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 KYOCERA

YASHICA

300

Auto Focus



Instruction manual • Bedienungsanleitung • Mode d'emploi • Manual de instrucciones

Thank you for your purchase of a Yashica camera. This single-lens-reflex camera is light, fully automatic, and simple to use. You can take pictures by simply depressing the shutter release. Focusing, exposure, and film advance are all automatic. In combination with an AF Power Lens, it is also equipped for power zooming of the lens by means of the lens' built-in motor. By using the camera's various exposure modes and built-in flash, you can get more advanced picture compositions.

Before you use the camera, please read this instruction manual carefully through to use it correctly.

This manual uses an AF Power Zoom Lens 28-70mm F3.5-4.5 for illustrations in it. If you are using other Yashica AF lenses on this camera, the operating procedures are the same as those described in it, except for some functions on the power zoom lens such as display of focal lengths on the display panel.

Wir danken Ihnen, daß Sie sich für eine Yashica-Kamera entschieden haben. Diese einäugige, vollautomatische Spiegelreflexkamera zeichnet sich durch geringes Gewicht und einfache Bedienung aus. Aufnahmen können durch einfaches Drücken des Auslösers gemacht werden, während die Scharfeinstellung, die Belichtungseinstellung und der Filmtransport automatisch erfolgen. Bei Verwendung eines AF-Power-Zoom-Objektives, das mit einem eingebauten Motor ausgestattet ist, ist ein motorbetriebener Zoombetrieb mit dieser Kamera möglich. Mit Hilfe der verschiedenen Belichtungs-Betriebsarten und des eingebauten Blitzes der Kamera lassen sich fortgeschrittene Effekte beim Fotografieren erzielen. Bitte lesen Sie diese Bedienungsanleitung vor Inbetriebnahme der Kamera sorgfältig durch, damit Sie mit allen Funktionen vertraut werden und die optimale Leistung von Ihrer neuen Kamera erzielen können.

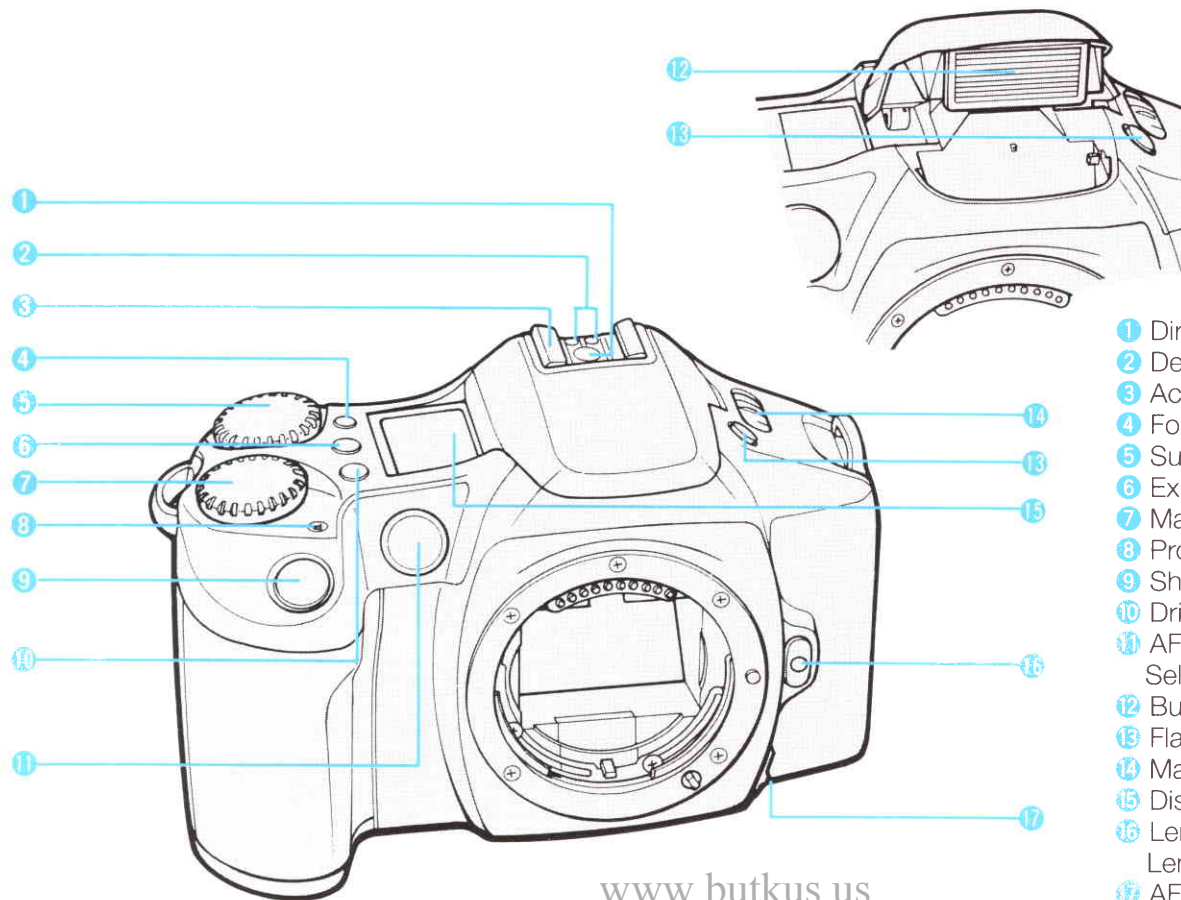
Diese Bedienungsanleitung geht von der Benutzung eines AF-Power-Zoom-Objektivs 3,5-4,5/28-70 mm aus. Werden andere Yashica Autofokus-Objektive an dieser Kamera verwendet, erfolgt die Bedienung in gleicher Weise, mit Ausnahme einiger Punkte, die mit den Power-Zoom-Funktionen zusammenhängen (wie z.B. die Brennweitenanzeige auf dem Monitor).

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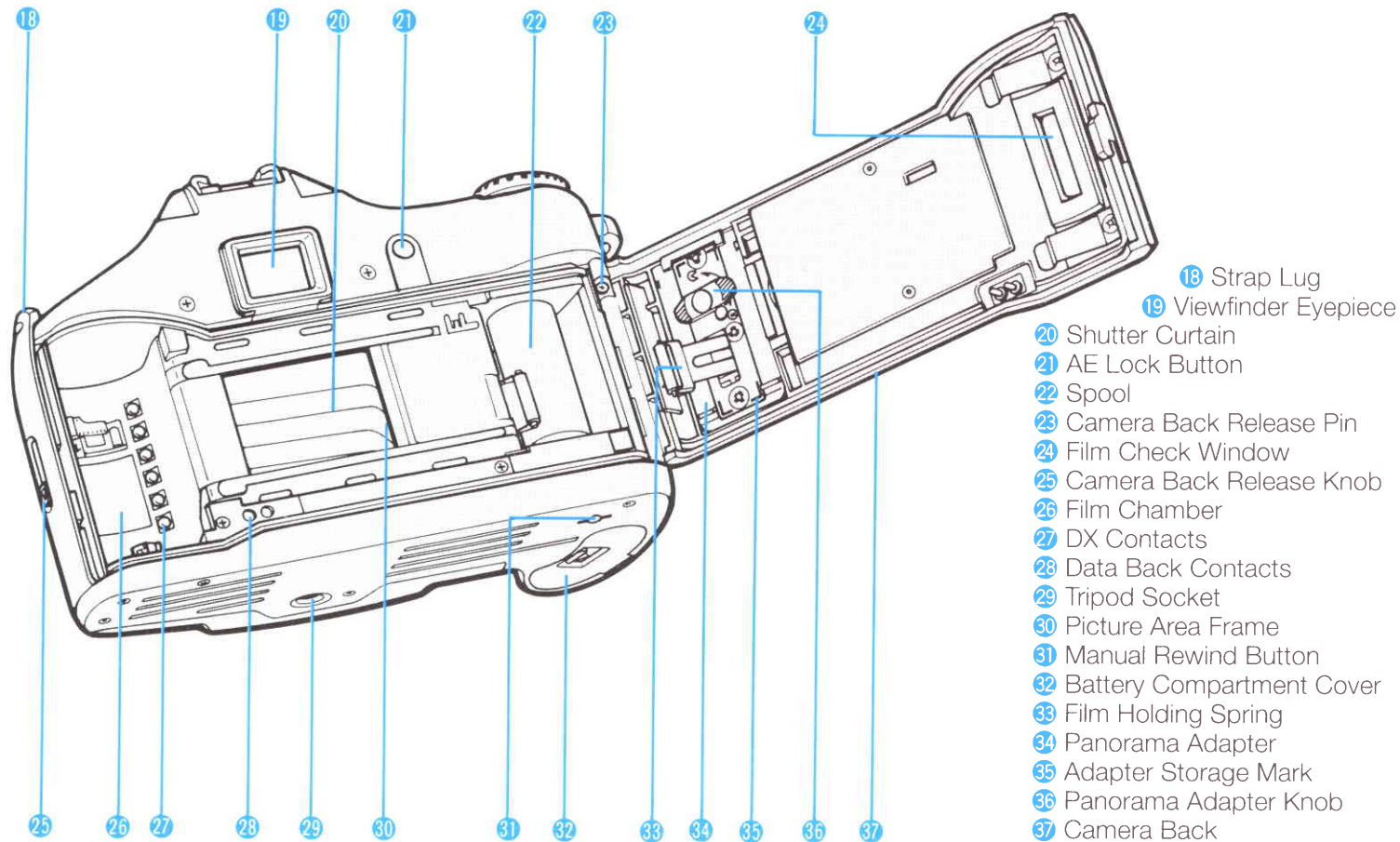
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Names of Parts



- ① Direct X-contact
- ② Dedicated Flash Contacts
- ③ Accessory Shoe
- ④ Focusing Range Selector
- ⑤ Subsidiary Dial
- ⑥ Exposure Mode Button
- ⑦ Main Dial
- ⑧ Program Reset Button
- ⑨ Shutter Release
- ⑩ Drive Mode Button
- ⑪ AF Supplementary Light/
Self-timer LED
- ⑫ Built-in Flash (Pop-up Type)
- ⑬ Flash Button
- ⑭ Main Switch
- ⑮ Display Panel
- ⑯ Lens Release Button/
Lens Mounting Index
- ⑰ AF/MF Selector Switch

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Attaching the Eyepiece Cover and Strap

- Pass the accessory eyepiece cover through the strap, then attach the strap to the camera as shown.

Anbringen von Okularabdeckung und Riemen

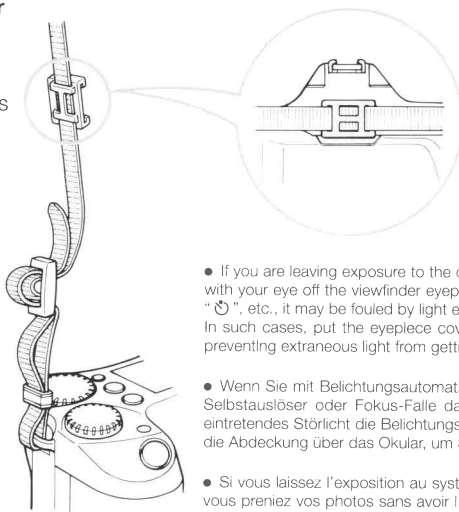
- Schieben Sie die Okularabdeckung (Standardzubehör) über den Trageriemen und befestigen Sie ihn wie abgebildet.

Fixation du cache de l'oculaire et de la courroie

- Faites passer le cache de l'oculaire accessoire par la courroie, puis fixer la courroie à l'appareil comme indiqué.

Instalación de la cubierta del ocular y correa

- Pase la cubierta del ocular accesoria a través de la correa, después instale la correa en la cámara como se muestra.



- If you are leaving exposure to the camera's automatic exposure system and shooting with your eye off the viewfinder eyepiece in the trap focus mode "◆", self-timer mode "⌚", etc., it may be fouled by light entering through the eyepiece. In such cases, put the eyepiece cover on the eyepiece to obtain correct exposure by preventing extraneous light from getting into the camera.

- Wenn Sie mit Belichtungsautomatik fotografieren und z.B. bei Aufnahmen mit Stativ, Selbstauslöser oder Fokus-Falle das Okular nicht mit dem Auge abschatten, kann eintretendes Störlicht die Belichtungsmessung verfälschen. In so einem Fall stecken Sie die Abdeckung über das Okular, um Störlichteinfall zu vermeiden.

- Si vous laissez l'exposition au système d'exposition automatique de l'appareil et que vous prenez vos photos sans avoir l'œil sur l'oculaire du viseur dans le mode capture-mise au point "◆", le mode de retardateur "⌚", etc., l'exposition peut être trompée par la lumière pénétrant par l'oculaire. Dans ces cas, placer le cache de l'oculaire sur l'oculaire pour assurer une exposition correcte en évitant la pénétration de toute lumière extérieure dans l'appareil.

- Si usted deja la exposición al sistema de exposición automática de la cámara y está disparando sin mirar a través del ocular del visor en el modo de enfoque instantáneo "◆", modo de disparador automático "⌚", etc., puede errar debido a la luz que entra a través del ocular. En tales casos, coloque la cubierta del ocular para obtener la exposición correcta evitando que entre luz extraña en la cámara.

Attaching the eyecup and diopter lens

- See illustration.

Anbringen von Augenmuschel und Korrekturlinse

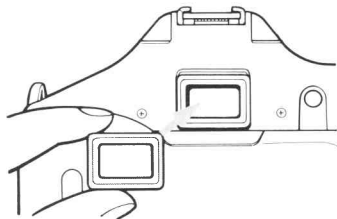
- siehe Abbildung.

Fixation de l'oculaire et de la lentille dioptrique

- Voir l'illustration.

Instalación del receptáculo del ocular y lentes diópticas

- Vea la ilustración.

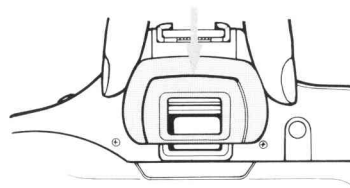


- Attach the FL type diopter (optional accessory) suited to your eyesight as shown. The eyecup can be attached over the diopter lens.

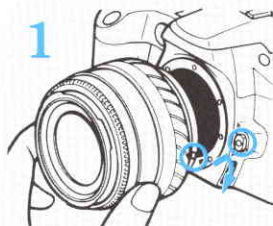
- Befestigen Sie die als Zubehör erhältliche Okularkorrekturlinse wie abgebildet. Die Augenmuschel kann darüber befestigt werden.

- Fixez la lentille dioptrique de type FL (accessoire optionnel) convenant à votre vision comme indiqué. L'oculaire peut être fixé sur la lentille dioptrique.

- Instale una lente dióptica del tipo FL (accesorio opcional) apropiado a su visión como se muestra. El receptáculo ocular puede instalarse sobre la lente dióptica.



Basic Steps/Grundlegendes Verfahren/Etapes de



Mount the lens

(for details, see page 24).

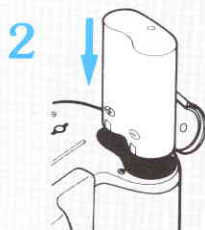
Setzen Sie das Objektiv ein (Näheres S. 25).

Montez l'objectif

(pour les détails, voir page 25).

Monte el objetivo

(para más detalles vea la página 25).



Load the battery

(for details, see page 26).

Legen Sie die Batterie ein (Näheres S. 27).

Legen Sie die Batterie ein

(pour les détails, voir page 27).

Cargue las pilas

(para más detalles vea la página 27).



Set the Main Switch to "ON"

(for details, see page 28).

