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

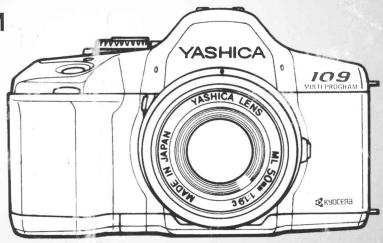
Only one "donation" needed per manual, not per multiple section of a manual!

The large manuals are split only for easy download size.

YASHICA 109

MULTI PROGRAM

INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE INSTRUCCIONES





Thank you for purchasing of this camera. This auto exposure single-lens-reflex (SLR) camera offers you many sophisticated features such as two types of programmed auto exposure, aperture-priority auto exposure, fast 1/2000 second shutter and automatic film advance.

Please study this manual thoroughly before using so as to ensure proper operation and years of trouble-free use.

This manual is illustrated with reference to the YASHICA ML 50mm f1.9c lens,

If you use other interchangeable YASHICA or CARL ZEISS lenses on this camera, they are also applicable and can be used in the same manner as described in this manual.

Vielen Dank, daß Sie sich für den Kauf der Kamera entschieden haben. Diese Spiegelreflexcamera besitzt eine Reihe von Automatikfunktionen, die die Handbabung erleichtern und eventuelle Fehlbedienungen weitgehendst ausschließen. Trotzdem sollten Sie diese Bediedungsanleitung sorgfältig studieren, um mit allen Funktionen vertraul zu werden. Nur die sachgerechte Handhabung Ihrer Kamera garantiert eine einwandfreie Funktion und lange Lebensdauer.

Diese Anleitung bezieht sich auf eine Ausstallung der Kamera mit einem Objektiv ML 1,9/50 mm, ist jedoch gleichermaßen für eine andere Objektivausstattung gültig.

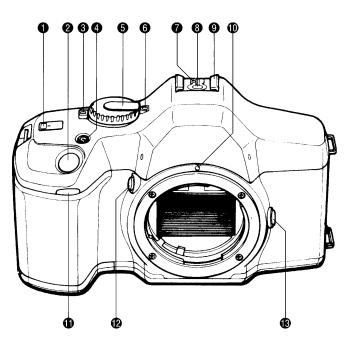
Contents

Inhalt

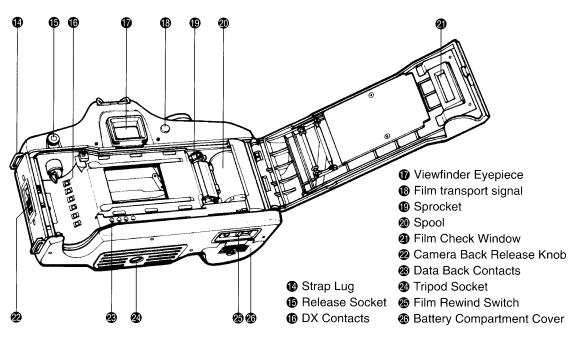
| NAME OF PARTS | 6 |
|-----------------------------------|----|
| BASIC PROCEDURES | |
| Lens Changing 1 | 0 |
| Batteries Loading 1 | 2 |
| Turning ON and OFF the camera 1 | |
| Film Loading 1 | 6 |
| Shutter Dial/Drive Selector | |
| Holding the Camera | |
| Display in the Viewfinder | |
| Focusing the Lens | |
| Rewinding the Film | 34 |
| TAKING PICTURE | |
| Programmed Auto Exposure | 86 |
| Aperture-priority Auto Exposure 4 | |
| Manual Exposure 4 | 2 |
| Bulb Exposure | 4 |
| Backlight Compensation 4 | |
| Self-timer | |
| Flash Photography5 | |
| Depth-of-field | |
| Infra-red Compensation Mark | 8 |
| Release Socket/ | |
| Interchangeable Camera Back | iO |
| Attaching the Accessories | |
| Battery Check | |
| Battery Precaution | |
| Camera Care/Storage | i8 |
| Specifications | 2 |
| | |

| BESCHREIBUNG DER TEILE ALLGEMEINE BEDIENUNG | |
|--|------|
| Objektivwechsel | . 1 |
| Einlegen der Batterien | |
| Ein-und Ausschalten der Kamera | |
| Einlege des Films | |
| Verschlußzeitenknopf/Filmtransportschalter | . 23 |
| Halten der Kamera | . 2 |
| Informationen Im Sucher | . 29 |
| Scharfstellung des Objektivs | . 3 |
| Filmrückspulung | 3 |
| PHOTOGRAPHIEREN | |
| Programm-Belichtungsautomatik | |
| Zeitautomatik nach Blendenvorwahi | |
| Manuelle Belichtung/Nachführmessung | |
| Langzeitbelichtung | |
| Gegenlichtkorrektur – Taste | |
| Selbstauslöser | 49 |
| Blitzaufnahmen | |
| Schärfentiefe | |
| Markierung für Infrarotkorrektur Auslöserbuchse/ | 59 |
| | - |
| Auswechselbare kamerarückwand | |
| Befestigung des Zubehörs Batteriewechsel | 63 |
| Batterie – Vorsiohtsmaßnahmen | 64 |
| | |
| Kamerapflege/Aufbewahrung der Kamera Technische Daten | 74 |
| TCCTITISCTIC Dater | 14 |

