the lens mounting, the aperture scale shifts to display the maximum aperture of the lens in use within the cut-out of the finder frame (extreme right).

Shutter Speed Display

The figures along the right edge of the finder frame correspond to the shutter speeds. 'B' indicates bulb exposure.

When the shutter speed control dial is turned, the pointer will move accordingly to display the shutter speed setting.

LED (Light Emitting Diode) Exposure Display

When the exposure check button is depressed before or after film wind, an LED dot will come on to the right of the shutter speed scale to display the exposure condition. For details, refer to the section dealing with 'Exposure Setting'.

LED Exposure Display

The LED exposure display incorporated in the view-finder comes on when the exposure check button is depressed either before or after film wind.

The red LED dot on top indicates over-exposure, while the bottom LED dot warns against under-exposure. The green LED dot signifies that correct exposure will be obtained at the shutter speed indicated by the shutter speed pointer.

Over-Exposure

When over-exposure is indicated, stop down the lens or reset the shutter speed control dial to a higher speed setting. In case the red LED dot fails to go off even then, mount an ND filter over the lens.

Under-Exposure

In case under-exposure is indicated, open the lens aperture or reset the shutter speed control dial to a slower speed setting. If the LED dot fails to go off even then, resort to flash photography.



Focusing

Turn the focusing ring while observing the subject in the split-image center spot, microprism collar or matte area of the viewfinder.

Split-image Center Spot

Precise focus is secured when the images in the diagonal split-image center spot are brought into alignment.

Microprism Collar and Matte Area

When the multiple glitter disappears in the microprism collar or when the image appears clear and sharp in the matte area, precise focus is secured.

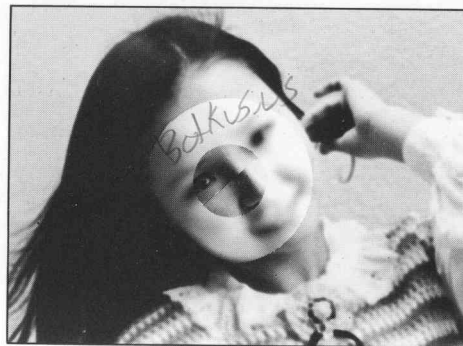
- The method of focusing remains the same regardless of whatever lens or accessory is in use.

Eyesight Adjustment

To permit adjustment of the viewfinder to the eyesight of the individual, eight types of diopter lenses (-5 to +3 diopters) are available.



In Focus

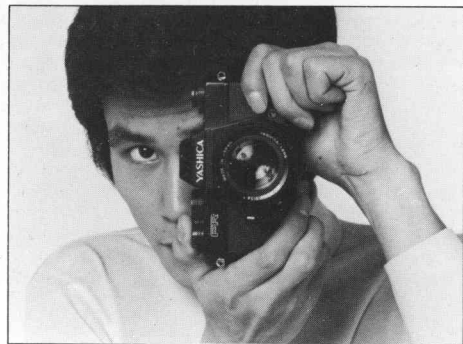
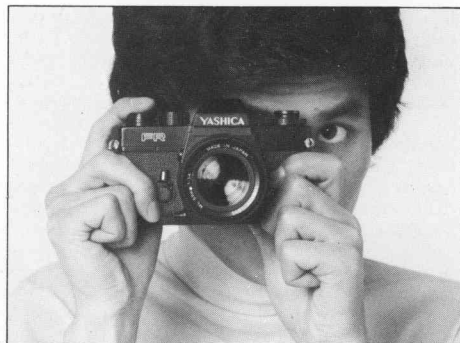


Out of Focus

Shooting Posture

To obtain good results, it is important that the camera be held steady. Erratic movement of the camera at the critical moment of exposure constitutes the most common cause of poor (blurred) photographic results. Before attempting to take your first series of photographs, familiarize yourself with all functional controls. As illustrated, the camera can be held in either horizontal or vertical posture, depending on your photographic requirement. In either case, support your camera firmly with your left hand, with your left elbow held close against your body. Avoid gripping the camera body too firmly with your right hand and press the magnetic release button gently.