Stellen Sie den

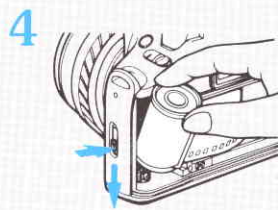
Hauptschalter auf "ON" (Näheres S. 29).

Placez l'interrupteur d'alimentation sur la position "ON"

(pour les détails, voir page 29).

Ajuste el Interruptor principal en posición "ON"

(para más detalles vea la página 29).



Load the film (for details, see page 30).

- If you are taking panorama-format pictures, install the Panorama Adapter on the Picture Area Frame before loading the film.

Legen Sie den Film ein (Näheres S. 31).

- Für Aufnahmen im Panoramaformat muß vor dem Filmeinlegen der Panorama-Adapter eingesetzt werden.

Chargez le film (pour les détails, voir page 31).

- Si vous prenez des photos au format panorama, installez l'adaptateur Panorama sur le cadre de zone de l'image avant de charger le film.

Cargue la película (para más detalles vea la página 31).

- Si está tomando fotografías en formato Panorama, instale el adaptador Panorama en el cuadro de área de la imagen antes de cargar la película.

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base/Pasos básicos

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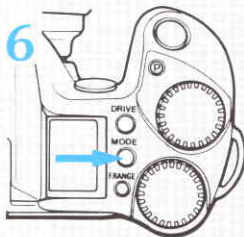
Set the AF/MF Selector Switch to "AF" (for details, see page 36).

Stellen Sie den AF/MF-Wählschalter auf "AF" (Näheres S. 37).

Placez le sélecteur AF/MF sur la position "AF" (pour les détails, voir page 37).

Ajuste el interruptor selector de AF/MF en posición "AF" (para más detalles vea la página 37).

6



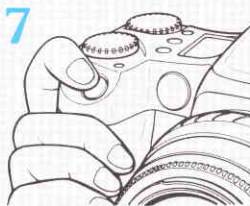
Choose the exposure mode (for details, see page 40).

Wählen Sie die Belichtungsfunktion (Näheres S. 41).

Sélectionnez le mode d'exposition (pour les détails, voir page 41).

Escoja el modo de exposición (para más detalles vea la página 41).

7



Depress the Shutter Release to shoot (for details, see page 52).

● Aim the focusing frame at your subject.

Drücken Sie den Auslöser zum Fotografieren (Näheres S. 53).

● Visieren Sie zuvor mit der Fokuszone das Motiv an.

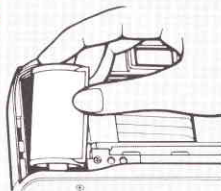
Appuyez sur le déclencheur pour prendre la photo (pour les détails voir page 53).

● Dirigez le cadre de mise au point sur votre sujet.

Presione el disparador para disparar (para más detalles vea la página 53).

● Dirija el marco de enfoque hacia el sujeto.

8



If the end of the film is reached, the film is automatically rewind.

After rewinding is completed, take out the film (for details, see page 60).

Beim Erreichen des Filmendes wird der Film automatisch zurückgespult.

Nach der vollständigen Rückspulung kann der Film aus der Kamera genommen werden (Näheres S. 61).

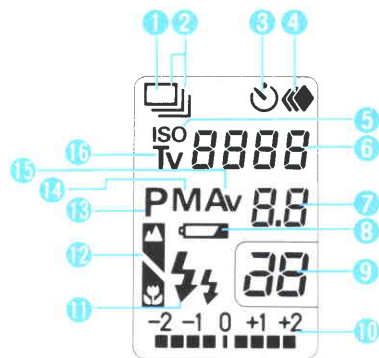
Si la fin du film est atteinte, ce dernier est automatiquement rembobiné. Sortez le film lorsque le rembobinage est terminé (pour les détails, voir page 61).

Si se ha alcanzado el final de la película, se rebobinará automáticamente. Después de haberse rebobinado por completo, saque la película (para más detalles vea la página 61).

Display Panel & Display in the Viewfinder

The Display panel and the display in the Viewfinder show the information of the camera at the moment when its power switch is turned on. The display in the viewfinder and the shutter speed and aperture data in the Display Panel will turn off after 16 seconds to save battery. To turn them on again, depress the Shutter Release halfway or the AE Lock Button.

<Display Panel>



(This illustration shows all information available for reference. It does not represent actual data, however.)

- ① **Single-frame Shooting Mode Indicator** (□)
- ② **Continuous Shooting Mode Indicator** (□)
- ③ **Self-timer Mode Indicator**
- ④ **Trap Focus Mode Indicator**

(①–④ represent drive modes. Four drive modes are available.)

⑤ **ISO Indicator**

(This mark is displayed with the film speed when the film is loaded and advances to the first frame.)

⑥ **Shutter Speed/Film Speed/Lens Focal Length**

(Normally, the shutter speed is displayed. When the film is loaded and advancing to the first frame, the film speed (ISO) is displayed. When an AF Power Zoom Lens is mounted on the camera, the lens' focal length is displayed. For details, refer to page 90.)

⑦ **Aperture Value**

⑧ **Battery Warning Mark**

(It appears when the battery is spent.)

⑨ **Exposure Counter**

(The counter advances by one each time the film is wound.)

⑩ **Exposure Compensation/Manual Exposure Indicator**

(In an auto exposure mode, it indicates the compensating value when exposure compensation is made. In the manual exposure mode, it indicates the camera's exposure.)

⑪ **Flash Mark**

(Displays the flash mode.)

⑫ **Focusing Range Indicator**

⑬ **Programmed Auto Exposure Indicator**

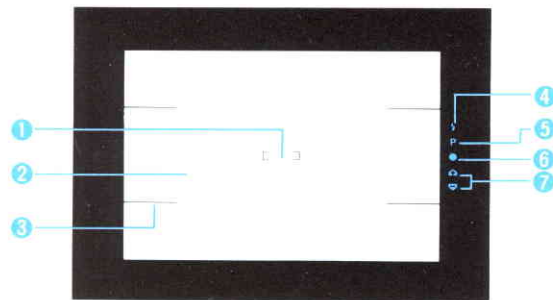
⑭ **Manual Exposure Indicator**

⑮ **Aperture-priority Auto Exposure Indicator**

⑯ **Shutter-speed-priority Auto Exposure Indicator**

(⑬–⑯ represent exposure modes. Four exposure modes are available.)

<Display in the Viewfinder>



① Focusing Frame

Aim this spot at the subject you want to focus on.

② Matte Screen

③ Panorama Frame

If you are taking panorama-format pictures by installing the accessory Panorama Adapter on the camera's Picture Area Frame, frame your subject within the Panorama Frame.

④ Flash Mark (green "⚡")

(A) Camera Shake Warning: If the selected shutter speed is so slow in an auto exposure mode ("P", "Av" or "Tv") that it may cause camera shake, this mark blinks slowly. (For details, refer to page 56).

(B) "Flash Charged" Signal: When you take flash pictures with the camera's built-in flash or an optional dedicated flash, this mark turns on when the flash is fully charged. (For details, refer to page 112).

(C) "Out-of-Flash-Range" Signal: This mark blinks quickly if your subject is beyond the effective range of the built-in flash. (For details, refer to page 112).

⑤ Program Mode Mark ("P" in green)

It appears when the exposure mode is set to the programmed auto exposure mode. It blinks when the program is shifted. (For details, refer to page 96).

⑥ Sharp Focus LED ("●" in green)

It turns on when the subject in the focusing frame is in sharp focus.

- (lighting) : The subject is in sharp focus
- (blinking) : Focusing is not possible.

* In the manual focus mode, it turns on only when the subject is in sharp focus. But it does not blink when focusing is not possible.

⑦ Exposure Compensation/Exposure Warning/Manual Exposure Indicator (red)

(A) Exposure Compensation Indicator: "▲" or "▼" is displayed when exposure compensation is made by operating the subsidiary Dial. (For details, refer to page 98).

(B) Exposure Warning: If the selected exposure causes overexposure in an auto exposure mode because it is beyond the camera's coupling range, the mark "▲" blinks. If it causes underexposure, the mark "▼" blinks. (For details, refer to page 56).

(C) Manual Exposure Indicator: If the exposure you have set (shutter speed and aperture) in the manual exposure mode is correct, both "▲" and "▼" turn on. If it is not correct, either "▲" or "▼" turns on. (For details, refer to page 56).

Basic Operation

This chapter explains the basic steps for operating this camera. If you read these instructions, you will learn how to use it for normal photography.

Grundlegende Bedienungsverfahren

Dieses Kapitel beschreibt die grundlegenden Verfahren bei der Bedienung dieser Kamera. In diesem Kapitel lernen Sie, wie die Kamera für normale Aufnahmen einzusetzen ist.

Procédure de base

Ce chapitre explique les étapes de base permettant d'utiliser cet appareil. En lisant ces instructions, vous apprendrez à utiliser votre appareil pour prendre des photos normales.

Operación básica

Este capítulo explica los procedimientos básicos para la operación de esta cámara. Si usted lee estas instrucciones, aprenderá a utilizarla para la fotografía normal.

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Mounting and Dismounting the Lens

<Mounting>

First, remove the camera's body cap and the lens' rear cap by turning them counterclockwise.

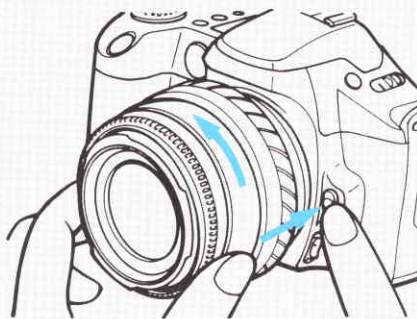
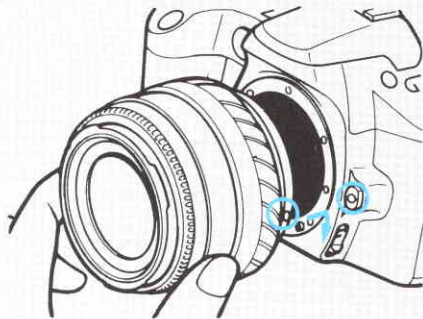
Then, align the red dot on the lens rear with the red dot (lens mounting index) on the camera's Lens Release Button, push in the lens and turn it clockwise until it locks with a click.

- Do not press the Lens Release Button when mounting the lens.

<Dismounting>

While pushing on the Lens Release Button, turn the lens counterclockwise as far as it will go, then remove it by pulling it out forward. After dismounting the lens, be sure to put the lens cap and body cap on it and the body cap on the camera.

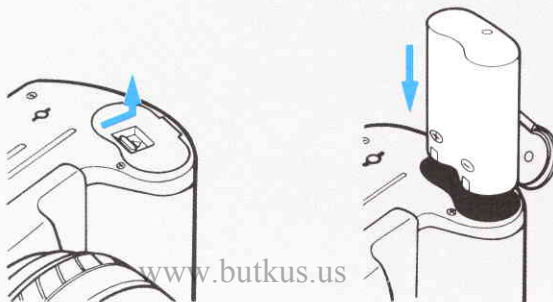
- Do not touch the lens surface and camera interior when mounting and dismounting the lens.
- If you are changing the lens when there is film in the camera, avoid direct sunlight.



Loading the Battery

1 Put your fingernail in the groove on the Battery Compartment Cover on the camera bottom, push the cover toward the arrow as shown and lift it up.

2 Load a 6V lithium battery (2CR5) correctly as illustrated on the back of the battery compartment cover and close the cover securely.



Main Switch

<Battery Check>

If the Battery Warning Mark ("  ") does not turn on in the Display Panel when the Main Switch is turned on, the battery is in good condition.

When to replace the battery: If the mark "  " turns on in the Display Panel, it is time to change the battery. Set the Main Switch to "LOCK", open the Battery Compartment Cover and replace the battery with a new one.

- Though you can still take pictures even if the mark "  " turns on, it is recommended to replace the battery as soon as possible. If the battery voltage has fallen below its specified limit, the mark "  " will blink or go out and the camera will no longer operate.



*Replace the battery.
Batterien wechseln
Remplacez la pile.
Cambie la pila.*



*The camera does not operate.
Kamera funktioniert nicht mehr.
L'appareil ne fonctionne pas.
La cámara no funciona.*

The Main Switch turns on and off the camera. If it is set to "ON", the camera's power switch will turn on.

If it is set to "LOCK", the power switch will turn off.

- If you are not using the camera, set the Main Switch to "LOCK" to save battery.



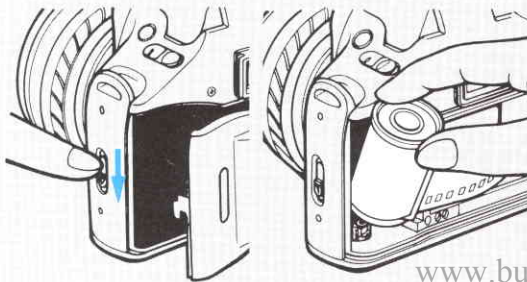
Loading the Film

If you are taking panorama-format pictures, install the accessory Panorama Adapter on the Picture Area Frame of the camera before loading the film. You cannot switch to the panorama mode in the middle of a roll. For details on the procedure of panorama photography, refer to page 62.

1 Set the Main Switch to "ON", open the Camera Back and load DX-coded film.

Open the Camera Back by pushing down the Camera Back Release Knob.

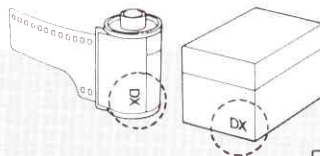
Insert the film into the Film Chamber. First, fit the recessed end of the film cassette into the shaft on the bottom of the Film Chamber. Thus, it will fit smoothly into position.



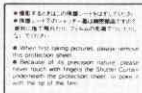
- Use DX-coded film. With DX film in the camera, the camera's film speed will be automatically set to the speed of the film you are using. With non-DX film, the camera's film speed will be automatically set to ISO 100.

Remarks on the shutter curtain:

Because the shutter curtain is a precision part, never touch it with your finger or push it with a film tip. Emphatically, never trip the shutter while the film tip is located on the shutter curtain. Also, take particular care not to touch the shutter curtain when attaching or detaching the Panorama Adapter.



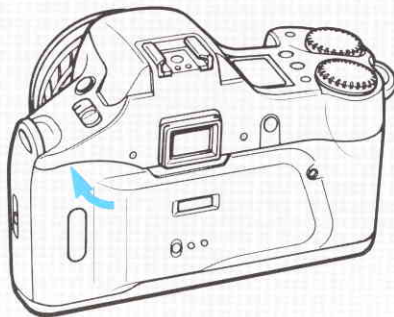
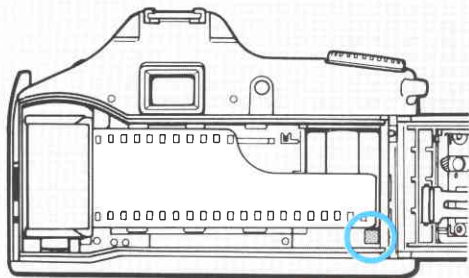
- When loading film, be sure to remove the Protection Sheet inserted in the camera's picture area frame.
- Vor dem Einlegen von Film darauf achten, die eingelegte Schutzfolie aus dem Bildfeldrahmen der Kamera zu entfernen.
- Lors du chargement du film, retirez toujours la feuille de protection insérée dans le cadre de zone d'image de l'appareil.
- Cuando cargue la película, asegúrese de extraer la lámina protectora insertada en el marco del área de la imagen de la cámara.



- Take care not to touch or soil the DX Contacts and Data Back Contacts.
- When loading and unloading film, avoid direct sunlight.
- This camera does not accept infrared film.

2 Pull out the film tip as far as the orange “■” mark, put it on the Spool and close the Camera Back.

Take care that the film does not float up on the film channel (see illustration).