Name of Parts



- 1 Exposure Counter
- 2 Shutter Release
- 3 Drive Selector
- 4 Self-timer Button
- **6** Shutter Dial
- 6 Shutter Dial Index
- Flash Ready Signal Contact
- 8 Direct X-Contact
- Accessory Shoe
- Lens Mounting Index
- Self-timer LED
- Lens Release Button
- Backlight Compensation Button



Lens Changing

< Mounting the lens >

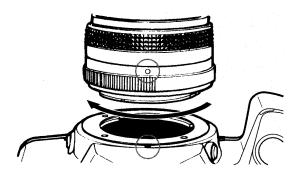
First, remove the camera body-cap and lens rear-cap by turning them counterclockwise. Then align the red dot on the lens with the Lens Mounting Index on the Mount of the camera body, gripping the lens barrel firmly and turn the lens clockwise until it locks with a click.

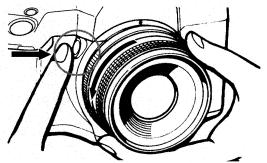
 Using a lens cap of snap-on type, attach or remove it from the lens by pressing the two side-tabs.

< Dismounting the lens >

While pressing the lens release button, turn the lens counterclockwise as far as it will go, gently remove it from the camera body-mount. Replace caps on the camera body and the lens mount to protect them.

- When mounting and dismounting the lens, avoid touching the lens surface and the interior of the body with your fingers.
- Avoid direct sunlight when changing the lens with film loaded in the camera.





Lens Changing

< Mounting the lens >

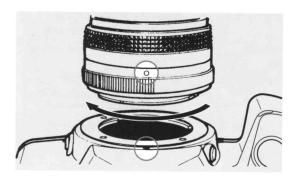
First, remove the camera body-cap and lens rear-cap by turning them counterclockwise. Then align the red dot on the lens with the Lens Mounting Index on the Mount of the camera body, gripping the lens barrel firmly and turn the lens clockwise until it locks with a click.

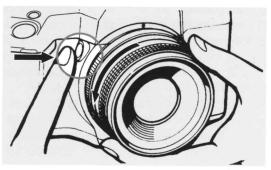
 Using a lens cap of snap-on type, attach or remove it from the lens by pressing the two side-tabs.

< Dismounting the lens >

While pressing the lens release button, turn the lens counterclockwise as far as it will go, gently remove it from the camera body-mount. Replace caps on the camera body and the lens mount to protect them.

- When mounting and dismounting the lens, avoid touching the lens surface and the interior of the body with your fingers.
- Avoid direct sunlight when changing the lens with film loaded in the camera.



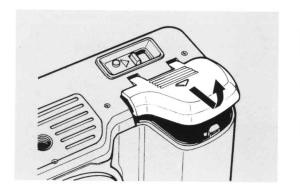


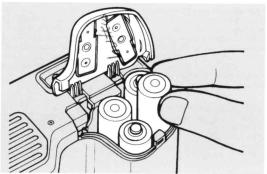
Batteries Loading

This camera is battery powered to perform all necessary functions, including film winding, shutter and display in the viewfinder. Therefore, make sure that batteries are installed correctly before using the camera. It will not operate without batteries.

1. Open the Battery Compartment Cover by pushing it in the direction of arrow.

- 2. Insert four alkaline AA-size batteries as indicated by the battery label inside the battery compartment following the "+" and "-" sign illustration.
- Do not force in the batteries. Let them drop-in the battery compartment.

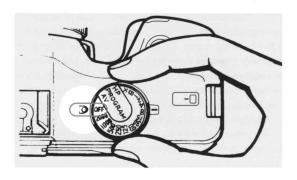




12

Turning ON and OFF the Camera

The power switch of the camera is turned on and off by means of the Shutter Dial. If you set the Shutter Dial at any position other then "OFF", it will turn on the power switch of the camera. If you are not taking pictures, set the Shutter Dial at "OFF" to prevent the shutter from tripping accidentially and save the battery power.



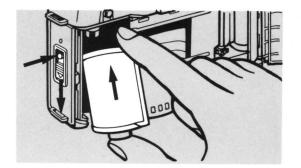
Film Loading

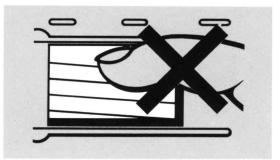
1 Set the Shutter Control Dial to any position other than "OFF", open the Camera Back and load the film.

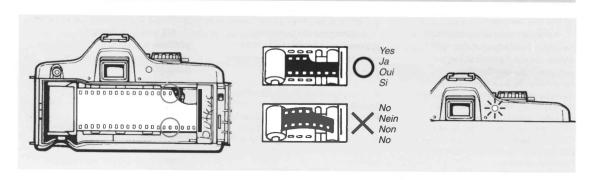
Open the Camera Back by pushing down the Camera Back Lock while pressing in the button on it.

To insert the film, first fit the recess of cassette to the shaft on the top of the film chamber and push in the film cassette smoothly.