- For extra steady support, the trunk of a tree or wall of a building or other structure can be used most effectively.
- When using a telephoto lens or when making exposure at a slow shutter speed, the use of a tripod is recommended.



Exposure Setting

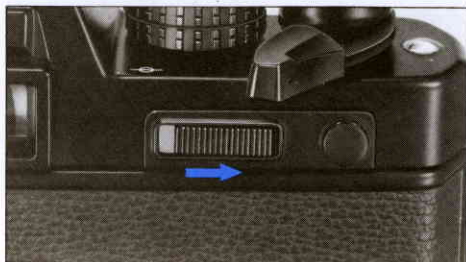
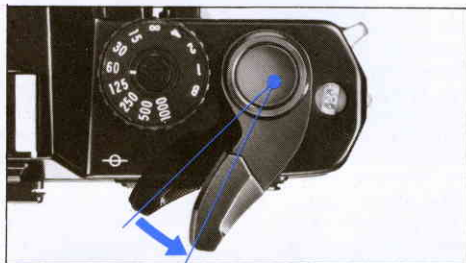
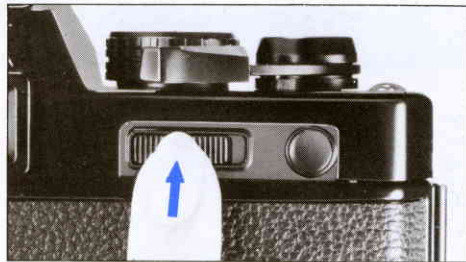
Exposure Check Button

Correct exposure is set by manipulating the camera controls while keeping the exposure check button depressed in either one of the following two methods:

① Press the exposure check button gently with your right thumb. As soon as the said button is depressed, the LED display will come on. When the fingertip pressure is released after setting the exposure, the LED display will turn off.

② After pulling out the film advance lever as illustrated, slide the exposure check button to the right. This will lock the button and keep the LED display on. To release the button from its locked state, push the film advance lever all the way in.

- To prevent excessive battery power drain, make it a rule to release the button from the locked state after setting the exposure.
- Do not attempt to reset the exposure check button forcefully. To release the check button, always push the film advance lever all the way in.



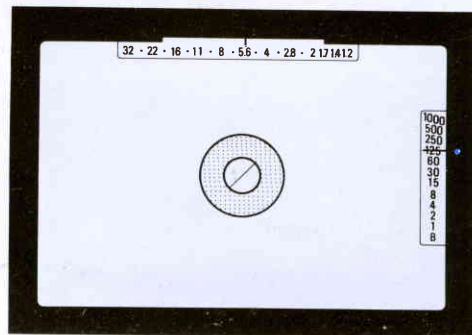
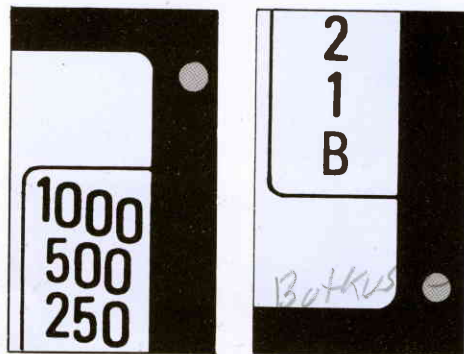
Correct Exposure Indication

Correct exposure is indicated when the green LED dot comes on in alignment with the shutter speed pointer indicating the shutter speed setting.

- ① Press the exposure check button.
- ② The red LED dot indicates the need to make exposure adjustment. The top red dot warns against over-exposure, while the bottom dot signifies under-exposure. Turn the aperture ring or the shutter speed control dial until the green LED dot comes on (see page 44 for further details).
- ③ When the green LED dot comes on, press the magnetic release button gently.

Exposure Guide (when ASA 100 film is in use)

Light Condition	Shutter Speed	Lens Aperture
Outdoors under bright sunlight	1/1000, 1/500, 1/250	16, 11, 8
Outdoors in shade or under overcast	1/250, 1/125, 1/60	5.6, 4, 2.8
Indoors or night photography	1/30 or slower speed	2.8, 1.7, 1.4



Exposure Setting Through Aperture Preselection

This method of exposure setting is recommended when taking full advantage of the depth-of-field effect or when the ambient light situation necessitates pre-selection of the lens aperture.