As soon as you close the Camera Back, the film will automatically advance to the frame No. 1 and the Exposure Counter will show “1”.

- If the Exposure Counter blinks at “0”, the film is not advancing properly. Reload it correctly.
- When the film is loaded in the camera, the ISO speed of the film loaded in the camera will be displayed in the shutter speed area of the Display Panel for 16 seconds. If you do shooting operation such as depressing the Shutter Release or AE Lock Button, the Display Panel will show the shutter speed again.
- If the length of film protruding from the cassette is too long, adjust its length by winding it back into the cassette.
- The Film Check Window allows you to check the type of the film loaded into the camera.

Holding the Camera

To take sharp and beautiful pictures, it is important to hold the camera still. Because camera shake is most often the cause of blurred pictures, repeat practice until you become familiar with the camera. Place the camera in the palm of your left hand, hold the camera by the grip with your right hand and put the forefinger lightly on the Shutter Release. Stick the left elbow to the body, press the camera lightly against your face and look through the viewfinder.

Relax the right hand and gently depress the Shutter Release. Depending on the composition, the camera can be held horizontally and vertically. In any case, study your comfortable camera position. It is also good to support your body or camera with a building, tree, and so on.



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Setting the Shooting Modes

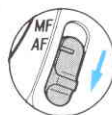
Set the three shooting modes (focus mode, exposure mode, and drive mode) depending on your shooting object and conditions as you desire.

Mode	Mode Selection	Operation
Focus Mode	● AF (auto-focus) ● MF (manual focus)	Set the AF/MF Selector Switch.
Exposure Mode	● Programmed auto exposure (P) ● Aperture-priority auto exposure (Av) ● Shutter-speed-priority auto exposure (Tv) ● Manual exposure (M) ● Flash photography Normal flash ⚡ - Red-eye reducing pre-flash ⚡⚡	Switch with the Exposure Mode Button.
Drive Mode	● Single-frame shooting "□" ● Continuous shooting "📄" ● Self-timer "🕒" ● Trap focus "🔍"	Switch with the Drive Mode Button.

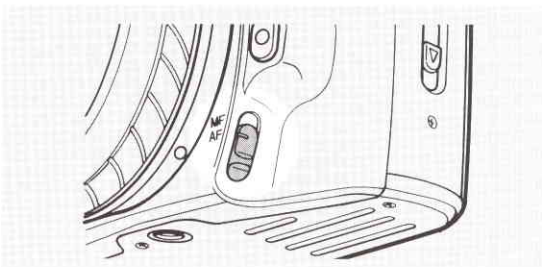
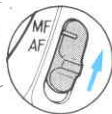
<1> AF/MF Selector Switch (Focus Mode)

Choose automatic focusing or manual focusing with the AF/MF Selector Switch.

- If you want to focus automatically, set the switch to "AF".
- Für automatische Fokussierung stellen Sie ihn auf "AF".
- Si vous désirez effectuer automatiquement la mise au point, placez le sélecteur sur "AF".
- Si desea enfocar automáticamente, ajuste el interruptor en posición "AF".



- If you want to focus manually, set the switch to "MF".
- Für manuelle Fokussierung stellen Sie ihn auf "MF".
- Si vous préférez la mise au point manuelle, placez le sélecteur sur "MF".
- Si desea enfocar manualmente, ajuste el interruptor en posición "MF".



■ Focusing Range Selector

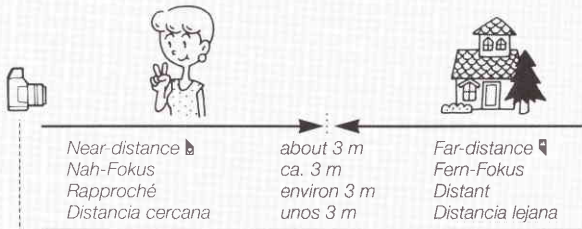
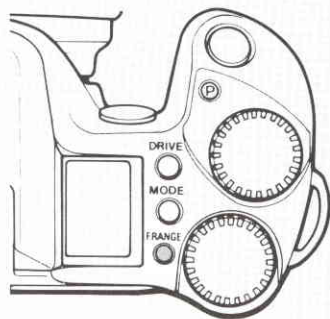
In auto focus mode, if the approximate distance from the camera to the subject is known beforehand, the time required for focusing can be reduced by limiting the focusing range with the aid of the Focusing Range Selector.

Each time the button is depressed, the mode will switch as shown below and the mode displayed in the Display Panel is the mode being set.

Choose your desired mode to suit your object.

- Full-range focusing mode
↓ (Focusing from Infinity to closest distance) 
- Far-distance mode
↓ (Focusing from infinity to about 3m) 
- Near-distance mode
(Focusing from about 3m to closest distance) 

- The Focusing Range Selector is useful when taking pictures with a telephoto lens or macro lens.
- The focusing range mode will reset itself to the full-range mode when the Main Switch or Program Reset Button is operated.
- If you are using an AF Converter (optional accessory), you cannot change the focusing range mode.
The camera always operates in the full-range mode.



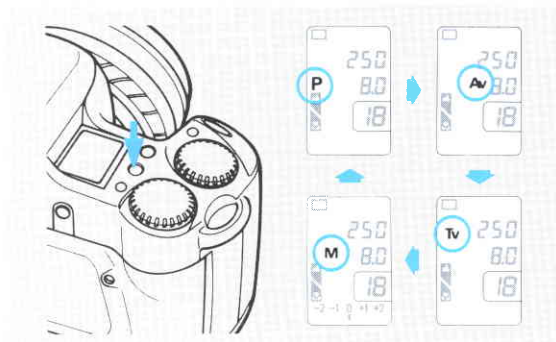
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Full-range
Voller Fokussierbereich 
Toute la portée
Margen completo

<2> Exposure Mode Button (Exposure Mode)

Each time the button is depressed, the exposure mode will switch as illustrated and the mode displayed in the Display Panel is the mode being set.

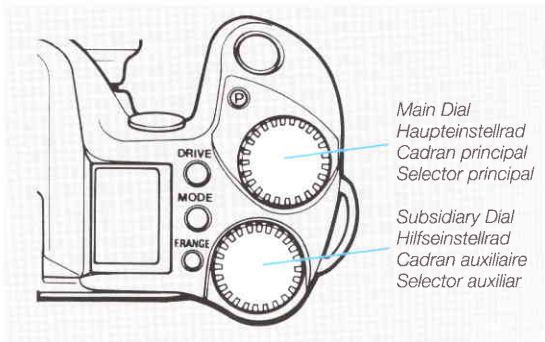
Choose your desired mode to suit your object.



<Main Dial and Subsidiary Dial>

Use the Main Dial and Subsidiary Dial to set the shutter speed and aperture in the selected exposure mode. Always set the Main and Subsidiary Dials at the click positions. You cannot trip the shutter at intermediate positions.

- The function of the dials in each mode are described in the table on page 42. For details, refer to the individual items.



Main Dial
Hauptestellrad
Cadran principal
Selector principal

Subsidiary Dial
Hilfseinstellrad
Cadran auxiliaire
Selector auxiliaire

Exposure Mode	Main Dial	Subsidiary Dial
Programmed auto exposure (P)	Program shift	Exposure compensation
Aperture-priority auto exposure (Av)	Aperture setting	Exposure compensation
Shutter-speed-priority auto exposure (Tv)	Shutter speed setting	Exposure compensation
Manual exposure (M)	Shutter speed setting	Aperture setting

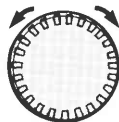
<Programmed Auto Exposure Mode> P

Depending the brightness of the subject, the camera automatically selects the optimum combination out of the programmed combinations of shutter speed and aperture designed to provide correct exposure.

This mode is convenient for ordinary shooting.

Beside the standard combination, it is also possible to shift it to "High" or "Low" by operating the Main Dial. (For details, refer to page 96).

Exposure Modes and Dial Functions Belichtungsbetriebsarten und Einstellradfunktionen Modes d'exposition et fonctions des cadrans Modos de exposición y funciones de los selectores



Main Dial
Hauptstellrad
Cadrán principal
Selector principal

P	Low Low Bas Bajo	[Program Shift] [Programmshift] [Décalage de programme] [Cambio de programa]	High High Haut Alto
Av	Open up Größer Ouverture Abrir	[Aperture] [Blende] [Diaphragme] [Abertura]	Stop down Kleiner Fermeture Parar
Tv	Slower Länger Plus lent	[Shutter Speed] [Verschlußzeit] [Vitesse d'obturation]	Faster Kürzer Plus rapide
M	Más lento	[Velocidad del obturador]	Más lento



Subsidiary Dial
Hilfseinstellrad
Cadrán auxiliar
Selector auxiliar

P	⊖	[Exposure Compensation] [Belichtungskorrektur]	⊕
Av	⊖	[Compensation d'exposition]	⊕
Tv	⊖	[Compensación de exposición]	⊕
M	Stop down Kleiner Fermeture Parar	[Aperture] [Blende] [Diaphragme] [Abertura]	Open up Größer Ouverture Abrir

<Aperture-priority Auto Exposure Mode> Av

If you set the aperture, the camera automatically selects the shutter speed suited for it depending on the brightness of the subject to provide correct exposure.

- Use the Main Dial to set the aperture. It can be set in 1/2-step increments from the lens' full aperture to the smallest aperture.
 - When using the AF Converter (optional accessory), set the aperture with the lens' aperture ring.
- With the AF Converter on, the camera will operate in the aperture-priority auto exposure mode even if it has been set to other auto exposure modes ("P" or "Tv").

<Shutter-speed-priority Auto Exposure Mode> Tv

If you set the shutter speed, the camera automatically selects the aperture suited for it depending on the brightness of the subject to provide correct exposure.

- Use the Main Dial to set the shutter speed. It can be set in 1-step increments from 8 seconds to 1/2000 second.

If you have set an aperture or shutter speed which does not provide correct exposure in an exposure mode "Av" or "Tv", the camera makes automatic compensation to provide correct exposure.

(For details, refer to page 98.)

<Blendenvorwahl mit Zeitautomatik> Av

Zu der von Ihnen vorgewählten Blende stellt die Kamera automatisch die Verschlußzeit ein, die für die richtige Belichtung bei dieser Motivhelligkeit nötig ist.

- Die Blende wird mit dem Haupteinstellrad vorgewählt. Sie läßt sich halbstufig von der größten bis zur kleinsten Blendenöffnung des Objektivs verstellen.
- Bei Verwendung des AF-Konverters (Sonderzubehör) die Blende mit dem Blendenring des Objektivs einstellen. Bei angesetztem AF-Konverter arbeitet die Kamera auch dann in der Zeitautomatik mit Blendenvorwahl, wenn eine andere Belichtungsautomatik ("P" oder "Tv") eingestellt ist.

<Zeitvorwahl mit Blendenautomatik> Tv

Zu der von Ihnen gewählten Verschlußzeit stellt die Kamera automatisch die Blende ein, die für die richtige Belichtung bei der vorhandenen Motivhelligkeit erforderlich ist.

- Die Verschlußzeit wird mit dem Haupteinstellrad vorgewählt und kann ganzstufig von 8 s bis 1/2000 s verstellt werden.

Falls bei Zeitautomatik "Av" oder Blendenautomatik "Tv" eine Blende bzw. Verschlußzeit vorgewählt wird, mit der die richtige Belichtung unmöglich ist, korrigiert die Kamera automatisch auf eine korrekte Einstellung. (Näheres auf Seite 98.)

<Manual Exposure Mode> M

In this mode, you can select your desired aperture and shutter speed.

- Use the Main Dial to set the shutter speed. It can be set in 1-step increments from 8 seconds to 1/2000 second, and to 1/100 second and bulb ("b/b").

- Use the Subsidiary Dial to set the aperture.

It can be set in 1/2-step increments from the lens' full aperture to the smallest aperture.

In the manual exposure mode, the approximate error from correct exposure is displayed by the manual exposure indicator in the Display Panel.

If the exposure is correct, "0" turns on in the Display Panel. If it is not, the error from correct exposure is displayed in 0.5-EV increments from -2 EV (underexposure) to +2 EV (overexposure). If the over- or underexposure exceeds ± 2 EV, it is displayed as ± 2 EV.

In the viewfinder, both "☀" and "☾" turn on at the same time if the exposure is correct. In the case of overexposure, "☀" turns on, and in the case of underexposure, "☾" turns on.

- Change the shutter speed or aperture so that both "☀" and "☾" turn on, and shoot.



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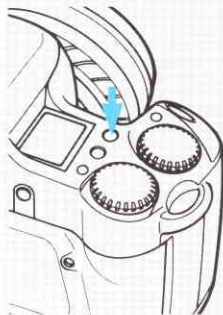
<3> Drive Mode Button (Drive Mode)

Each time the button is depressed, the drive mode will switch as illustrated and the mode displayed in the Display Panel is the mode being set.

Choose your desired mode to suit your object.

<Single-frame shooting mode> □

Each time the Shutter Release is depressed, the lens will start focusing itself on the subject. As soon as subject is in focus, the shutter will trip and the film will advance into position for the next shot, then stop.



<Continuous shooting mode>

While the Shutter Release is held depressed, the camera will shoot continuously at a rate of up to about 2 frames a second. The lens will also focus itself on the subject continuously. If the subject is moving, the camera's moving-object-prediction function is activated.

- If you operate the camera in the continuous shooting mode without loading film in it, the camera may stop. To test the camera again, first set the Main Switch to "LOCK", then return it to "ON".

<Self-timer shooting mode>

As soon as the Shutter Release is depressed, the self-timer LED in the camera front will blink, tripping the shutter after about 10 seconds. (For details, refer to page 72.)



<Trap focus mode> 《◆》

In this mode, the shutter will trip as soon as the camera is focused on the subject at the distance that has been set beforehand. It is useful for taking photographs of animals by ambush or moving objects at the fixed distance.
(For details, refer to page 76.)

■ Program Reset Button

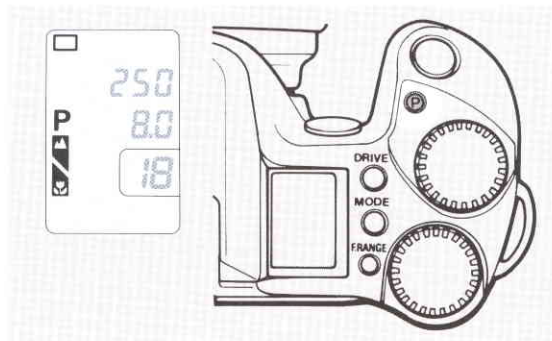
When the Program Reset Button is depressed,

- The exposure mode is set to the programmed auto exposure mode (P).
- The drive mode is set to the single-frame exposure mode (□).
- The exposure compensation is set to “0” (no compensation).
- The shooting range is set to the entire range ().
- The flash mode is set to normal flash ().

If you are a camera beginner, or if you want to take pictures immediately, set the AF/MF Selector Switch to “AF” and press in the Program Reset Button. The camera will now take care of all the rest to take pictures for you.

- Press in the Program Reset Button with a fine-pointed object.

(Do not use a sharp-pointed object such as a needle.)



Taking Pictures

1 Set the Main Switch to "ON".

2 Compose your picture.

If you are using a zoom lens, choose the image size by changing the lens' focal length (zooming) and compose your picture.

Read the instruction manual of the lens on how to zoom the lens.

3 Focus the lens.

Auto-focus mode: AF/MF Selector Switch at "AF". Aim the focusing frame at your subject and depress the Shutter Release halfway. The lens will drive to focus itself.

If you are shooting in the single-frame shooting mode "□", the sharp-focus LED (green) will turn on in the viewfinder when the subject is sharply focused by depressing the Shutter Release halfway, and you will hear an electronic sound. Thus, you can make sure your subject is in sharp focus, and the focus will be locked in this position. If you are shooting in the continuous shooting mode "📷", the focusing operation will continue as long as the Shutter Release is held depressed halfway. In this mode, you won't hear an electronic sound when the subject is sharply focused.