- Always load and unload film in subdued light.
- Use DX-coded film. If non DX-coded film is used, the camera will set its film speed to ISO 100 automatically.
 - · Do not touch the Shutter Curtain or DX-contacts.







2 Insert the film leader under the orange mark "—" and close the Camera Back.

Engage the film perforations with the teeth on sprocket and insert the leader of film in the slot under the orange mark "—" at the end of the film channel. Make sure the film lies flat on the film channel as shown.

• If the leader of the film is too long, adjust its length by rewinding it back into the film cassette.

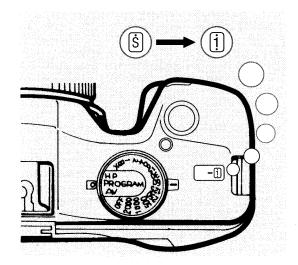
3 Slightly depress the Shutter Release and the film will automatically advance to the first frame.

When the film is advancing correctly, the green LED by the finder will blink and the film counter shows "1".

 If the green LED does not blink, it means the film is not advancing correctly. Open the Camera Back and load the film correctly again.

< Exposure Counter >

The exposure counter advances every time the automatic winding mechanism operates, and returns to "S" (Start) when the camera back is opened, regardless of whether or not there is film in the camera. The exposure counter starts with "S", then "1", followed by even numbers from "4" through "36". The odd numbers are indicated by dots marked between the even numbers. The orange-colored numbers "12", "24" and "36" correspond to the number of exposures in standard 35mm film cartridges.



Shutter Dial/Drive Selector

The Shutter Dial is used as the power switch of camera, it is also used for setting auto exposure modes and shutter speeds in case of manual exposure. Turn and set the dial to your desired exposure position.

< Shutter Dial Setting >

"PROGRAM" Standard programmed auto exposure The camera will automatically select the correct combination of shutter speed and aperture from its program according to the brightness of the subject.

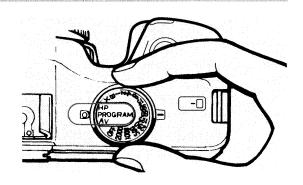
"HP" High-speed Programmed auto exposure
This mode will give a priority to a fast shutter speed for
providing correct exposure. This mode is useful for shooting
quick sports scenes or sharp portraits against a blurred
background. It is also good for avoiding camera shake when
taking pictures with a telephoto lens.

"AV" Aperture-priority auto exposure

If you set your camera at the desired aperture, the camera will automatically control the shutter speed according to the brightness of the subject to provide correct exposure. This mode is suited for shooting with lens with depth-of-field emphasis.

"2000, 1000 - 2, 1" ····

In the **manual** exposure mode, choose your desired shutter speed on this dial. "2000" means 1/2000 second, "1000" means 1/1000 second,, and "1" means 1 second.



"B" Bulb

As long as the Shutter Release is held depressed, the shutter will remain open to expose the film.

"X" ···· Flash synchronizing speed

Set the Shutter Dial to "X" if pictures are taken with flash units other than dedicated flash (CS 140, CS 220 AUTO, CS 240 AUTO FLASH). The synchro socket of the camera is a direct "X-contact" type and the shutter will trip at 1/90 sec.

"OFF" Camera OFF

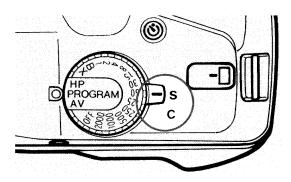
The power switch of the camera is turned off.

Intermediate settings are not available on the Shutter Dial.
 Be sure to set it at the correct positions with the Shutter Dial Index. Do not set in-between positions.

< Drive Selector >

With the Drive Selector, you can set the film drive mode at either "S" (Single) or "C" (Continuous). Switch it to suit your purpose. "S" Each time the Shutter Release is depressed, the shutter trips to expose one frame, then the film will advance to the next frame. before it will stop.

"C" As long as the Shutter Release is held depressed, the shutter will trip in succession to take pictures one after another. If you take your finger off the Shutter Release, then the film will advance to the next frame, before it will stop.



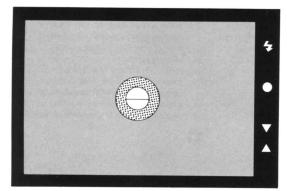
Holding the Camera

To take sharp picture, it is important to hold the camera still. Because the main cause of blurred pictures is camera shake, it is recommended to learn how to hold the camera and find the best position that suits you. Place the camera in the palm of your left hand, hold the len's focusing ring so that you can turn it with your fingers; grip the camera with your right hand and put the forefinger lightly on the Shutter Release. Stick the left elbow to your body, press the camera lightly against your face and look through the viewfinder. Always depress the Shutter Release slowly and gently. To accomodate objects of different shapes, the camera can be used both in the horizontal and in the vertical position. In either case, choose the position that suits you best. Sometimes you could gain stability and support by leaning against a building or tree when pictures are taken.

Display in the Viewfinder

If the Shutter Release is lightly depressed when the camera switch is on, the relevant display in the viewfinder will light up or blink for about 8 seconds showing the following shooting informations.