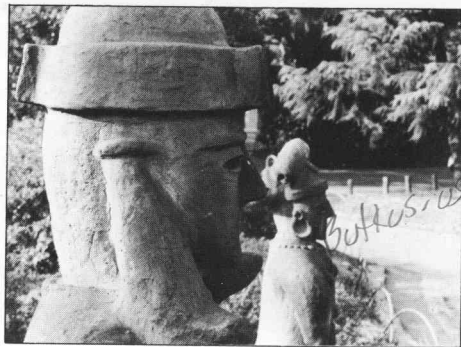
First, turn the aperture ring and adjust the ring to the desired setting. Then, rotate the shutter speed control dial until the green LED dot comes on. If it comes on momentarily between the settings, set the dial at either one of the calibrated settings and readjust the aperture ring until the green LED dot comes on in alignment with the shutter speed pointer. (The Yashica Lens ML permits use of half-stops.)

- The shutter speed control dial of your Yashica FR is designed to enable manipulation with the tip of your right index finger only.

Top photo (taken at $f/1.4$) and bottom photo (taken at minimum aperture $f/16$) illustrate the difference in background and foreground blurs depending on the aperture settings.



$f/1.4$



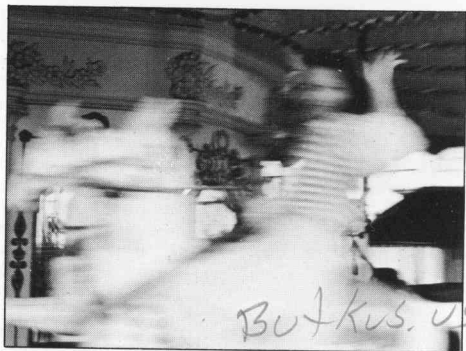
$f/16$

Exposure Setting Through Shutter Speed Preselection

To 'freeze' fast-moving subjects or when the conditions surrounding the subject so demands, set the exposure by preselecting the shutter speed.

First, rotate the shutter speed control dial and adjust it to the required setting. Then, turn the aperture ring until the green LED dot is brought into alignment with the shutter speed pointer.

Top photo (taken at $1/8$ sec.) and bottom photo (taken at $1/250$ sec.) show the difference in the photographic results when exposure is made at different shutter speeds.



$1/8$ sec.



$1/250$ sec.

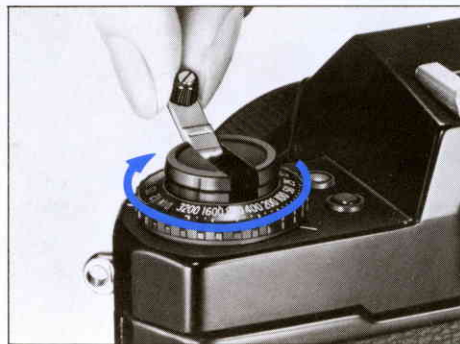
Film Unloading

When the exposure counter registers the number equivalent to the exposure load of the film in use, avoid advancing the film forcibly. If the perforations of the film tear or the film pulls away from the cassette, it will become impossible to rewind the film.

① Push in the film rewind release button on the camera base. It is unnecessary to keep this button depressed all the while during film rewind.

② Fold out the film rewind crank-handle and turn it in the direction of the arrow. When the crank-handle is turned, the take-up spool will rotate with an audible signal, indicating that the film is being rewound properly. The crank-handle will rotate freely when the film is rewound completely into its cassette.

- When the film fails to advance, push the film rewind release button and rewind.
- Make sure the exposed film is rewound into the film cassette before opening the camera back.





After familiarizing yourself with the basic procedure of operation, read the following pages dealing with the functional features of your Yashica FR to extend the scope of your photographic application.