- Sharp-focus LED in the viewfinder.
- Fokus-Bestätigungs-LED im Sucher.
- LED de bonne mise au point dans le viseur.
- LED de enfoque correcto del visor.



Lights up when the subject is in sharp focus.
Leuchtet, wenn Scharfeinstellung erfolgt ist.
S'allume lorsque le sujet est bien net.
Se enciende cuando el sujeto está nítidamente enfocado.



Blinks when focusing is not possible.
Blinkt, wenn Fokussieren nicht möglich ist.
Clignote lorsque la mise au point n'est pas possible.
Parpadea cuando el enfoque no es posible.

- If the sharp-focus LED blinks, the shutter does not trip when the drive mode is set to the single-frame mode "□", or trap focus mode "◀▶". The self-timer does not start in the self-timer mode "⌚".

The shutter trips when the camera is operating in the continuous-shooting mode "📷".

Manual-focus mode: AF/MF Selector Switch at "MF".

In this mode, focus the lens while watching the image on the Matte Screen.

While looking through the viewfinder, turn the lens' focusing ring until the image of the subject on the Matte Screen appears sharp. If the subject is not in sharp focus, you will get a blurred image.

- The sharp-focus LED (green) in the viewfinder will turn on when the subject is sharply focused.
- You won't hear an electronic sound, however.
- The distance can also be set on the distance of the lens.
- If you are near- or far-sighted, use an optional FL type diopter lens. The following eight types of lenses are available: -5, -4, -3, -2, 0, +1, +2, and +3 diopters.

- Wenn die Fokus-Bestätigungs-LED im Sucher blinkt, ist eine Auslösung in der Funktion Einzelbelichtung "□" oder Fokus-Falle "◀▶" nicht möglich. In der Funktion Selbstauslöser "⌚" beginnt der Vorlauf des Selbstauslösers nicht.

In der Funktion Serienbelichtung "📷" wird der Verschluss jedoch ausgelöst.

Manuelle Fokussierung: AF/MF-Wählschalter auf "MF".

In dieser Funktion stellen Sie mit Hilfe des Sucherbildes scharf.

Drehen Sie am Entfernungsrings des Objektivs, bis Ihr Motiv auf der Sucherscheibe scharf abgebildet wird. Ist das nicht der Fall, wird auch das Foto unscharf.

- Die grüne Fokus-Bestätigungs-LED im Sucher leuchtet bei richtiger Fokussierung auf. Es ertönt jedoch kein Signal.
- Die Entfernungseinstellung kann auch mit Hilfe der Skala am Objektiv vorgenommen werden.
- Wenn Sie weitsichtig sind, können Sie eine FL-Okularkorrekturlinse (nicht im Lieferumfang) verwenden. Folgende Stärken gibt es: -5, -4, -3, -2, 0, +1, +2 und +3 Dioptrien.

4 Check the exposure.

Depress the Shutter Release halfway to check exposure in the viewfinder.

In an auto exposure mode (P, Av or Tv), you will get correct exposure if no exposure warning signal appears in the viewfinder. Take your picture by depressing the Shutter Release all the way.

- If the mark "⚡" blinks, it warns you of a slow shutter speed which may cause camera shake. Take your picture with flash or use a tripod to prevent camera shake.
- If the mark "⬆" blinks, the subject is too dark to obtain correct exposure. It will be underexposed because it is beyond the camera's exposure coupling range. Use flash to take your picture.
- If the mark "⬇" blinks, the subject is too bright to obtain correct exposure. It will be overexposed because it is not within the camera's exposure coupling range. Use an ND filter to shoot.
- If you are shooting in the manual exposure mode ("M"), these marks serve as the manual exposure indicator. Adjust so that both "⬆" and "⬇" turn on at the same time.
- The shutter speed and aperture will be displayed in the Display Panel. In the manual exposure mode, the approximate error from correct exposure will also be displayed in a range of up to ± 2 EV.

4 Belichtungskontrolle

Drücken Sie den Auslöser halb ein, um die Belichtung im Sucher zu kontrollieren.

Mit Belichtungsautomatik (P, Av, Tv) wird richtig belichtet, solange kein Warnsignal im Sucher aufleuchtet. Drücken Sie den Auslöser zum Fotografieren ganz durch.

- Das Blinken des Signals "⚡" warnt vor zu langen Verschlusszeiten, bei denen Verwacklungsunschärfen auftreten können. Machen Sie das Bild mit Blitz, oder benutzen Sie ein Stativ, um Verwacklungen zu vermeiden.
- Falls das Symbol "⬆" blinkt, ist das Motiv zu dunkel für eine korrekte Belichtung. Es würde unterbelichtet, weil es außerhalb des Einstellbereichs der Kamera liegt. Daher empfiehlt sich die Benutzung eines Blitzgeräts.
- Wenn das Symbol "⬇" blinkt, ist das Motiv zu hell für eine richtige Belichtung. Es würde überbelichtet, weil es außerhalb des Einstellbereichs der Kamera liegt. Abhilfe schafft die Verwendung eines Neutral-Graufilters (ND).
- Bei manueller Belichtungseinstellung ("M") dienen diese Zeichen als Manuell-Belichtungs-Symbol. Die Symbole "⬆" und "⬇" erscheinen bei korrekter Belichtungseinstellung gleichzeitig.
- Verschlusszeit und Blende werden im Monitor angezeigt. Bei manueller Belichtungseinstellung wird außerdem die ungefähre Abweichung von der korrekten (gemessenen) Belichtung im Bereich von ± 2 EV angezeigt.

Exposure signal in the viewfinder — Auto (“P”, “Av” or “Tv”)

Out of coupling range (over)

Correct exposure

Correct exposure (Camera shake warning)

Out of coupling range (under)



No mark



Exposure signal in the viewfinder — Manual (“M”)

Overexposure

Correct exposure

Underexposure



Belichtungs-Warnsignal im Sucher — Auto (“P”, “Av” oder “Tv”)

Außerhalb des Einstellbereiches (über)

Richtige Belichtung

Richtige Belichtung (Verwacklungsgefahr)

Außerhalb des Einstellbereiches (darunter)



keine Anzeige



Belichtungs-Warnsignal im Sucher — Manuell (“M”)

Überbelichtung

Richtige Belichtung

Unterbelichtung



5 Den Auslöser für die Aufnahme des Bildes ganz durchdrücken.

5 Depress the Shutter Release all the way. The shutter will trip to take your picture.

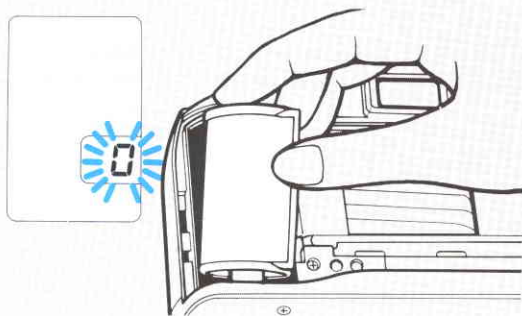
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Rewinding the Film

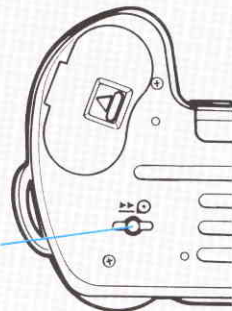
If the entire roll of film has been exposed, the film will automatically start rewinding itself.

While the film is rewinding, the Exposure Counter will count down. As soon as rewinding is completed, the film will automatically stop and the counter will blink at "0". Make sure that the counter blinks at "0", open the Camera Back and take out the film.

- Unload the film after making sure that it has been completely wound back into its cassette. The camera will not operate again unless the Camera Back is opened.
- Avoid direct sunlight when unloading the film.
- Take the exposed film for processing as soon as possible.
- The shutter curtain is a precision part. Never touch it with your finger or push it with a film tip.
- To rewind the film in the middle of a roll, press in the Manual Rewind Button with a fine-pointed object. (Do not use a sharp-pointed object such as a needle.)



Manual Rewind Button
Taste für manuellen Rückspulstart
Bouton de rembobinage manuel
Botón de rebobinado manual



Advanced Techniques

**Funktionen
für Fortgeschrittene**

Techniques avancées

Técnicas avanzadas

Taking Panorama-format Pictures

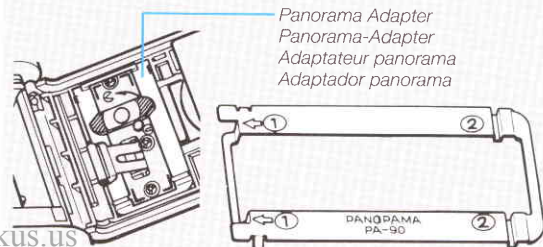
By installing the accessory Panorama Adapter on the camera's Picture Area Frame, you will get panorama-format negatives of about $13 \times 36\text{mm}$ on the film. From these negatives, an area of about $12 \times 35\text{mm}$ will be printed in a panorama size.

- Install the adapter before loading the film. It cannot be attached or detached in the middle of a roll.
- To take standard-format pictures, remove the adapter from the Picture Area Frame and put it away in the specified place.

<Panorama Adapter>

The Panorama Adapter is located inside the Camera Back when you purchase the camera.

If you want to take panorama-format pictures, rotate out the Panorama Adapter and install it on the camera's Picture Area Frame before loading the film.



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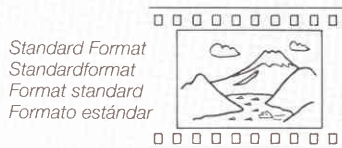
Panoramafotografie

Nach dem Anbringen des Panorama-Adapters (Zubehör) im Ausschnitt des Filmkanals der Kamera können Aufnahmen im Panoramaformat (etwa 13 x 36 mm auf dem Filmbild) gemacht werden. Von diesen Negativen lassen sich Panorama-Vergrößerungen mit einem Format von etwa 12 x 35 mm anfertigen.

- Der Panorama-Adapter muß vor dem Filmeinlegen installiert werden. Ein Einsetzen oder Herausnehmen des Adapters mitten im Film ist nicht möglich.
- Für Aufnahmen im Standardformat entfernt man den Adapter wieder aus dem Ausschnitt der Filmführung und bewahrt ihn an dem dafür vorgesehenen Platz auf.

<Panorama-Adapter>

Der Panorama-Adapter ist beim Kauf der Kamera an der Kamerarückwand untergebracht. Wenn Sie Panoramabilder aufnehmen möchten, vor dem Filmeinlegen den Panorama-Adapter herausnehmen und im Ausschnitt des Filmkanals anbringen.



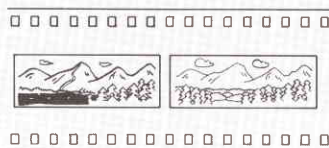
Prise de vues au format panorama

En installant l'adaptateur panorama accessoire sur le cadre de zone d'image de l'appareil, vous obtiendrez des négatifs au format panorama d'environ 13 x 36 mm sur le film. De ces négatifs, une zone d'environ 12 x 35 mm sera tirée dans un format panorama.

- Installez l'adaptateur avant de charger le film. Il ne peut être installé ou retiré au milieu d'un rouleau.
- Pour prendre des photos au format standard, retirez l'adaptateur du cadre de zone d'image et rangez-le dans l'endroit spécifié.

<Adaptateur panorama>

L'adaptateur panorama se trouve dans le dos de l'appareil lors de son achat. Si vous désirez prendre des photos au format panorama, sortez l'adaptateur panorama et mettez-le en place sur le cadre de zone d'image de l'appareil avant de charger le film.



Toma de fotografías en formato Panorama

Instalando el adaptador Panorama opcional en el cuadro del área de la imagen, obtendrá negativos de formato Panorama de 13 x 36 mm en la película. De esos negativos, un área de 12 x 35 mm se imprimirá en tamaño Panorama.

- Instale el adaptador antes de cargar la película. No podrá acoplarse o desacoplarse a la mitad de un rollo.
- Para tomar fotografías en formato estándar, extraiga el adaptador del cuadro del área de la imagen y colóquelo en el lugar especificado.

<Adaptador Panorama>

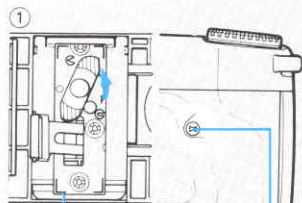
El adaptador Panorama está ubicado dentro del respaldo de la cámara al comprar la cámara.

Si desea tomar fotografías en formato Panorama, saque el adaptador Panorama e instálelo en el cuadro del área de la imagen de la cámara antes de cargar la película.

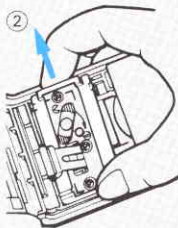
Panorama Format
Panoramaformat
Format panorama
Formato Panorama

1 Remove the Panorama Adapter.

- ① Turn the knob in the direction of the arrow as shown as far as it will go.
- ② Remove the Panorama Adapter by holding its frame as shown.
 - When removing the adapter, take care not to bend the film holding spring.
 - The panorama mark “” will appear in the Panorama Indicator Window on the outside of the Camera Back.



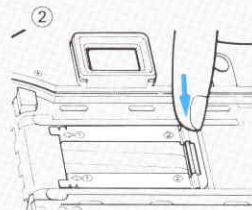
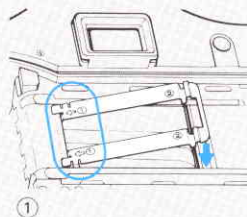
Adapter Strage Mark
Adapter-Aufbewahrungsmarke
Maque de rangement d'adaptateur
Marca del adaptador



Panorama Mark
Panorama-Symbol
Marque panorama
Marca de panorama

2 Install the Adapter on the Picture Area Frame.

- ① With the lettering side on top, fit the part marked “←①” on the adapter onto the Picture Area Frame on its left side, fit the claw on the left side of the adapter as shown and install the adapter.
- ② Push down the adapter while pressing it slightly to the left side, fit in the claw in the part marked “②” into the Picture Area Frame and press in lightly.
 - If the adapter is not installed correctly, it will cause malfunction. Be sure to fit it in the specified positions securely.
 - Do not press the adapter too strongly when installing it because you may damage it or touch the shutter curtain inadvertently.



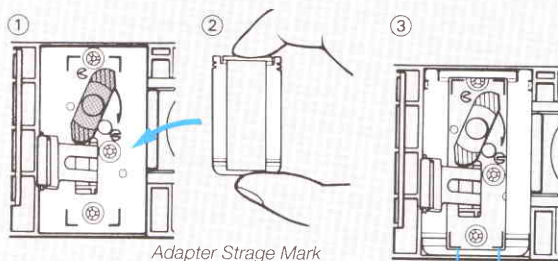
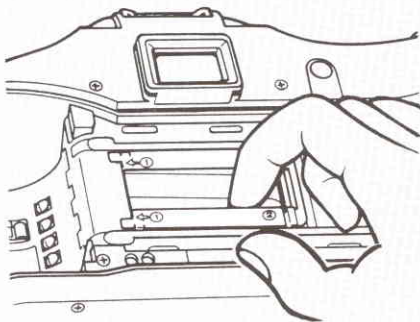
3 Detach the Adapter from the Picture Area Frame.

Hold the part marked "②" of the adapter as shown so **that you do not touch the shutter curtain** and remove the adapter by lifting it up.

- Take care that you do not touch the shutter curtain with your fingernail when detaching the adapter.