- " Lights up: When the Shutter Dial is set to an auto exposure mode ("HP", "PROGRAM", or "AV").
- ** Blink: When the control range of the program is narrow. The lens cannot be adjusted down to the "HP" or "PROGRAM" mode. In this case, adjust it to its minimum aperture (or the largest f-number).



- "X"Lights up: When the exposure is correct in the **manual** exposure mode,
- "X"Blinks: When the Shutter Dial is set to "B" (Bulb).
- "▲" or "▼" Lights up: In **manual** exposure, when the exposure is over "▲" or under "▼" within 1 EV relative to the correct exposure.
- "*\(\delta\)" or "\(\vec{\psi}\)" Blinks: In **manual** exposure, when the exposure is over "\(\delta\)" or under "\(\vec{\psi}\)" by more than 1 EV relative to the correct exposure.
 - In aperture-priority auto exposure **(AV)**, when the set aperture is not within the camera exposure control range.
- "\$" Lights up: When it is fully charged on a dedicated flash (CS 140, CS 220 AUTO, CS 240 AUTO FLASH).
- "#" Blinks: When the shutter speed is slower than 1/30 second in an auto exposure mode, this sign is to warn you of a risk of camera shake. In this case, use a flash unit or support the camera with a tripod.

Focusing the Lens

Focusing is done with the split image in the center of the viewfinder, the microprism collar around it, or the surrounding matte screen.

< Horizontal Split-Image Spot>

While looking through the viewfinder, turn the focusing ring until the upper and lower halves of the split image coincide. If the image is not in properly focused, the two halves do not coincide.



In Focus
Schalf/Mise au point correcte/Entocado



Out of Focus
Unscharf/Mise au point incorrecte/Desenfocade

< Microprism Collar and Matter Screen >

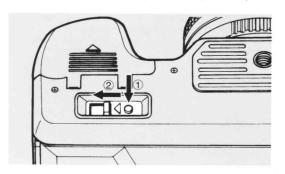
Turn the focusing ring until the image on the microprism or matte screen appears sharpest. If the subject is not in sharp focus, the image on the matte screen unsharp.

- •If you are using a "slow" lens or taking close-up with a high magnification, you may not be able to focus properly. In such case, focus with the surrounding matte screen.
- •If you are far-sighted or near-sighted, use an optional FL type diopter lens. There are eight types available, (-5, -4, -3, -2, 0, +1, +2 and +3), which can be attached to the Viewfinder Eyepiece.

Rewinding the Film

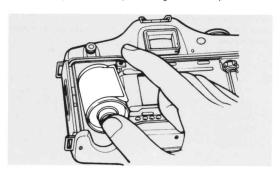
After the last frame is exposed, the camera will stop winding the film. Rewind the film by sliding the Rewind Switch in the direction of the arrow.

- Slide the Rewind Switch in the direction of the arrow with pushing the button on the side of Rewind Switch. The film will start rewinding itself, and green LED near by the finder eyepiece will blink during film rewinding.
- Before rewinding, do not switch the Shutter Dial to "OFF". If
 the Shutter Dial is in the "OFF" position, the film will not rewind.
 Please also remember- Do not switch the Shutter Dial to the
 "OFF" position while film is rewinding. If you switch the Shutter
 Dial to "OFF" while film is rewinding, film rewinding will stop. Put
 the Shutter Dial into any position ("PROGRAM", "AV", etc.)



except "OFF" position, then push the Shutter Release button to resume the rewinding procedure.

- If the batteries are weak, even you slided the Rewind Switch, the rewind function will not operate. Change to the new batteries, then push the Shutter Release button to start the film rewinding.
- The film can also be rewound in the middle of roll.
- Take out the film when rewinding is completed.When the rewinding process is finished the motor automatically stops and green LED by the finder goes out.
- Do not open the Camera Back until the film rewinding procedure is completed.
- Take the exposed film for processing as soon as possible.



Programmed Auto Exposure

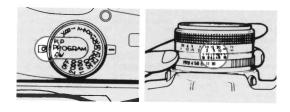
1 Set the Shutter Dial to either "PROGRAM" or "HP".

If you depress the Shutter Release lightly, a green lamp "\op" will appear in the viewfinder, indicating that the camera is set for auto exposure.

2 Set the lens aperture to minimum (the largest f-number)

If the green lamp in the viewfinder blinks, it means the lens is not stopped down to its minimum aperture. Adjust until the lamp stops blinking.

3 Focus the lens and compose your picture Focus the lens by turning it distance ring, compose your picture and shoot.





< Program Auto Exposure Control Diagram>

The following diagram shows the combinations of shutter speed and aperture in the standard program and high-speed program auto exposure modes.

< Multi-Program Curve>

P - Standard PROGRAM

HP----High-speed Program

If the lens is not set to its minimum aperture, the lamp " • "
 blinks and the program control range is narrower.

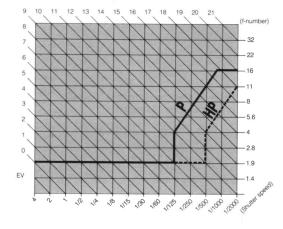
P — Normal Program

Normal-Programm

Programme normal

Programa normal

HP---- High-speed Program
Schneil-Programm
Programme a vitesse elevee
Programa de alta velocidad



Aperture-priority Auto Exposure

1 Set the Shutter Dial to "AV"

If you depress the Shutter Release lightly, a green lamp

"

" will appear in the viewfinder indicating that the camera is set up for auto exposure.