Nachdem Sie sich mit der grundsätzlichen Bedienung vertraut machten, lesen Sie die folgenden Seiten über die funktionellen Merkmale Ihrer Yashica FR durch, um die photographischen Möglichkeiten zu erweitern.

Après vous être familiarisé avec la procédure d'opérations de base, lisez les pages suivantes concernant les caractéristiques fonctionnelles de votre Yashica FR pour étendre la plage de vos applications photographiques.

Una vez que se haya familiarizado con los procedimientos básicos de operación, lea las siguientes páginas, que tratan de las características funcionales de su Yashica FR, para ampliar así el alcance de su aplicación fotográfica.

Magnetic Release Button

The electromagnetic release system incorporated in your Yashica FR opens up a completely new possibility in photography. Compared with the conventional mechanical release system, it activates the shutter with a minimum operating stroke. Coupled with this, the feather-touch action permits shutter tripping without erratic camera movement. Moreover, it is designed to permit convenient use of various accessories.

① The shutter activates through feather-touch fingertip action. Depression of the magnetic release button in effect establishes contact of a microswitch which in turn activates the shutter.

② It provides most effective use of the exclusive winder and various remote control accessories.

Because the release system functions electrically, all sorts of remote control accessories with switching device, such as the cable switches and infrared controller set, can be used effectively. Besides, the use of the exclusive winder (compact motor drive unit) will permit automatic film drive at all shutter speeds.

Magnetischer Auslöser

Das in Ihre Yashica FR eingebaute magnetische Auslösesystem eröffnet völlig neue Möglichkeiten auf dem Gebiet der Photographie. Im Vergleich zum herkömmlichen mechanischen Auslösesystem löst es den Verschluß mit einem minimalen Arbeitshub aus. Zusammen mit diesem erlaubt die federleichte Bewegung eine Verschlußauslösung ohne Verwackeln der Kamera.

① Der Verschluß wird durch federleichten Druck mit der Fingerspitze ausgelöst. Durch Niederdrücken des magnetischen Auslösers wird tatsächlich der Kontakt eines Mikroschalters hergestellt, der seinerseits den Verschluß auslöst.

② Es erlaubt die wirksamste Verwendung des exklusiven Winders und verschiedener Zubehörteile für die Fernauslösung.

Da das Auslösesystem elektrisch funktioniert, können alle möglichen Fernauslösungs-Zubehörteile mit Schaltvorrichtungen, wie z.B. die Kabelauslöser und der Infrarot-Fernauslöser, auf wirkungsvolle Weise eingesetzt werden. Außerdem ermöglicht die Verwendung des exklusiven Winders (kompakter Motorantrieb) einen automatischen Filmtrieb bei sämtlichen Verschlußzeiten.

ASA	Lens Aperture																						
	f/1.4	f/2	f/2.8	f/4	f/5.6	f/8	f/11	f/16	f/22	f/32	f/45	f/64	f/90	f/128	f/180	f/256	f/360	f/500	f/710	f/1000	f/1410	f/2000	f/2810
5200																							
1600																							
800																							
400																							
200																							
100																							
50																							
25																							
12																							

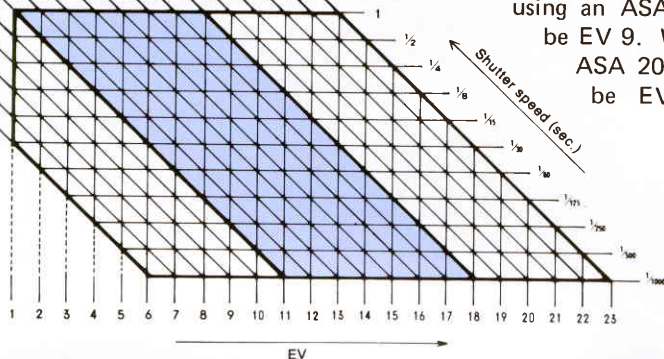
Exposure Control

Your Yashica FR offers the full advantage of through-the lens full aperture light reading.