4 Put away the Adapter.

- ① Make sure the knob on the adapter storage place is set as shown in the illustration. If not, correct it as shown.
 - ② Hold the adapter frame with the letters on the back as shown.
 - ③ Put the adapter in its storage place by fitting the storage mark as shown, taking care not to bend the film holding spring.
- You may store the adapter upside down.
 - If the adapter is not put correctly in palce, it will cause malfunction. Be sure to fit it in the specified place.



Adapter Strage Mark
Adapter-Aufbewahrungsmarke
Marque de rangement d'adaptateur
Marca del adaptador

④ Set the knob in the horizontal position by rotating it in the direction of the arrow (marked "⊖").

● The adapter has been fixed and the panorama mark on the outside of the Camera Back will disappear.

Never touch the shutter curtain when attaching or detaching the adapter, because it will cause malfunction if you do.

Also, caution is required because the adapter may be damaged if you apply too much pressure on it.

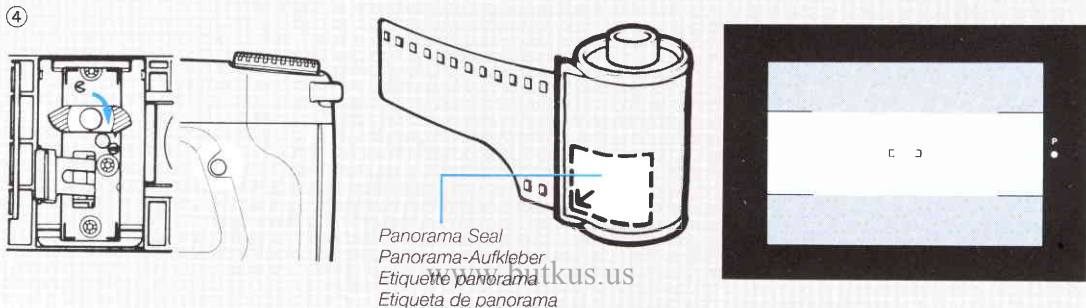
<Taking Pictures>

1 Before loading the film in the camera, put the enclosed "Panorama Seal" on the film cassette.

● Do not put the Panorama Seal on the DX-code area of the cassette because the camera cannot set the film speed automatically.

2 You will get in your picture the area marked by the panorama frame in the viewfinder.

Other shooting procedures are the same as those for taking standard-format pictures.



● The panorama-format frame consists of a standard-format frame whose upper and lower sections are cut off, but it has the same angle of view as that of the standard-format frame. For larger panorama effects, zoom the lens to the wide-angle side or step back so that a larger area is covered.

● In the panorama mode, the date and time cannot be printed on the picture. When using the Panorama Adapter, set the dating mode to "-- -- --" (dating off) to simplify the printing operation by your photofinisher.

● When you take your film exposed in the panorama format to your photofinisher for processing and printing, make sure the "Panorama Seal" is put on the film cassette and do not forget to tell your photofinisher that it contains "panorama-format pictures".

● If your panorama-format pictures are printed in the standard size, a black band will appear in the upper and lower parts of the picture area.

* For processing and printing of panorama-format pictures, it will take longer days and higher costs than in the case of processing and printing of regular 35mm frames. For details, ask your photofinisher.

● Das Panoramabild entspricht einem Standardformatbild, dessen oberer und unterer Rand weggeschnitten ist. Der horizontale Bildwinkel ändert sich dabei nicht. Daher für einen stärkeren Panorama-Effekt das Zoom-Objektiv auf eine kurze Weitwinkelbrennweite einstellen oder etwas zurückgehen, um einen größeren Bildausschnitt zu erfassen.

● In Panoramafunktion können Datum oder Uhrzeit nicht in das Bild einbelichtet werden.

Beim Verwenden des Panorama-Adapters sollte die Einbelichtungsfunktion auf "-- -- --" (keine Einbelichtung) eingestellt werden, um dem Fotolabor die Vergrößerung zu erleichtern.

● Wenn Sie einen Film mit Panorama-Aufnahmen zum Entwickeln und Vergrößern bringen, achten Sie darauf, daß sich ein Panorama-Aufkleber auf der Filmpatrone befindet, und weisen Sie den Fotofachhändler oder das Fotolabor besonders darauf hin.

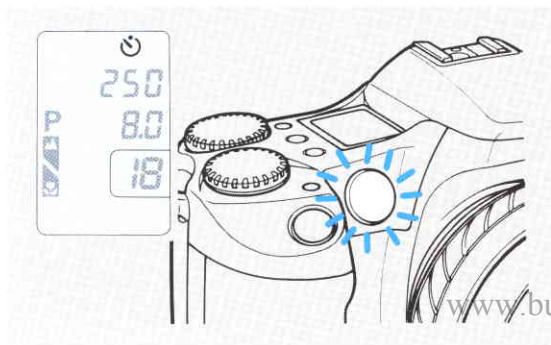
● Wenn Panorama-Aufnahmen im Standardformat vergrößert werden, haben die Bilder oben und unten einen schwarzen Rand.

* Das Entwickeln und Vergrößern von Panorama-Aufnahmen dauert etwas länger und ist teurer als bei normalen Kleinbild-Aufnahmen. Erkundigen Sie sich bitte bei Ihrem Händler bzw. Fotolabor nach den Verarbeitungsmöglichkeiten von Panoramabildern.

Using the Self-timer

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

- 1 Mount the camera on a tripod.
- 2 Depress the Drive Mode Button to show “” on the Display Panel.



3 Focus the lens and depress the Shutter Release. As soon as the Shutter Release is depressed, the self-timer will start and the shutter will trip after 10 seconds. While the self-timer is operating, the Self-timer LED will blink and you will hear an electronic sound at the same time.

- The focus and exposure will be locked when the self-timer starts.
- To stop the self-timer after it has started, set the Main Switch at “LOCK”.

Shutter Release is depressed.
Auslöser wird gedrückt.
Le déclencheur est enfoncé.
El disparador está oprimido.

Shutter trips
Verschluß wird ausgelöst
Déclenchement
Disparo



-
- When taking pictures with the self-timer in an auto exposure mode (P, Av or Tv), extraneous light entering through the viewfinder may affect the exposure. Because this camera is designed to determine the exposure when the self-timer starts, do not remove your eye from the eyepiece before the self-timer starts. Otherwise, put the accessory eyepiece cover on the viewfinder eyepiece and depress the Shutter Release.
 - When you take self-timer pictures with flash, make sure the flash is fully charged before you shoot. When taking pictures with the built-in flash, the self-timer will not start if the flash is not fully charged. Also, the self-timer will stop running if the built-in flash is switched on or off (the flash head is popped up or down) while the self-timer is operating.

-
- Beim Fotografieren mit Selbstauslöser und Belichtungsautomatik (P, AV, Tv) ist zu vermeiden, daß Störlicht durch das Okular die Belichtung verfälscht. Deswegen sollten Sie den Auslöser mit dem Auge am Okular betätigen, da die Kamera den Belichtungswert in diesem Moment speichert oder die Abdeckung vor dem Auslösen über das Okular stecken.
 - Stellen Sie bei Blitzaufnahmen mit Selbstauslöser sicher, daß das Blitzgerät vor dem Auslösen vollständig aufgeladen ist. Bei Verwendung des eingebauten Blitzes läuft der Selbstauslöser nicht ab, wenn der Blitz nicht voll geladen ist. Der Ablauf des Selbstauslösers wird außerdem unterbrochen, wenn der eingebaute Blitz an- oder ausgeschaltet wird (Blitzreflektor wird hoch- oder runtergedrückt).

Trap Focus Shooting

In this mode, the shutter will trip as soon as the camera is focused on the subject at the distance that has been set beforehand. It is useful for taking photographs of animals by ambush or moving objects at the fixed distance.

- The camera is in the standby condition if the shutter is ready to trip the shutter when the lens is focused on the subject.

1 Depress the Drive Mode Button so that the mark "◀▶" appears in the Display Panel.

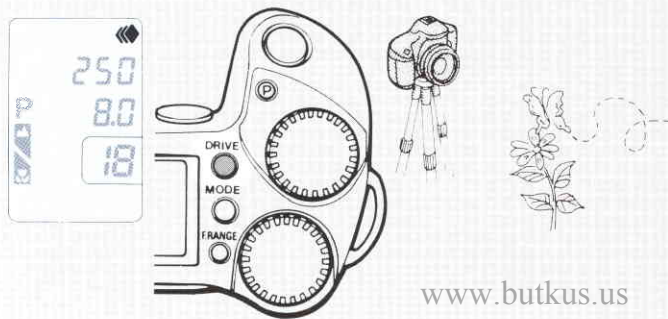
2 Set the distance from the camera to the subject by using the auto-focus or manual focus and depress the Shutter Release.

If you are using the auto-focus (AF), aim the focusing

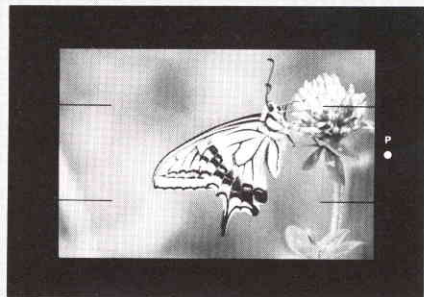
frame in the viewfinder at an object located at the same distance as your subject and depress the Shutter Release halfway.

The lens will focus itself and the focus will be locked in position as long as the Shutter Release is depressed halfway. Recompose your subject and depress the Shutter Release all the way, then release your finger. In this condition, the mark "◀▶" will blink, sensing the trap focus in the standby condition.

If you are shooting in the manual focus (MF) mode, set the distance, depress the Shutter Release all the way, then remove your finger from the button. In this condition, the mark "◀▶" blinks and the camera is now in the trap-focus standby condition.



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● **As soon as the subject arrives at the preset point and the camera is focused on it in the focusing frame, the shutter will trip.**

● The camera will continue to take pictures as long as it is focused on the subject.

3 Depress the Shutter Release again. The mark "◀▶" will stop blinking and the standby condition will be cleared.

● To take pictures with the trap focus again, repeat the above-mentioned procedure from Paragraph 2.

● It is recommended to mount the camera on a tripod when shooting in the trap focus mode, because the shooting distance is fixed.

* While the trap focus is in the standby condition, the battery will consume power because the power remains on even if the shutter does not trip. After shooting with the trap focus, clear the standby condition as soon as possible by depressing the Shutter Release again.

(A new lithium battery will last about 13 hours when the camera operates continuously with the trap focus in the standby condition.)

● If you remove your eye from the viewfinder eyepiece when shooting in an auto exposure mode, use the accessory eyepiece cover to prevent extraneous light from entering through it. For details, refer to page 12.

● When using an AF Converter (optional accessory), take pictures in the auto-focus (AF) mode.

● **Sobald ein Objekt den voreingestellten Punkt erreicht, auf die Fokuszone der Kamera weist, erfolgt die Auslösung.**

● Die Kamera nimmt solange auf, wie das Objekt scharf ist.

3 Um die Bereitschaft der Fokus-Falle abzuschalten, drücken Sie erneut auf den Auslöser. Das "◀▶"-Symbol hört auf zu blinken.

● Um die Fokus-Falle wieder zu aktivieren, wiederholen Sie die Schritte 2 und 3.

● Es empfiehlt sich, mit der Fokus-Falle von einem Stativ zu arbeiten, weil so die Entfernung unverändert bleibt.

* Mit aktivierter Fokus-Falle wird Strom verbraucht, auch wenn der Verschluss nicht ausgelöst wird. Schalten Sie die Bereitschaft der Fokus-Falle aus, sobald Sie sie nicht mehr benötigen, indem Sie erneut den Auslöser betätigen. (Eine neue Lithium-Batterie reicht für ca. 13 Stunden ununterbrochener Aufnahmebereitschaft der Fokus-Falle.)

● Verwenden Sie die Okularabdeckung, wenn Sie nicht mit dem Auge am Sucherokular fotografieren, um Störlicheinfall zu verhindern. (Näheres S. 12.)

● Bei Verwendung des AF-Konverters (Sonderzubehör) sollten Sie mit Autofocus arbeiten.

Focus Lock

If your subject is not in the center of the viewfinder when taking pictures by auto focusing, or if it is difficult to focus, use the focus lock.

When the drive mode is "□" (single-frame operation) or "◀▶" (trap focus mode), the focus lock is activated when the Shutter Release is depressed halfway and the subject is sharply focused. (Focus Lock)

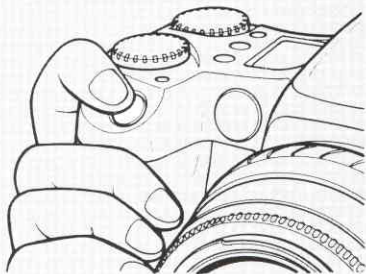
- The focus lock cannot be activated in the continuous shooting mode (▶▶▶).

1 Aim the focusing frame at your subject and depress the Shutter Release halfway. The lens will focus itself on the subject and the sharp-focus LED (green) will turn on when it is in sharp focus, and the focus will then be locked in this position.

- The exposure has not yet been locked, however. To lock the exposure, depress the AE Lock Button.

2 If the sharp-focus LED turns on, recompose your subject **with the Shutter Release held in**

depressed position, and take your picture by depressing it all the way.



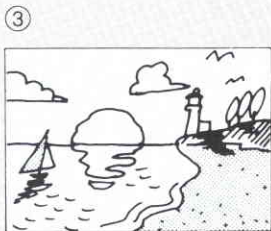
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<Objects That are Difficult to Focus>

In the following cases, the camera's auto focusing system may not be able to operate properly. In such cases, focus the lens on another object located at the same distance as your subject, activate the focus lock and shoot. You can also use the manual focus.

- ① When the subject is extremely bright or dark;
- ② When the subject contrast is extremely low against the background;

- ③ When there is a strong light source (e.g. sunlight) in or around the focusing frame;
- ④ When there are two or more subjects in the focusing frame, which have extremely different distances.
- ⑤ When the subject has only horizontal lines or a uniform pattern of vertical lines;
- ⑥ When the subject is moving at a high speed;
- ⑦ When the subject has not a concrete shape (e.g. flame or smoke);
- ⑧ When the quantity of light from the subject is extremely reduced through an ND filter, polarizing filter, etc.

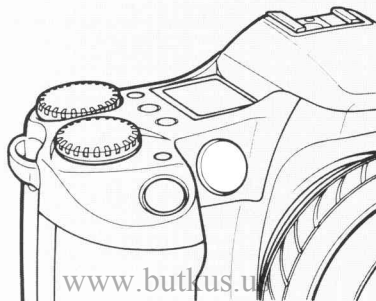


AF Supplementary Light

If the accuracy of the auto-focus is not enough in dim light, an infrared ray will be emitted automatically from the AF Supplementary Light projector to illuminate the subject, thereby increasing the accuracy of the auto-focus.

- The AF supplementary light is emitted only in the AF mode.
- The effective range of the AF supplementary light is approximately 1—4 m (with 50 mm AF normal lens: according to our testing conditions). This range may become shorter in the case of low-reflectivity subjects.

- If you are using an optional CS-250 AF flash, the flash's supplementary light does not work. In this case, only the camera's AF supplementary light will be emitted automatically.



Predictive-autofocus Function

The predictive-autofocus function is automatically activated when the camera operates with the auto-focus in the continuous shooting “” or trap focus “” mode.

When shooting a moving object, the focus may be shifted in a period from the moment when it was focused until the moment when the shutter trips.

In this case, the camera can predict a focus shift which will occur between the moment of focusing and that of shutter tripping and adjust the lens so that the subject is sharply focused when the shutter trips.

- The predictive-autofocus function is effective for objects which are coming near or going away at almost the same speed.