2 Choose the aperture

Set to the desired aperture by turning the aperture ring.

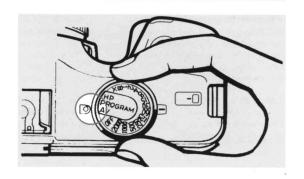
3 Focus the lens and compose your picture

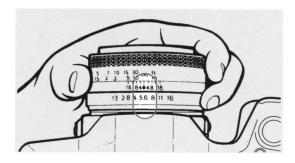
Focus the lens by turning its focusing ring, compose your picture and shoot.

 As long as ypu hold on the Shutter Release, the exposure value will be fixed and stored in memory (AE Lock).

<Over "▲" / Under "▼" exposure Warning in Aperture-priority Auto Exposure>

When the Shutter Release is lightly depressed, the lamp "▲" or "▼" means that the aperture value selected is respectively on the overexposure or underexposure side beyond the exposure, adjust the aperture unit the lamp no longer blinks.





Manual Exposure

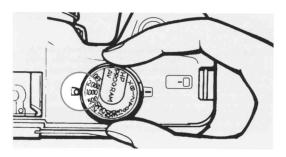
1 Set the shutter speed with the Shutter Dial and the aperture with the aperture ring

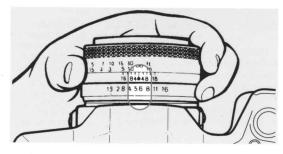
2 Check correct exposure

If you depress the Shutter Release lightly, the lamp "▲" or/ and "▼" will light up or blink (see illustration below) to indicate exposure condition at that time. Adjust your shutter speed and aperture so as to obtain correct exposure.

- Blinks Overexposure of more than 1 EV.
- ▲ Lights up ···· Overexposure within 1 EV.
- Lights up Correct exposure.
- ▼ Lights up ···· Underexposure within 1 EV.
- ▼ Blinks Underexposure of more than 1 EV.

3 Focus the lens and compose your picture Focus the lens by turning its focusing ring, compose your picture and shoot.

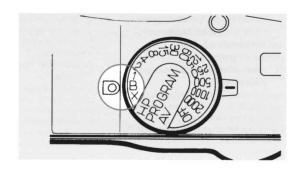




Bulb Exposure

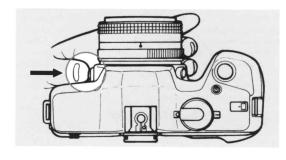
To take night scenes or pictures of the sky at night requiring long exposure time, set the Shutter Dial at "B" (Bulb). Then, as long as the Shutter Release is depressed, the shutter remains open to allow long exposure time on the film. To avoid blurred pictures, mount the camera on a tripod or put it on a stable base and trip the shutter with a Cable Switch (optional accessory).

• When the Shutter Dial is set at "B", the lamp " ▼" will blink in the viewfinder by depressing the Shutter Release lightly.



Backlight Compensation Button

If you are shooting in an auto exposure mode ("HP", "PROGRAM", or "AV") and your subject is black-lighted or situates in front of a bright window, it will be underexposed and appears dark in the picture. In this case, trip the shutter while pressing in the Exposure Compensation Button. Your subject will be exposed with an exposure compensation of +1.5 EV.



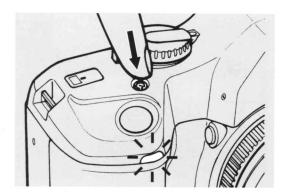




Self-timer

If you want to include yourself in a group picture or a souvenir picture, use the self-timer.

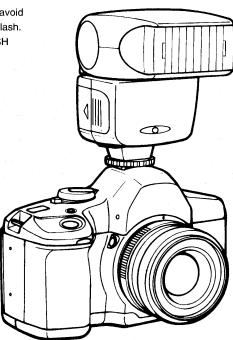
- 1. Focus the lens on the subject and compose your picture.
- 2. Depress the Self-timer Button. The Self-timer LED will turn on and the shutter will automatically trip in about 10 seconds. The Self-timer LED will light up for the first 8 seconds, then will blink for the remaining 2 seconds to warn you right before tripped of the shutter.
- To stop the self-timer after it has been activated, simply press the Self-timer Button once again.
- If you depress the Shutter Release while the self-timer is running, the shutter will trip immediately.
- Under strong daylight, if you start the self-timer without putting your eye on the Viewfinder Eyepiece, it is advisable to cover the eyepiece with the Eyepiece Cover.
 However, you need not attach the Eyepiece Cover in



manual mode

Flash Photography

If the lamp "\$\frac{1}{2}" blinks, the subject is dimly lighted. To avoid camera shake, it is recommended to use a dedicated flash. (The CS 140, CS 220 AUTO, and CS 240 AUTO FLASH are available as optical accessories). If you use any of these flash units, the lamp "\$\frac{1}{2}" will light up in the viewfinder as soon as the flash is fully charged.