• Sensitivity Range

The sensitivity range of the exposure control of your Yashica FR is from EV 1 to EV 18 at f/1.4 (ASA 100). The exposure value (EV) denotes the shutter/aperture combination, the actual exposure being determined by the rating of the film in use and the light intensity.

If correct exposure can be obtained at EV 10 when using an ASA 100 film, the exposure value when using an ASA 50 film will be EV 9. When using an ASA 200 film, it will be EV 11.



Backlit Subjects

When photographing subjects against light or against a bright background, give two to four times the normal exposure by resorting to one of the following methods:

- Aperture compensation

If the camera indicates an exposure setting of $f/16$ at $1/125$ sec., maintain the shutter speed at $1/125$ sec. and reset the lens aperture to $f/11$ (2X) or $f/8$ (4X).

- Shutter speed compensation

If the camera indicates an exposure setting of $f/16$ at $1/125$ sec., readjust the shutter speed control dial to $1/60$ sec. (2X) or $1/30$ sec. (4X).

- ASA film speed compensation

Keep the exposure controls of the camera at the normal setting and reset the ASA film speed dial to 50 (2X) or 25 (4X) when an ASA 100 film is in use.

Make sure the film speed dial is reset to its original position after making exposure through compensation of ASA film speed.



Exposure compensated



Without exposure compensation

Spotlit Subjects

Your main subject will be over-exposed if spotlight subjects are exposed in the normal manner. A similar effect will be obtained if there is a conspicuous difference in the lighting of the subject and the background.

Better overall results will be obtained if compensation is made by resetting the lens aperture, shutter speed or ASA film speed to give $1/2$ or $1/4$ the normal exposure. In case the camera indicates an exposure of $f/1.4$ at $1/60$ sec., for example, readjust the lens opening to $f/2$ ($1/2X$) or $f/2.8$ ($1/4X$).

Exposure compensation will be unnecessary in the event you approach your subject and determine the exposure from a close distance and then back away to the shooting position.



Exposure compensated



Without exposure compensation

Self-Timer

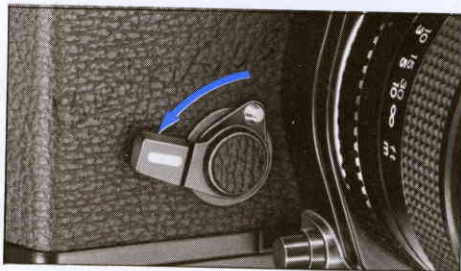
When you wish to include yourself in the picture, mount the camera on a tripod and trip the shutter with the aid of the self-timer.

- 1 Advance the film and secure precise focus.
- 2 Shift the self-timer lever on the front-face of the camera body all the way in the direction of the arrow (see illustration).
- 3 Push the self-timer start lever in the direction of the arrow to activate the self-timer. The shutter will be tripped after a delay of approximately 7 to 10 seconds.

- If the film advance is incomplete, the self-timer will be activated through manipulation of the self-timer start lever but it will not trip the shutter. In such a case, manipulate the film advance lever to complete the film wind.

- If after activating the self-timer you wish to suspend the self-timer exposure, simply reset the self-timer start lever manually to its original position.

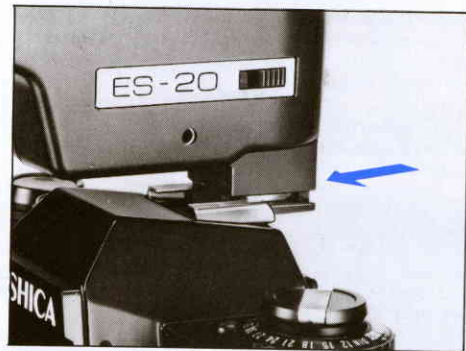
- The magnetic release button will function normally even when the self-timer is charged.



Flash Exposure

When making exposure with the aid of an electronic flash unit, make sure the shutter speed control dial is set at 1/60 sec. or slower speed. Your Yashica FR features an X sync.

❶ Mount the electronic flash unit properly on the accessory shoe.



❷ If your unit does not feature a direct contact shoe, plug the PC cord into the X sync terminal.