Bewegungserkennungsfunktion

Die Bewegungserkennungsfunktion wird automatisch aktiviert, wenn die Kamera mit Serienbelichtungs “”- oder Fokus-Falle “”-Funktion arbeitet. Beim Fotografieren eines bewegten Motivs kann sich die Entfernung in dem Moment zwischen Druck auf den Auslöser und Start des Verschlüßvorhangs noch verändern. Diese Fokusverschiebung kann die Kamera berechnen und die Objektiveneinstellung so verändern, daß die Schärfe beim Belichten stimmt.

- Die Bewegungserkennungsfunktion ist besonders effektiv bei Objekten, die sich mit gleichmäßiger Geschwindigkeit nähern oder entfernen.

Depth of Field

When the lens is focused on a subject, not only the subject itself, but also a certain zone in front of and behind it will turn out sharp in the picture. This is called the lens' depth of field and it varies as follows:

- ① The smaller the aperture, the wider the depth of field, and vice versa.
- ② The longer the subject distance, the wider the depth of field, and vice versa.
- ③ The zone of sharpness behind the point on which the lens is focused is wider than that in front of it.

- In the case of different lenses, a lens with a shorter focal length has a wider depth of field than a lens with a longer focal length.



Display of the Focal Length of AF Power Zoom Lenses

When the camera is equipped with an AF Power Zoom Lens, the shutter speed in the Display Panel will switch to the lens' focal length if you depress the Drive Mode Button while you hold the AE Lock Button in depressed position, and for 16 seconds after you remove your finger from the button.

The Display Panel will show the shutter speed again if you depress the Shutter Release halfway while the focal length is displayed.

- The focal length on display serves only as a guide.
- Focal lengths are displayed with an AF Power Zoom Lens only, but not with other lenses such as AF Lenses and AF Zoom Lenses.



Display of Shutter Speed and Aperture

The shutter speeds are displayed in 1/2-step increments from "2000" (1/2000 sec.) to "8" (8 sec.), and the apertures in 1/2-step increments within the aperture range of the lens used. If the picture is taken with an intermediate value between two 1/2-step F-numbers, the camera will display the value that is closer to that which is set. For example, if you are using an F1.8 lens, the camera will display "1.7"; if you are using an F3.3 lens, it will display "3.5".

- In the shutter-speed-priority auto exposure and manual exposure modes, the shutter speed can be set in 1-step increments, and at 1/100 (sec.). In the aperture-priority auto exposure and manual exposure mode, the aperture can be set in 1/2-step increments. It is impossible to set the shutter speed or aperture between the positions marked on the dial.

Shutter Speed Verschlußzeitanzeige Vitesse d'obturation Velocidad del obturador		Aperture Blendenanzeige Diaphragme Abertura	
P/Av	Tv/M	All exposure modes mit allen Belichtungsarten Tous les modes d'exposition Todos los modos de exposición	
2000	1400	2000	64
1000	700	1000	45
500	350	500	32
250	180	250	22
125	100	125	16
60	45	100	11
30	20	60	8.0
15	10	30	5.6
8	6	15	4.0
4	3	8	2.8
2	0.7"	4	2.0
1"	1.5"	2	1.4
2"	3"	1"	
4"	6"	2"	
8"		4"	
		8"	
		blb*	

* "blb" (bulb) is for the manual mode only

"blb" (Langzeitbelichtung B) kann nur bei M-Funktion verwendet werden.

"blb" (bulb ou exposition prolongée) n'est que pour le mode manuel.

* "blb" (pose) es sólo para el modo manual.

Programmed Automatic Control/Program Shift

This control diagram shows the control range of shutter speeds and apertures in relation to the EV values in the programmed auto exposure mode.

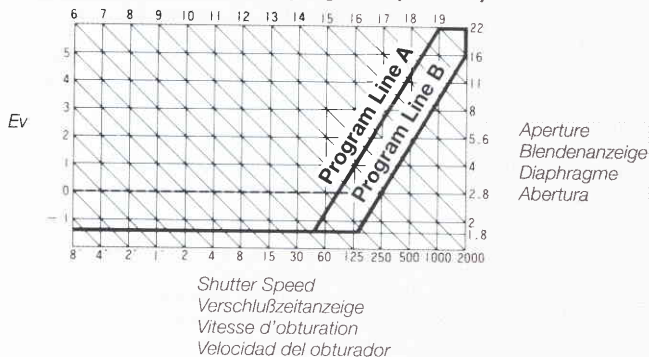
The lines A and B in the diagram will switch automatically according to the focal length of the lens used, and the camera will select the optimum combination of shutter speed and aperture on the line.

Programmautomatik/Programm-Shift

Dieses Kurvendiagramm zeigt den Programmautomatik-Steuerbereich der Verschlusszeiten und Blenden in Abhängigkeit vom Belichtungswert.

Die Kurven A oder B werden je nach verwendeter Brennweite automatisch gewählt, und die Kamera steuert eine optimale Zeit/Blende-Kombination aus dem Kurvenbereich.

Program Control Diagram (ISO 100)
Programmsteuerungs-Diagramm (ISO 100)
Diagramme de contrôle de programme (ISO 100)
Diagrama de control de programa (100 ISO)



Line A: For lenses with focal lengths of 85mm or shorter.

Line B: For lenses with focal lengths of 86mm or longer.

● The program control diagram shows the automatic control range with an F1.8 lens.

In the case of lenses with different F-numbers, the control range becomes narrower as the lens speed decreases. The control range with an F2.8 lens, for example, is that which is represented by the dotted line in the diagram.

<Program shift>

The exposure program can be shifted to "High" and "Low" (broken oblique lines) within the scope of the same EV value so that you can select your desired shutter speed or aperture depending on the shooting situation.

In the programmed auto exposure mode, the program can be shifted by turning the Main Dial to the right ("High") or left ("Low") as shown. If F4 and 1/125 sec., for example, provide correct exposure, and if you want to stop down the aperture by one step, move the Main Dial toward "Low" to F5.6 and 1/60 sec. Thus, you can shoot with your desired

aperture or shutter speed without changing the EV value.

- The program mark "P" will blink in the viewfinder and Display Panel when the program shift is effected. In the viewfinder, it will blink quickly when the program is shifted to "High", and slowly when it is shifted to "Low".

The shutter speed and aperture in shifted positions will be displayed in the Display Panel.

- After shooting with the program shift function, it is recommended to clear it by moving back the Main Dial to its original position or setting the Main switch to "LOCK".

Program Shift Diagram (ISO 100)

Programmsteuerungs-Diagramm (ISO 100)

Diagramme de contrôle de programme (ISO 100)

Diagrama de control programado (100 ISO)



[Program Shift]
[Programm Shift]
[Décalage de programme]
[Cambio de programa]

Low
Low
Bas
Baja



High
High
Haut
Alta

Main Dial
Hauptstellrad
Cadran principal
Selector Principal

Automatic Compensation of Setting Values in Auto Exposure

If you are shooting in the shutter-speed-priority auto exposure mode, and the shutter speed you have selected cannot provide correct exposure within the aperture range of the lens used, the shutter speed will be automatically shifted to provide correct exposure.

Likewise, if you are shooting in the aperture-priority auto exposure mode, and the aperture you have selected cannot provide correct exposure within the camera's shutter speed range, the aperture will be automatically shifted to provide correct exposure.

Exposure Compensation

If the subject is not correctly exposed by auto exposure because there is a great difference in brightness between the subject and its background, or if you want to take intentional over or underexposed pictures, you can make exposure compensation in two ways.

Automatische Korrektur der eingestellten Werte

Wenn Sie mit Blendenautomatik und Verschußzeitenvorwahl fotografieren und die vorgewählte Verschußzeit beim Blendenbereich des Objektivs für eine richtige Belichtung nicht ausreicht, wird die Verschußzeit automatisch soweit wie nötig verändert, damit die Belichtung stimmt.

Entsprechend verhält es sich bei Zeitautomatik und Blendenvorwahl, wenn die gewählte Blende keine richtige Belichtung bei den Verschußzeiten der Kamera erlaubt. Dann wird die Blende automatisch geöffnet oder geschlossen.

Belichtungskorrektur

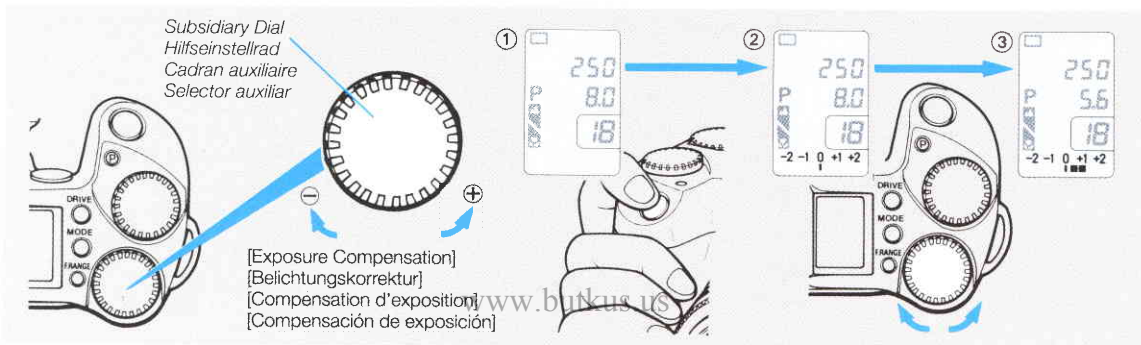
Wenn das Motiv in automatischer Belichtungseinstellung nicht richtig belichtet wird weil der Helligkeitsunterschied zwischen Motiv und Hintergrund zu groß ist, oder wenn Sie gewollt über- bzw. unterbelichten wollen, können Sie die Belichtungskorrektur folgendermaßen verwenden:

<1> Using the Subsidiary Dial

In an auto exposure mode, the camera is normally set for standard exposure without exposure compensation. The Subsidiary Dial, however, enables you to make exposure compensation of up to ± 2 EV in 1/2-EV step increments. Because the camera incorporates a mechanism to prevent wrong operation, make exposure compensation with the Subsidiary Dial as follows:

1 When starting the exposure compensation

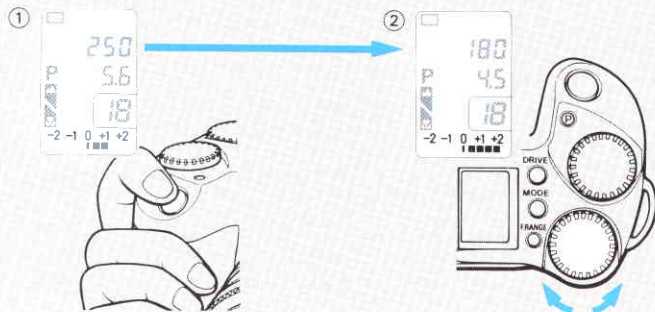
- ① Depress the Shutter Release halfway.
The shutter speed and aperture will be displayed in the Display Panel.
- ② Turn the Subsidiary Dial either to the left or right.
The exposure compensation scale ($-2 -1 0 +1 +2$) will appear in the Display Panel.
- ③ Make exposure compensation by turning the dial until your desired compensating value is shown on the scale.
 - If the shutter speed and aperture are already shown in the Display Panel, you need only repeat the foregoing procedure from ②.



2 When changing the compensating value

- ① Depress the Shutter Release halfway. The shutter speed and display will be displayed in the Display Panel.
 - ② Make exposure compensation by turning the Subsidiary Dial until your desired compensating value is shown on the scale.
- If the shutter speed and aperture are already shown in the Display Panel, you need only repeat the step ② above to change the compensating value.

If you are taking pictures in an auto exposure mode ("P", "Av" or "Tv"), exposure compensation is made by turning the Subsidiary Dial to the right (compensated to the "+" side) or to the left (compensated to the "-" side) and the compensating value is displayed in the Display Panel. Adjust so that your desired compensating value is displayed.



- The compensating value changes 0.5 EV when you operate the Subsidiary Dial by one step.
- The mark “” (compensated to the “+” side) or “” (compensated to the “-” side) turns on in the viewfinder during exposure compensation.
- After taking pictures with exposure compensation, be sure to reset the compensating value to “0”.
- The compensating value can be reset to “0” (no compensation) by depressing the Program Reset Button or setting the Main Switch to “LOCK”.
- In the manual exposure mode, exposure compensation with the Subsidiary Dial is impossible.

- Bei jedem Drehen des Hilfseinstellrads um eine Stufe ändert sich der Korrekturwert um jeweils 0,5 EV.
- Das Zeichen “” (nach + hin korrigiert) oder “” (nach - hin korrigiert) erscheint während der Belichtungskorrektur im sucher.
- Vergewissern Sie sich nach Aufnahmen mit Belichtungskorrektur, daß der Korrekturwert wieder auf “0” gestellt wird.
- Der Korrekturwert kann auf “0” (keine Kompensation) zurückgestellt werden, indem die Programm-Rückstelltaste gedrückt wird oder der Hauptschalter auf “LOCK” gestellt wird.
- Bei manueller Belichtung ist Belichtungskorrektur mit dem Hilfseinstellrad nicht möglich.

<For backlighting subjects>

Compensate exposure to the “+” side.

If you are taking a portrait against the light, against a bright sky or sea, in front of a window, etc., where the greater part of your picture is occupied by a bright background, your subject will be underexposed and turn out dark like a silhouette. In this case, compensate exposure to the “+” side to give more exposure.

● This camera can make automatic exposure compensation when the main subject in the center of the picture frame is dark in background (for details, see page 110).



<For spotlighted subjects>

Compensate exposure to the “-” side.

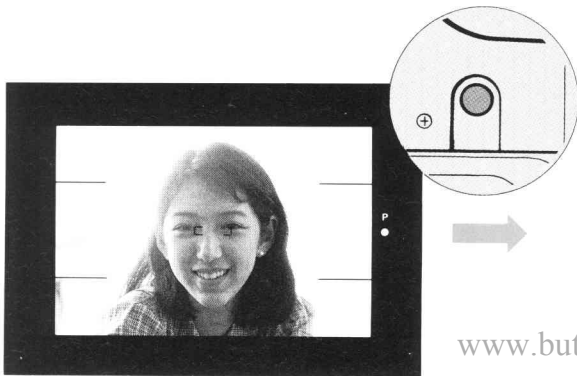
If you are shooting a spotlighted subject on a stage where a dark background predominates in the scene, your subject will be overexposed and turn out light. In this case, compensate exposure to the “-” side to reduce exposure.



<2> Using the AE Lock Button

In an auto exposure mode, the exposure value (combination of shutter speed and aperture) of the subject can be stored in memory with the AE Lock Button. If the AE Lock Button is depressed, the exposure value at the moment when it was operated will be stored in the camera memory as long as it is held depressed. Thus, you can trip the shutter with the fixed exposure value, unaffected by changes in brightness on the background.

1 First, compose your picture and frame the main subject in the center of the viewfinder so that it looks as big as possible.



2 Depress the AE Lock Button to activate the AE lock and store the exposure value of the subject in memory.

3 While holding the AE Lock Button in depressed position, recompose your subject and shoot.

- If you take your finger off the AE Lock Button, the AE lock will be released.
- In extremely backlighted conditions, it is recommended to get closer to the main subject and activate the AE lock. Then, recompose your subject, focus the lens and shoot.



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Automatic Backlight Compensation

When there is a backlighting subject in the center of the picture frame, the main subject will generally be underexposed because exposure is measured on a bright background.

This camera will make automatic exposure compensation when the main subject in the center is backlit to prevent it from being underexposed.

Flash Photography

If the subject is so dark that the mark “” blinks in the viewfinder when the Shutter Release is depressed halfway, it warns you that the camera may shake when you trip the shutter. Use flash to prevent camera shake. You can also use flash in bright daylight if the subject is backlit and dark, to take beautiful pictures.

For flash photography, you can use the camera's built-in flash or an external flash (optional accessory).