< Using a dedicated flash >

Set the camera for aperture-priority auto exposure or manual exposure. Choose and set the aperture according to the instructions in your flash manual. In the aperture-priority auto exposure mode, as soon as the flash is fully charged, the shutter speed will automatically switch to 1/90 second. If you are shooting manual exposure mode and the shutter speed has been set to "2000" (1/2000) – "125" (1/125) sec., it will switch automatically to 1/90 sec. If it has been set to "60" (1/60) sec. or slower, the shutter will trip at the speed that has been set.

< Using an ordinary flash >

Select the manual exposure mode and set the Shutter Dial at "X" or "60" (1/60) sec. or slower. Choose the correct aperture setting according to the instruction in your flash manual.

< Benutzung eines geeigneten Blitzgerätes >

Stellen Sie den Verschlußzeitenknopf auf "AV" oder manuelle Belichtung ein. In der Bedienungsanleitung für Ihr Blitzgerät finden Sie die richtige Blendeneinstellung. In der automatischen Einstellung wird die Synchrozeit auf 1/90 Sekunde eingestelit, sobald der Blitz voll aufgeladen ist. Wenn Sie in der manuellen Belichtungseinstellung fotografieren, ist die Verschiußzeit mit "2000" (1/2000) bis "125" (1/125) Sekunde festgelegt. Auch hier wird auf die Synchrozeit 1/90 Sekunde umgeschaltet. Wird auf "60" oder langsamer eingestelit, entspricht die Synchrozeit der jeweilig gewählten Verschlußzeit.

< Benutzung eines anderen Blitzgerätes >

Wählen Sie die manuelle Belichtungseinstellung und stellen Sie den Verschlußzeitenknopf auf "X", "60" (1/60 Sekunde) oder langsamer ein. In der Bedienungsanleitung des jeweiligen Blitzgerätes finden Sie die richtige Blendeneinstellung.

< Slow-shutter flash >

If you choose a shutter speed slower than 1/60 sec. in the manual exposure mode, you can take pictures in a twilight or night scene with flash. Choose the correct aperture according to the instructions in your flash manual. While checking the marks "▲" and "▼" in the viewfinder, adjust correct exposure by turning the Shutter Dial. Thus, the subject will look better against a clear background. Because the shutter speed is slow, it is recommended to mount the camera on a tripod to avoid blurred exposure.

< Daylight flash >

If you are shooting an object with strong backlight, or in front of a bright window, it will appear to be darker than its background. In this case, if you use flash as fill-in light, the extreme contrast between your object and its backgrounds will be balanced out. When shooting in the aperture-priority auto exposure mode, the overexposure warning " Δ " may blink because the shutter speed automatically switches to 1/90 sec. In this case, decrease the aperture until this warning light goes out. In the manual exposure mode the shutter speed must be set to 1/90 sec. (by automatic switching) or "X" on the Shutter Dial. Then, adjust the aperture properly by checking against the " Δ " and " ∇ " marks in the viewfinder. In this mode, you can use flash as fill-in light.

< Blitzen mit längeren Verschlußzeiten >

Eine Verschlußzeit unter 1/60 Sekunde in der manuellen Belichtungseinstellung eignet sich für Aufnanmen in der Dämmerung oder für Nachtaufnahmen. Entnehmen Sie die korrekte Blendeneinstellung der Bedienungsanleitung Ihres Blitzlichtgerätes, Überprüfen Sie die Markierung "▲" und "▼" Im Sucher. Stellen Sie die richtige Belichtungzeit ein. Auf diese Weise wird Ihr Motiv Klar gegenüber dem hellen Hintergrund abgegrenzt. Die längere Verschlußzeit erfordert es, ein Stativ zu benutzen, um verwackelte Bilder zu vermeiden.

< Blitzen bei Tageslicht >

Wenn Sie im Gegenlicht fotografieren oder Porträts in Räumen vor einem hellen Fenster machen, dann können die Motive dunkel erscheinen. Benutzen Sie in diesem Fall den Blitz, um Ihr Motiv perfekt auszuleuchten. Wenn Sie die Zeitautomatik "AV" fotografieren, könnte die Anzeige "▲" im Sucher blinken. Die Kamera warnt Sie damit vor Überbelichtung, weil die Verschlußzeit automatisch auf 1/90 Sekunde umschaltet. In diesem Fall verkleinern Sie die Blende, bis das Warnlicht erlischt. Wenn Sie mit manueller Belichtungseinstellung fotografieren, stellen Sie die Verschlußscheibe auf 1/90 Sekunde oder auf "X". Kontrollieren Sie die Markierungen "▲" und "▼" im Sucher und stellen Sie die richtige Blende für eine perfekte Belichtung ein.

Depth-of-field



F1.9

When the lens is focused on a subject, not the subject itself, but also a certain zone in front and behind of it will appear as acceptably well focused. This range is called the depth-of-field of a lens and it changes in following ways:

- 1. The smaller the aperture, the deeper the depth-of-field, and vice versa.
- 2. The longer the subject distance, the deeper the depth-offield, and vice versa.