- The direct X contact incorporated in the accessory shoe provides circuit contact only when the unit is properly mounted, thus preventing electric shock hazard.



③ Adjust the shutter speed control dial to a setting providing precise flash synchronization. (Refer to the following table.)

Shutter Speeds	1/60	1/30	1/15	1/8	1/4	1/2	1
Electronic flash	○	○	○	○	○	○	○
Flashbulb	FP		○	○	○	○	○
	M		○	○	○	○	○
	MF		○	○	○	○	○



④ Secure focus and set the lens aperture accordingly. Focus and read off the camera-to-subject distance. Then, decide the correct aperture setting (see page 66).

- The foregoing procedure remains the same even if a flash gun is used.



Correct Exposure Setting

Correct exposure in flash photography is decided on the basis of the guide number of the flashbulb or electronic flash unit in use. The guide number is clearly indicated in the instructions accompanying the flashbulb or the unit.

Correct exposure is obtained by dividing the guide number by the flash-to-subject distance.

When the guide number is given in meters, see that the flash-to-subject distance is converted into meters.

If, for example, an electronic flash unit with a guide number of 20 (ASA 100 in meters) is used in photographing a subject at a distance of 5 meters by loading an ASA 100 film, the correct aperture setting will be,

$$\begin{array}{ccccccc} \text{GN} & & \text{Distance} & & \text{Correct Aperture} \\ 20 & \div & 5 & = & f/4 \end{array}$$



Depth-of-Field Preview

With any one of the Yashica ML or Zeiss T* lenses, your Yashica FR always provides full aperture viewing and focusing. To preview the depth of field, therefore, push in the depth-of-field preview button. The lens diaphragm will close down to the preset aperture as long as the button is kept depressed.

To prevent exposure inaccuracy, keep your finger off this button except when previewing the depth of field.



Interchanging the Camera Back

To interchange the camera back, press the camera back release lug and remove as illustrated.

The standard camera back can be interchanged with the exclusive data back available as an optional accessory.



When a lens is focused on a given subject, objects in the foreground and background will appear acceptably sharp in the picture. The extent over which all objects will be reproduced acceptably sharp in the picture is called the depth of field.

Both photos were taken by focusing on the subject. At $f/1.4$ (left), the foreground and background objects appear blurred.

The depth-of-field scale on the lens barrel will show the extent of the depth of field at different aperture settings. In case the standard 50 mm lens is stopped down to $f/16$ and focused at 2 meters, this scale will indicate that all objects within the range of about 1.5 and 3 meters will appear acceptably sharp in the picture.

- With a specific lens, the depth of field varies according to the following:

- ① It increases as you stop down the lens.
- ② It is more extensive in the background than in the foreground.
- ③ It is more extensive as you focus on a distant subject.



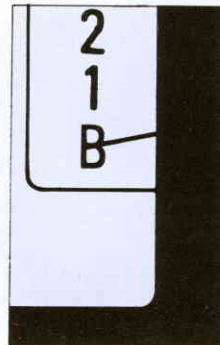
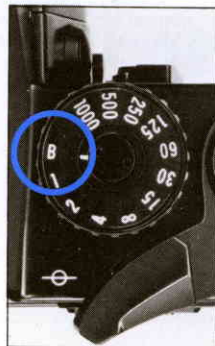
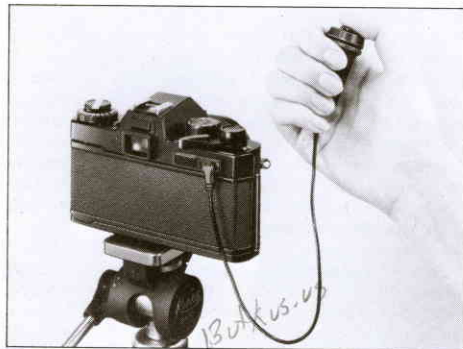
Slow Shutter Speeds

When making exposure at 1/30 sec. or slower shutter speed, even the slightest erratic movement of the camera may spoil an otherwise perfect shot. Make it a rule, therefore, to mount the camera on a tripod or to set it on a firm surface to avoid camera shake.