- The automatic backlight compensation work when the main subject is located inside this area or around.
- Die automatische Gegenlichtkorrektur arbeitet, wenn sich das Hauptmotiv innerhalb oder in der Nähe dieses Bereichs befindet.
- La compensation automatique de contre-jour fonctionne lorsque le sujet principal se trouve à l'intérieur de la cette zone ou autour.
- La compensación de contraluz automática funciona cuando el objeto principal está situado dentro de esta área o a su alrededor.

Built-in Flash

Based on a so-called CPU-matic method, the camera's built-in flash lets you take automatic flash pictures. The CPU-matic method provides correct exposure by changing the aperture with the subjects's distance and brightness. Even if you are shooting your subject against a dark background or using flash as fill-in light, the CPU takes care for correct exposure.

<Using the built-in flash>

1 Set the Main Switch to "ON" and depress the Flash Button. The flash head will pop up and the flash will start to recharge itself.

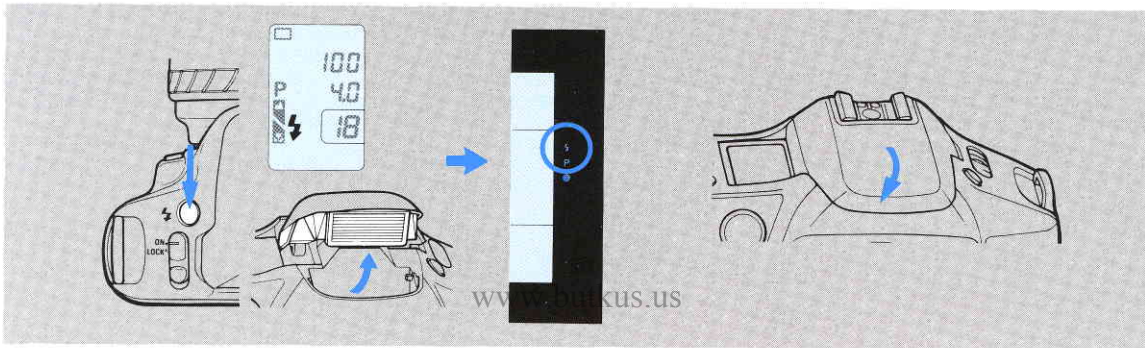
- The mark "⚡" will appear in the Display Panel.

2 As soon as the flash is fully charged, the flash mark "⚡" will turn on in the viewfinder.

3 Take your picture by depressing the Shutter Release. Make sure the mark "⚡" in the viewfinder turns on before you shoot.

- If you do not see the mark "⚡" in the viewfinder, the flash is still recharging. The shutter does not trip when you depress the Shutter Release.
- If the mark "⚡" in the viewfinder blinks quickly, your subject is beyond the flash's effective range. Change the shooting distance so that the flash turns on with steady light. If you are shooting a far subject, use an external flash that emits a large quantity of light.
- If you take flash pictures some time after the flash is fully charged, make sure the mark "⚡" turns on by depressing the Shutter Release halfway before you shoot.

* After taking flash pictures, push down the Flash Head.



- After flash charging is completed, the camera's shutter speed and aperture can be set. Settings of shutter speed and aperture depending on the exposure mode are as follows:

	Shutter Speed	Aperture
P	Automatically set to 1/100 sec.	Comparison is made between the aperture depending on the distance and the aperture corresponding to natural light, and a smaller aperture is selected automatically.
Av	Automatically set to 1/100 sec.	Comparison is made between the aperture depending on the distance and the aperture corresponding to natural light, and a smaller aperture is selected automatically.
Tv	If the shutter speed has been set to 1/125 sec. or faster, it will switch to 1/100 sec.; if it is slower than 1/100 sec., the set speed will persist.	Comparison is made between the aperture depending on the distance and the aperture corresponding to natural light, and a smaller aperture is selected automatically.
M	If the shutter speed has been set to 1/125 sec. or faster, it will switch to 1/100 sec.; if it is slower than 1/100 sec., the set speed will persist.	Aperture which has been set manually.

- The camera will not operate before flash charging is completed.
- The illumination angle of the built-in flash covers a field of view of lenses with a focal length of 35 mm. If you are using a lens with a focal length shorter than 35 mm, the built-in flash cannot provide enough light on the edges of the picture frame. It is recommended, therefore, to use a lens of 35 mm or more.

<Effective Range of the Built-in Flash>

The guide number of the built-in flash is about 12 (ISO 100·m). The guide number and flash effective range vary with the film speed (ISO). Refer to the following table.

Film Speed (ISO)	Guide Number	Flash Effective Range	
		50mm Fl.8	28-70mm F3.5-4.5 (at focal lengths of 35mm)
25	6	Approx. 0.7m-3m	Approx. 0.7m-2 m
50	8	Approx. 0.7m-4m	Approx. 0.7m-2.5m
100	12	Approx. 0.7m-6m	Approx. 0.7m-3.5m
200	16	Approx. 0.7m-6m	Approx. 0.7m-5 m
400	24	Approx. 1 m-6m	Approx. 1 m-6 m
800	33	Approx. 1.5m-6m	Approx. 1.5m-6 m
1600	48	Approx. 2 m-6m	Approx. 2 m-6 m
3200	67	Approx. 3 m-6m	Approx. 3 m-6 m

- The illumination angle of the built-in flash covers the field of view of 35mm lenses. However, because the distance from the lens to the flash is short, the quantity of light may be reduced on part of the picture depending on the type of the lens. In critical situations, therefore, it is recommended to make test exposures beforehand. When taking pictures with the built-in flash, remove the lens hood because the shadow of the hood appears on the picture.

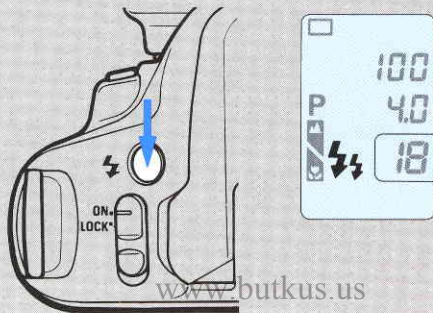
<Red-eye reducing (pre-flash) mode with the built-in flash>

Though rarely, a person's pupils may turn out red (red-eye effect) on the picture when it is taken in dim light.

The red-eye reducing (pre-flash) mode is useful for reducing this red-eye effect.

- If the Flash Button is depressed with the flash head popped up, the red-eye reducing (pre-flash) mode is activated and the mark “” turns on in the Display Panel.

- In this mode, the flash will fire twice at an interval of 0.8 sec. The self-timer LED will blink between the first and second firings, and the shutter will trip when the flash fires for the second time. Take care that the camera or subject does not move after the first firing of flash.
- The red-eye reducing (pre-flash) mode is not effective in the continuous-shooting () and trap focus () modes.
- The camera is reset to the normal-flash mode if the Flash Button is depressed again.



<Fill-in Flash>

In the following cases, you can use flash in bright daylight. By using flash as fill-in light, both the subject and background will turn out beautifully exposed.

- ① When the subject is standing against a bright background, such as a person in front of a window illuminated by sunlight or a slightly backlit person.
- ② When the subject's face is dark in the shade of a tree or illuminated by sunlight filtering through foliage;

Without Flash
Ohne Blitz
Sans éclair
Sin flash



Set the camera to an automatic exposure mode ("P", "Av" or "Tv"), make sure that the mark "⚡" turns on in the viewfinder and depress the Shutter Release. Your picture will be exposed with fill-in flash.

- In an auto exposure mode (P, Av or Tv), the shutter speed is automatically set to 1/100 sec. as soon as the flash is fully charged.

With Flash
Mit Blitz
Avec éclair
Con flash

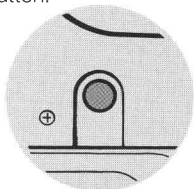


<Slow-shutter Flash Synchronization>

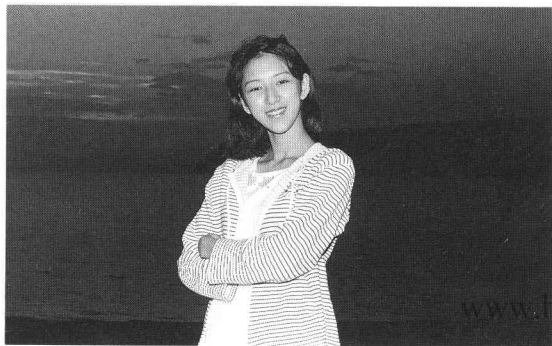
This technique is useful for taking portraits in an atmosphere of a twilight or night scene by firing flash with a slow shutter speed.

For slow-shutter flash synchronization, use the built-in flash or our built-in sensor type automatic flash. The operation is simple with the aid of the AE Lock Button.

Set the camera to an automatic exposure mode ("P", "Av" or "Tv"). Make sure the flash mark "⚡" turns on in the viewfinder, depress the AE Lock Button, hold it there and



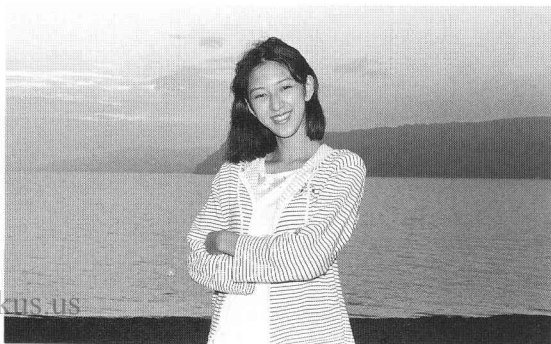
*With normal Flash/Mit gewöhnlichem Blitz
Avec flash normal/Con flash normal*



depress the Shutter Release all the way to take your picture. In an auto exposure mode (P, Av or Tv), the camera will choose a proper shutter speed in the range of 1/100–1/8 sec. in accordance with the brightness in the background when the AE Lock Button is depressed. Because exposure is measured by natural light, you can take pictures in a natural mood.

- Mount the camera on a tripod to prevent camera shake because the shutter speed is slow.
- When using an AF Converter or Auto Extension Ring (optional accessories), set the aperture manually.

*Using the AE Lock/Verwendung der AE-Speicherung
En utilisant le verrou AE/Empleando el bloqueo de AE*



Flash Photography with an External Flash

Though this camera is equipped with a built-in flash, you can also use external flashes (optional accessories) by mounting them on the camera's accessory shoe. However, it is impossible to use the built-in flash and an external flash in combination. It is recommended to use the CS-240 AUTO as an optional flash for this camera. It is a built-in sensor type flash with a guide number of 24. If it is used with this camera, the camera's shutter speed and aperture will be set automatically in an auto exposure mode (P, Av or Tv) so that you can enjoy taking flash pictures by simple operation. If you are shooting in the manual exposure mode (M), caution is required because the aperture cannot be switched automatically. With the CS-240 AUTO, fill-in flash and slow-shutter flash synchronization techniques can be used as in the case of the built-in flash.

- For details, refer to the instruction manual of the CS-240 AUTO.
- If you are using our flash provided with dedicated-flash contacts, excepting the CS-240 AUTO, be sure to set the camera to the manual exposure mode (M). The camera's shutter speed will be automatically set to 1/100 sec. or slower. The aperture should be set manually by following the instructions in the flash manual. Set the mode on the flash to manual or built-in sensor type auto mode.
- If you are using a commercially available flash, set the camera's exposure mode to manual (M) and the shutter speed to 1/100 sec. or slower. Determine the aperture by following the instructions in the flash manual.

- The Contax RTF540 cannot be mounted directly on this camera. Also, the release plug of the special cord for the RTF540 cannot be connected to this camera.
- If you are using the Yashica PRO-50DX, always use dry batteries as its power source. If you operate it with an AC power supply, the camera may cause malfunction.
- Commercially available flash units which apply high voltage to the camera's X-contact cannot be used on this camera. If you are using a commercially available flash unit, make preliminary tests by operating the camera with flash.

Taking Flash Pictures with Our Optional Accessories

If you are taking auto-flash pictures with an AF Converter or AF Extension Tube, caution is required because the distance information from the lens is not correctly transmitted to the camera. Therefore, the aperture cannot be set correctly when pictures are taken in an auto exposure mode (P, Av or Tv). In such cases, do as follows:

- If you are using an AF Converter, the camera will operate in the aperture-priority mode, regardless of the mode you have selected for auto exposure.

As soon as flash charging is completed, the shutter speed will automatically switch to 1/100 sec.

If you are shooting in the manual exposure mode (M), you can use a shutter speed of 1/100 sec. or slower and "blb" (bulb).

Calculate the correct aperture by using the following formula and **set it manually**.

With an AF Converter on the lens, the required aperture is 1.6 times the f-number which is set.

$$\begin{array}{l} \text{F-number set on the lens} \times \\ 1.6 (= \text{Required aperture}) \end{array} = \frac{\text{Guide number}^*}{\text{Subject distance (m)}}$$

* The guide number differs with the ISO speed of the film.
For details, refer to page 114.

- If you are shooting with extension tubes, set the camera to the manual exposure mode (M). The useable shutter speeds are 1/100 sec. or slower and "blb" (bulb). The correct aperture can be calculated with the flash's guide number by using the following formula.

$$\text{Correct aperture} = \frac{\text{Guide number}^*}{\text{Subject distance (m)}}$$

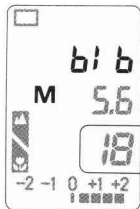
* The guide number differs with the ISO speed of the film. When shooting extreme close-ups, however, exposure compensation is necessary. It is recommended to make test exposures beforehand.

When using the built-in flash, caution is required because flash light may be blocked by the lens' front end.

Bulb Exposure

If you are taking nighttime pictures or stars at night requiring long exposure, use bulb exposure.

Set the exposure mode to "M" and set the shutter speed to "blb" (bulb) on the Display Panel. As long as the Shutter Release is held in depressed position, the shutter will remain open to expose the film.



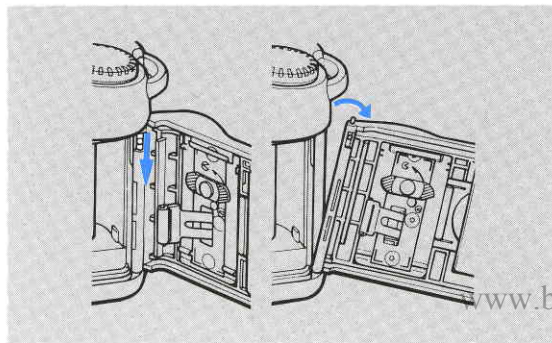
Mount the camera on a tripod or a stable support to prevent camera shake and depress the Shutter Release gently.

- When the camera is set for bulb exposure, do not take pictures in the self-timer/trap focus mode.



Detaching the Camera Back

The Camera Back can be detached and a Data Back DA-5 (optional accessory) can be installed in its place to print the date and time on your picture. The Camera Back is detached by pushing down the disengaging pin.



Data Back DA-5 (Optional)

This data back is a quartz-controlled liquid crystal data back which is installed in place of the standard camera back and interlocked with the camera body. Its auto-dating unit allows you to print the date or time automatically. The Panorama Adapter (attached to the standard Camera Back) can be stored in the Data Back DA-5 as it is in the standard Camera Back.