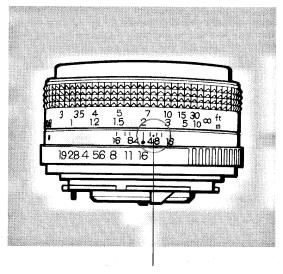
F16

- The zone of sharpness behind the point on which the lens is focused is larger than that in front of it. Also the shorter the focal length, the wider the range of depth-of-field, and vice versa.
- Certain zoom lenses are not provided with a dept-of-field scale.

Infra-red Compensation Mark

To take infra-red pictures with B & W infra-red film (by using an infra-red filter), compensation on focusing is necessary. The point of focus will shift slightly relative to that in normal photography. For this purpose, an infra-red compensation mark is provided on the depth-of-field as normal, then put on the filter, shift that distance to the infra-red mark and shoot.

 \bullet If you use colour infra-red film, follow the instruction sheet in the film package.



Infra-red compensation mark Infrarotkorrektur-Markierung Repère pour infrarouge Marca de compensación infrarroja

Release Socket/Interchangeable Camera Back

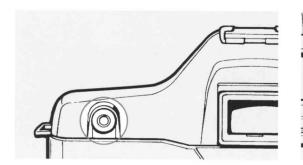
< Release Socket >

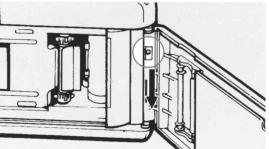
The release socket has a contact for transmitting electric signals from the Cable Switch L to operate the shutter.

 Do not connect a commercially available, ordinary cable release (mechanically operated type) to this socket, because it will cause malfunction.

< Interchangeable Camera Back >

You can replace the Camera Back with an Data Back DA-3 (optional accessory) for inprint date or time on your picture. The Camera Back can be detached by pushing down the Back Cover Release Pin.





Attaching the Accessories

< Stray Light Prevention Adaptor >

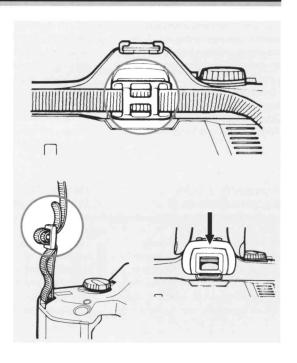
A stray light prevention adaptor has been supplied with your camera for preventing stray light from entering the viewfinder when using the self-timer or remote control system. Slip it onto your carrying strap as illustrated, and use it by fitting it onto the viewfinder eyepiece.

< Attaching the Strap >

Attach the Strap to the camera's Strap Lug as shown.

< Attaching the Eyecup >

Attach the Eyecup to the Viewfinder Eyepiece as shown. The optional FL-type Diopter Lenses are attached as shown. The Eyecup can be placed over the Diopter Lens.



Batteries Check

Batteriewechsel

The lamps "● ", or "▲" and "▼" in the viewfinder are also used as battery checking indicators. If the battery voltage is normal, the lamps will light up steadily or blink at a constant frequency (6 timers per second).

If the battery voltage is low, the lamp will no longer light up steadily or it will blink with irregular interruption. In this case, the batteries still have enough power for exposing the film remaining in the camera, but you will have to change them after exposing the entire roll of film.

If the battery voltage falls below the specified level, all lamps in the viewfinder will blink and you cannot trip the shutter. Replace all batteries immediately with new ones (four AA-size Alkaline batteries).

- Fast blinking aperture warning
- Slowing blinking batteries warning

Die Anzeigen "●" oder "▲" und "▼" im Sucher zeigen Ihnen auch den Batteriezustand an. Ist er normal, leuchten die Anzeigen ständig oder blinken konstant 6 mal pro Sekunde. Bei zu niedriger Spannung wird der Blinkzyklus unterbrochen. In diesem Fall haben die Batterien noch genügend Spannung, um den in der Kamera befindlichen Film zu belichten. Fällt die Batteriespannung unter den angegebenen Stand, blinken alle Anzeigen im Sucher und der Auslöser läßt sich nicht mehr betätigen. Tauschen Sie die Batterien gegen vier frische Batterien der Größe AA aus.

- Schnell blinken Blendenwarnung
- Langsam blinken Batterienwarnung

Battery Precautions

Batterie-Vorsiohtsmaßnahmen

- Always replace all four batteries at the same time with new ones of the same type and brand. Never mix new and old ones.
- Battery performance would be reduced in extreme low temperatures (i.e. 0°C or below). If you are shooting in extreme cold weather, use new batteries and keep the camera warm before shooting. Even if battery performance is reduced temporarily in low temperatures, it will recover once room temperature is resumed.
- Wipe both caps of battery cell clean with a piece of dry cloth before use. Batteries soiled by sweat, oil or grease will cause poor contact and malfunction.
- If you are going on a long trip, bring spare fresh batteries along with you.
- Do not throw used batteries into a fire or attempted to take then apart because it is dangerous.
- To take full advantage of the outstanding features of this camera, we recommened you to use our interchangeable lenses and accessories designed for it.
- We are not responsible for the malfunction and trouble resulting from the use of products by other makers. It is advisable to use our interchangeable products.