'B' (Bulb) Exposure

When an exposure longer than one second is required, set the shutter speed control dial at 'B' (Bulb exposure). When the dial is thus set, the shutter speed pointer in the viewfinder will point at the 'B' setting. At this setting, the shutter will remain open as long as the magnetic release button is kept depressed. To prevent erratic camera movement during exposure, always mount the camera on a tripod. Also, see that the magnetic release button is kept firmly depressed. If pressure is somewhat released, the shutter may close prematurely.

- When shooting at slow shutter speed or in case of 'B' (bulb) exposure, use the cable switch available as an optional accessory.



Intentional Multiple Exposure

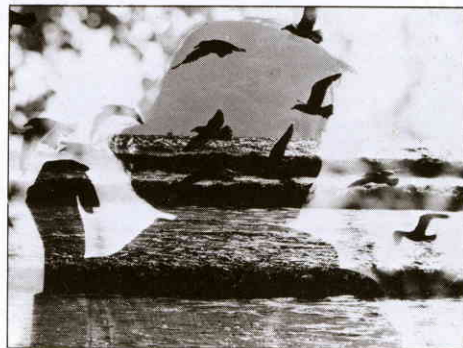
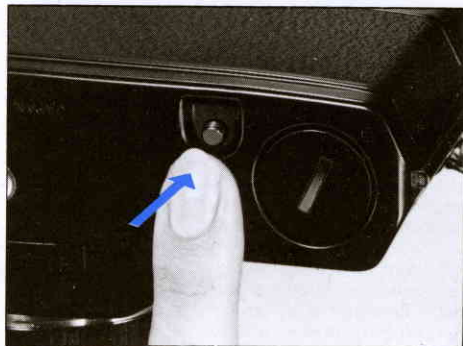
By intentional multiple exposure, it is meant superimposing the images of the same subject or different subjects on a single frame. This multiple exposure provision comes in handy when taking photos of fireworks, etc.

① Make the first exposure by pressing the magnetic release button in the normal manner.

② Push in the film rewind release button and then give the film advance lever a full wind. This will charge the shutter without advancing the film.

③ Press the magnetic release button to make the second exposure. Then, repeat these steps as required. Each time you manipulate the film advance lever, the exposure counter will advance by one frame; therefore, keep count of how many exposures have been superimposed on one frame.

- Better results in multiple exposure can be obtained by selecting the subject to be superimposed. Make it a rule to superimpose lighter subjects over darker ones. Multiple exposures of bright subjects will not come out well.

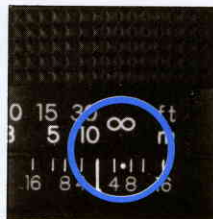


Infrared Ray Photography

In case of infrared ray photography using the infrared ray film in combination with the red filter, focus must be secured in the normal manner and then compensated accordingly in order to obtain sharp images. The Yashica ML and Zeiss T* lenses feature R index permitting ready compensation of focus.

First, secure focus in the normal manner without using the filter. Then, read off the subject distance and align it with the R index. After making this compensation, mount the filter over the lens.

- Always use the red filter when attempting infrared ray photography.
- For correct exposure setting, refer to the instructions accompanying the infrared ray film.



Ambient Temperature

Your Yashica FR is tested to provide faithful function in ambient temperature ranging from $+45^{\circ}$ to -10° C. in extremely low ambient temperature, however, give utmost precaution to the following matters:

- A battery which may function properly in normal ambient temperature may not provide the required performance in extremely low temperature. If the LED battery checker display fails to come on, replace the battery with a new one or use the battery adapter set available as an optional accessory.
- Avoid exposing your camera to excessive temperature fluctuation.

When your camera is brought into a warm room suddenly after exposing it to cold outdoor temperature or vice versa, small droplets of water may accumulate on the internal mechanism. If left in this state corrosion may set in, causing serious malfunctions. Protect your camera from excessive temperature fluctuation as much as possible.