- Ersetzen Sie jeweils alle vier Batterien durch neue derselben Marke.
 Mischen Sie keine alten mit frischen Batterien.
- Die Leistung der Batterien verringert sich generell bei Temperaturen um den Gefrierpunkt (0 Grad Celsius oder darunter). Wenn Sie bei kaltem Wetter fotografieren, verwenden Sie frische Batterien und halten Sie die Kamera warm. Die Batterien erholen sich rasch bei normalen Temperaturen.
- Reinigen Sie beide Pole der Batterien mit einem trockenen Tuch, bevor Sie sie verwenden. Batterien, deren Kontakte durch Schweiß, Öi oder Fett verunreinigt sind, können Funktionsstörungen verursachen.
- · Wenn Sie länger verreisen, nehmen Sie Ersatzbatterien mit.
- Werfen Sie gebrauchte Batterien nicht ins Feuer Versuchen Sie auch nicht, sie zu öffnen. Das ist gefährlich.
- Um die Vorteile dieser Kamera voll ausschöpfen zu können, empfehlen wir Ihnen, YASHICA Wechsel-Objektive und das entsprechende Zubehör zu verwenden. Wir haften nicht für Funktionsstörungen oder Schäden, die entstehen, wenn Sie Produkte anderer Hersteller benutzen.

Camera Care/Camera Storage

<Camera Care>

- Do not expose the camera to extreme temperatures (e.g. on a beach in summer or in a parked car under direct sunlight, etc.) for a prolonged period of time. The camera, film and batteries may be adversely affected.
- After taking picture at the seaside or on mountains, clean the camera thoroughly. Salty air would cause corrosion, sand and dust would adversely affect the internal precision parts of the camera.
- To remove dust and dirt on the lens and viewfinder eyepiece, use an air blower or a soft lens brush. Wipe off fingerprints lightly with lens tissue. Remove dust and soil on the mirror surface with a lens brush.
- The lens and viewfinder glass may be clouded if the camera is carried into a warm room from outdoors where it is cold. Cloudiness caused by condensation disappears quickly. But, it is recommended to avoid sudden changes internal corrosion.
- If you are going to use the camera for important events such as an overseas trip or wedding ceremony, test it before hand to make sure it functions properly. It is also advisable to bring spare batteries along with you.

 To clean the camera exterior wipe it with a piece of soft cloth. Never use benzine thinner or other solvents or chemicals.

<Camera Storage>

- Keep the camera away from heat, moisture, and dust. Do not place it in a wardrobe or drawer containing monthballs or in a laboratory where chemicals would damage it.
- If you are not going to use the camera for an extended period of time, remove the batteries to prevent damage in case of battery leakage.

Specifications

Type: 35mm auto-exposure Single-Lens-Reflex (SLR) camera with focal-plane shutter.

Picture: 24 x 36 mm

Lens Mount: YASHICA / CONTAX mount.

Shutter: Vertical-travel metal focal-plane shutter.

Shutter Speed: 1/2000 – 16 SEC. on auto, 1/2000 – 1 SEC. (12 steps) on manual, X (X-contact) and B (Bulb).

Shutter Release: Electromagnetic release, provided with dedicated cable release socket.

Exposure control: (1) Standard programmed auto exposure, (2) High-speed Programmed auto exposure, (3) Aperture priority auto exposure, (4) manual exposure, (5) manual flash exposure.

Metering System: TTL center-weight light metering at full aperture. SPD (Silicon Photo Diode) cell.

Metering Range: EV2 - EV19 (ISO 100, f/1.4 lens)

Film Speed Setting: Automatic setting with ISO 25 – 3200 DX-code films, film speed is automatically set to ISO 100 for non DX-code films.

Viewfinder: Penta-prism eye-level finder, 92% field-of-view, 0.82X magnification (with 50mm normal lens at infinity).

Focusing Screen: Horizontal split-image and microprism collar.

Display in viewfinder: Four LED lamps (\clubsuit , lacktriangle , lacktriangle , lacktriangle)

Film Winding: Automatic film winding with built-in motor, auto-loading and automatic film advance to frame No. "1", continuous **(C)** shooting with drive selector.

Film Rewinding: Automatic rewinding by rewind switch.

Exposure Counter: Automatic reset, additive type.

Accessory Shoe: Direct X-contact hot-shoe (provided with an flash coupling contacts).

Synchro Socket: X-contact only, shutter speed automatically switches to 1/90 sec. synchronizing with dedicated flash when it is fully charges, or slower speed in manual exposure. " \$ " lamp lights up when flash if fully charges.

Self-timer: Electronic Quartz-timer with 10 seconds delay on shutter release with self-timer LED turns on while self-timer is operating. Cancellable during count-down.

Exposure Compensation: +1.5 EV exposure compensation is possible with exposure compensation button.

Camera Back: Detachable camera back. Open by release knob, provided with Film Check Window.

Power Source: Alkaline batteries (1.5V x 4 pcs. of AA size).

Battery Capacity: About 80 rolls of 24-exposure film with AA size Alkaline batteries. (According to the factory testing conditions and standards of YASHICA.)

Dimensions: 150.5 (W) x 95.5 (H) x 62 (D) mm [5-15/16 (W) x 3-3/4 (H) x 2-7/16 (D) in.]

Weight: 510g (Body only without lens, film & batteries.) [18oz.]

^{*} Specifications and design are subject to change without notice.