- Do not expose your camera to excessive heat. Never leave it in direct sunlight or in the glove compartment, trunk or on the rear seat shelf of your car. Exposure to excessive heat may adversely affect the film emulsion, battery and/or camera systems and cause exposure inaccuracy. If it is accidentally exposed to heat, leave the camera to cool to normal temperature before attempting to use it.

- Knocks and jolts, as well as exposure to humidity and sea breeze are counted among the common causes of malfunction. To obtain maximum service, take good care of your camera and avoid rough handling.

- Do not keep the shutter charged when your camera is to be left unused over any great length of time. If possible, take out the battery from its compartment.

- Never expose your camera to sudden changes in temperature, because the electrical contacts may corrode, thus causing malfunction due to poor electrical contact.

- Setzen Sie Ihre Kamera nicht übermäßiger Hitze aus. Lassen Sie sie niemals in direktem Sonnenlicht oder im Handschuhfach, Kofferraum oder auf der Heckfensterablage Ihres Wagens liegen. Wird sie übermäßiger Hitze ausgesetzt, können Filmschicht, Batterie und/oder die Kamerasysteme beschädigt werden, was eine ungenaue Belichtung zur Folge hat. Sollte sie versehentlich Hitze ausgesetzt werden, lassen Sie die Kamera auf Normaltemperatur abkühlen, bevor Sie versuchen, sie zu benutzen.

- Stöße und Erschütterungen, ebenso die Einwirkung von Feuchtigkeit und Seebrisen zählen zu den häufigsten Ursachen einer Betriebsstörung. Um eine maximale Leistung zu erzielen, sollten Sie auf Ihre Kamera gut achtgeben und eine grobe Behandlung vermeiden.

- Lassen Sie den Verschuß nicht gespannt, wenn Ihre Kamera längere Zeit nicht benutzt wird. Wenn möglich, sollten Sie die Batterie aus dem Batteriefach entfernen.

- Setzen Sie Ihre Kamera niemals plötzlichen Temperaturschwankungen aus, weil die elektrischen Kontakte rosten können und dadurch eine Betriebsstörung wegen schlechten elektrischen Kontaktes verursacht wird.

Precautions

- Before installing the battery in the battery compartment, wipe both ends with a clean, dry cloth. Oily smears on the battery ends may cause poor contact.
- In case your camera is to be left unused over a great length of time, take out the battery from its compartment.
- When going out on a long trip, take along a couple of spare batteries.
- To avoid hazards, do not attempt to dismantle the battery or to throw it into open fire.

Vorsichtsmaßregeln

- Wischen Sie vor Einsetzen der Batterie in das Batteriefach beide Enden mit einem sauberen, trockenen Tuch ab. Ölflecken auf den Batterieenden können einen schlechten elektrischen Kontakt verursachen.
- Falls Ihre Kamera längere Zeit nicht benutzt wird, entfernen Sie die Batterie aus dem Batteriefach.
- Wenn Sie eine lange Reise machen, nehmen Sie ein Paar Ersatzbatterien mit.
- Um Gefahren zu vermeiden, sollten Sie nicht versuchen, die Batterie zu zerlegen oder in ein offenes Feuer zu werfen.

Précautions à prendre

- Avant d'installer une pile dans le compartiment de pile, essuyez en chaque extrémité avec un chiffon propre et sec. Les traces huileuses sur les extrémités de pile peuvent causer de mauvais contacts.
- Au cas où votre appareil doit rester inutilisé pour une longue période de temps, enlevez la pile de son compartiment.
- Si vous partez pour un long voyage, prenez avec vous une paire de piles de rechange.
- Pour éviter les accidents, n'essayez pas d'ouvrir la pile ou de la jeter au feu.

Precauciones

- Antes de instalar una pila en el compartimiento de la pila, pase un paño limpio y seco en ambos terminales. Los embadurnamientos oleaginosos en los terminales de la pila podrían causar un mal contacto.
- En caso de que su cámara no vaya a ser usada durante un largo período de tiempo, saque la pila de su compartimiento.
- Al realizar un viaje largo, lleve con usted un par de pilas de repuesto.
- Para evitar peligros, no intente abrir la pila ni tirarla al fuego.