Date Mode Button

Datierbetriebsarten-Taste

Bouton de mode de date

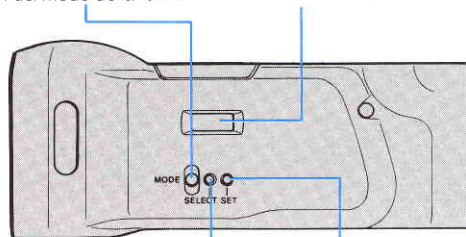
Botón del modo de la fecha

Date Display Window

Datumanzeigefenster

Fenêtre d'affichage de date

Ventanilla del visualizador de la fecha



Date Select Button

Datumwahltaste

Bouton de sélection de date

Botón de selección de la fecha

Date Set Button

Datumeinstelltaste

Bouton de réglage de date

Botón de ajuste de la fecha

<Attaching the Data Back to the Camera>

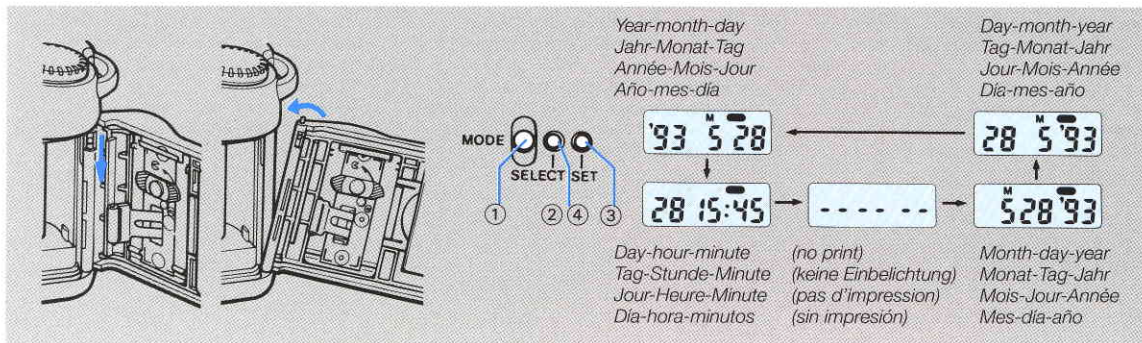
- ① Open the Camera Back and remove it by pushing down the camera back disengaging pin.
- ② Insert the bottom of the mounting lug of the Data Back into the fixing hole in the camera and, while pushing down the disengaging pin, fit the top of the mounting lug into the fixing hole, then release your finger from the engaging pin. Thus, the installation of the Data Back has been completed.

<Printing the Date or Time on your Picture>

Though the data-back battery has been installed before leaving the factory, be sure to reset it correctly in your country.

<Setting or Correcting the Date and Time>

- ① Press in the Date Mode Button to show the number you want to correct.
- ② Press in the Date Select Button to make that number blink.
- ③ Correct the date and time with Date Set Button. (If the colon ":" blinks in the "day-hour-minute" mode, you can set the correct time to 00 seconds. Press in the Date Set Button with a time signal.)
- ④ After setting the correct date or time, press in the Date Select Button until the number stops blinking.



<Printing>

① Choose the Dating Mode

Each time you press in the Date Mode Button, the dating mode will change in the following order: "year-month-day", "day-hour-minute", "-- -- --" (dating off), "month-day-year", and "day-month-year". Set your desired mode with this button.

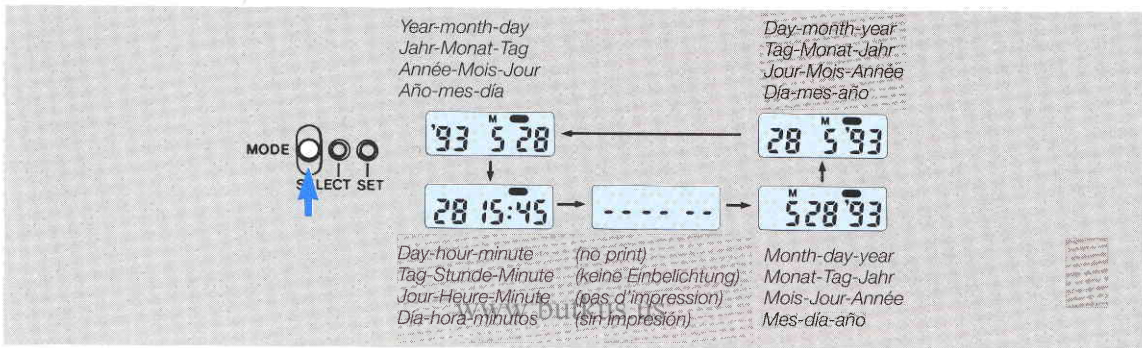
② Depress the Shutter Release to shoot.

The mark "—" above the number on the right side of the display will blink to tell you that the date has been printed on your picture.

- The date or time will be printed on the bottom right of the picture. If there is a white, yellow or other bright colored object in the position where the date is to be printed,

caution is required because the date numbers are not clearly readable.

- If you do not want to print a date or time on your picture, set the dating mode to "-- -- --".
 - The letter "M" above the month number in the display stands for Month. It will not be printed.
 - If you are taking pictures in the panorama mode, no date or time will be printed on your picture.
- If you use the Panorama Adapter to take panorama-format pictures, set the dating mode to "-- -- --" to simplify the printing operation by your photofinisher.



<Changing the Data-back Battery>

The data-back battery is a long life lithium battery (CR2025) which normally lasts about 3 or 4 years. However, if the battery power becomes weaker, the date numbers will appear faint and light on your picture or the liquid crystal display will no longer show correct numbers. In such cases, replace the battery as follows:

① **Detach the Data Back DA-5 from the camera.**

Detach it by pushing down the disengaging pin as shown.

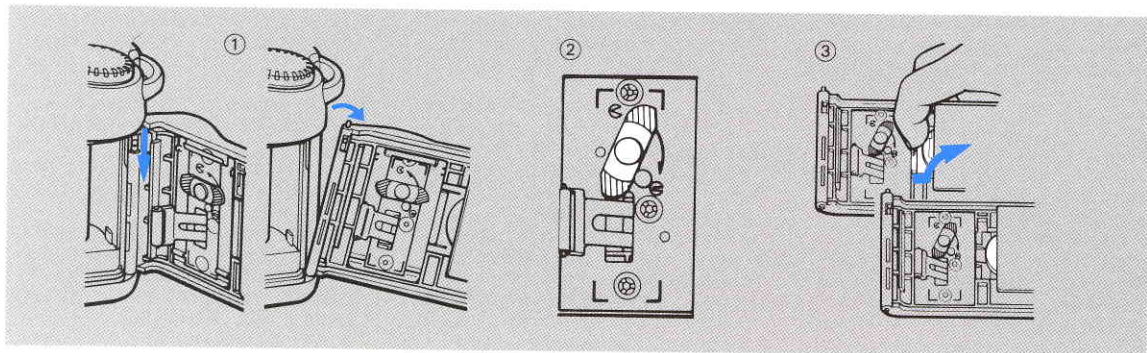
② **Remove the Panorama Adapter.**

Just remove the Panorama Adapter from the Camera Back if it is located in the Camera Back.

③ **Remove the cover of the dating-unit battery.**

Put your fingernail on the cover of the dating-unit battery, lift it up while pushing it in the direction of the arrow as shown, and remove the nail.

Then, pick the battery cover again and detach it.



④ Remove the old battery.

Hold the Data Back and, facing down the side of the Data Back where the panorama adapter storage place is located, tap it several times toward the palm of the other hand. Thus, the battery will come out.

- Do not tap the Data Back too strongly because the dating unit may be damaged.

⑤ Put the new battery with the (+) side up into the battery compartment and replace the cover.

To replace the cover, put it by sliding it down, hold it with your finger, return it and fix it in place.

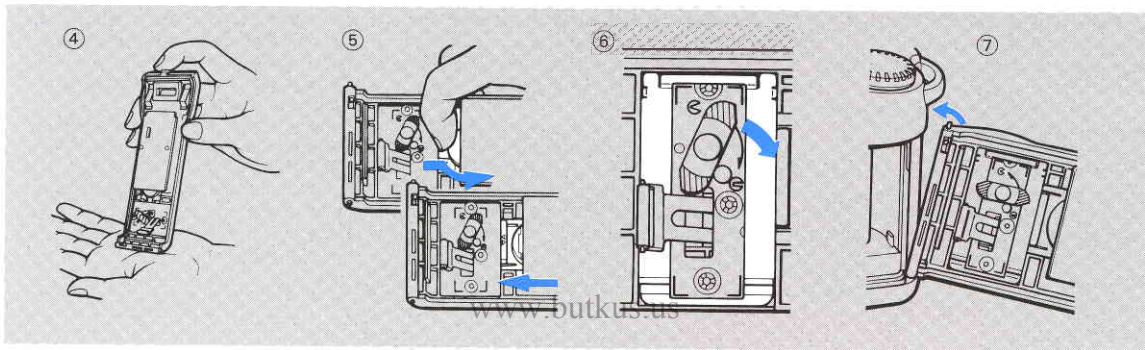
⑥ Store the Panorama Adapter.

If the Panorama Adapter was removed in the above step ②, put it away in the Data Back.

⑦ Install the Data Back on the camera.

Fit the bottom of the mounting lug of the Data Back into the mounting hole in the camera and, while pushing down the disengaging pin, fit the top of the lug into the hole and remove your finger from the disengaging pin.

Thus, the installation of the Data Back has been completed.



Be sure to reset the date and time after changing the dating-unit battery.

Keep the dating-unit battery (CR2025) out of the reach of children. If it is swallowed, consult your physician immediately.

<Main Specification of the Data Back DA-5>

Type: Quartz-controlled liquid crystal display (auto calendar).

Printing: Automatic printing when shutter trips. Dating modes...Year-month-day, day-hour-minute, dating off, month-day-year, day-month-year.

Film Speed: Automatic setting.

Power Source: 3V lithium battery (CR2025).

Dimensions & Weight: 139 (W) × 59 (H) × 16 (D) mm, 51 g (without battery).

Others: Panorama adapter attachable.

** Specification and design are subject to change without notice.*

Nachdem die Batterie der Datenrückwand ausgetauscht wurde, müssen Datum und Zeit neu eingestellt werden.

Halten Sie die Batterie (CR2025) der Datenrückwand von Kindern fern. Sollte sie heruntergeschluckt worden sein, rufen Sie sofort einen Arzt.

<Technische Daten der Datenrückwand Data Back DA-5>

Typ: Quarzgesteuert mit Flüssigkristallanzeige und Automatik-Kalender.

Einbelichtung: Automatische Einbelichtung bei Verschlußauslösung. Einbelichtungsfunktionen: Jahr-Monat-Tag, Tag-Stunde-Minute, keine Einbelichtung, Monat-Tag-Jahr, Tag-Monat-Jahr.

Filmempfindlichkeit: automatische Einstellung

Energiequelle: Lithiumbatterie 3 Volt (CR2025)

Abmessungen und Gewicht: 139 (B) × 59 (H) × 16 (T) mm, 51 g (ohne Batterie).

Sonstiges: Aufbewahrungsmöglichkeit für Panorama-Adapter

** Technische Änderungen vorbehalten*

Camera Care and Precautions

- Do not leave the camera in hot places (on an ocean beach in summer, in a parked car under direct sunlight, etc.) for a long time, because the camera, film and battery may be adversely affected.
- After taking pictures at the seaside or on mountains, clean the camera thoroughly. Salt air will cause corrosion and sand and dust will adversely affect the precision parts inside the camera.
- To remove dust and dirt on the lens and viewfinder eyepiece, use an air blower or a soft lens brush. If they are soiled with fingerprints, wipe off lightly with lens tissue. Remove dust and dirt on the mirror with a lens brush.
- To clean the camera body, wipe off with a soft cloth. Never use organic solvents such as benzine and thinner.
- The lens may be clouded if the camera is brought into a warm room from outside where it is cold. This cloudiness will disappear soon, but it is always good to avoid abrupt temperature changes.
- The camera contains high-voltage circuits. Never try to disassemble it by yourself because it is dangerous.
- **If you are going to use the camera for important events such as an overseas trip or wedding ceremony, be sure to test it beforehand to make sure it functions properly. It is also advisable to bring a spare battery with you.**
- The camera is a precision instrument. Do not drop it down or apply intense shock.
- The liquid crystal display will not appear clear in hot temperature (e.g. on an ocean beach in summer) or cold

temperature (under 0°C), but it will return to normal in ordinary temperature.

<Note on the use of polarizing filters>

When a polarizing filter (linear type) is used on this camera, your picture may be slightly underexposed because of the nature of its light metering system.

If you want to shoot with a polarizing filter, it is recommended to use a circular type polarizing filter.

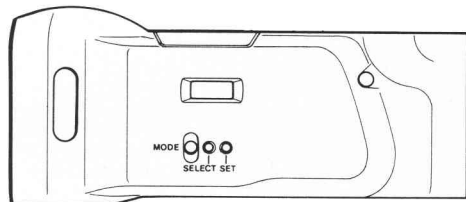
Special Instructions regarding the Use of a Tripod

Because this camera is built compactly, if it is mounted on a tripod with a large-diameter lens such as the AF Power Zoom 28–70mm F3.5–4.5 and 70–210mm F4–5.6 Macro, it may cause malfunction or damage because the lens strikes against the tripod head. In this case, fit a commercially available quick shoe adapter between the camera and tripod.

Remarks on the microcomputer protection circuit

This camera incorporates a safety circuit for protecting it against strong static electricity. Though rarely, the camera may fail to operate when this circuit is activated. In this case, first remove the battery then reload it and operate the camera again.

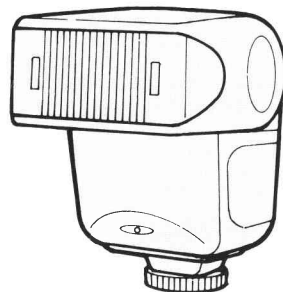
Dedicated Accessories (optional)



<Data Back DA-5>

This quartz-controlled liquid crystal data back can be used in place of the standard Camera Back and operates by coupling with the camera body.

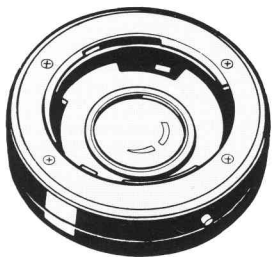
You can choose two printing modes: data and time. Its auto calendar unit enables automatic correction of leap years as well as months having a different number of days up to the year 2019.



<Flash CS-240 AUTO>

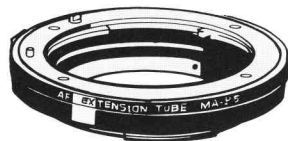
The CS-240 AUTO is a high-performance, built-in sensor type automatic flash developed specially for auto-focus SLR cameras.

It is compact and has a guide number of 24 (ISO 100).



<AF Converter 1.6X>

Attached to a Contax/Yashica mount lens, this teleconverter extends the focal length of the lens by a factor of 1.6 and allows you to take pictures by auto focusing. Because it transmits various lens signals such as auto-diaphragm signal to the camera, you can take sharp pictures without detracting from the excellent optical qualities of the lens.



<AF Extension Tube MA-8.5>

This extension tube for auto-focus SLR cameras is mounted between the camera and lens to enable you to take close-ups of people, flowers, etc. easily by using the camera's auto-focus system.

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<Diopter Lenses, FL Type>

If you are near- or far-sighted and you cannot see the viewfinder image clearly, attach an optional diopter lens (FL type) that suits you to the viewfinder eyepiece.

There are eight diopter lenses:

For near-sighted persons-2D, -3D, -4D, -5D

For far-sighted persons0D, +1D, +2D, +3D

(D: Diopter)

<Okular-Korrektionslinsen Typ FL>

Für Kurz- oder Weitsichtige, die das Sucherbild nicht klar erkennen können, stehen 8 verschiedene Korrektionslinsen Typ FL zur Verfügung, die über das Okular geschoben werden können.

Für Kurzsichtige:-2D, -3D, -4D, -5D

Für Weitsichtige:0D, +1D, +2D, +3D

(D-Dioptrien)

Specifications

Type: 35mm focal-plane shutter, auto-focus SLR camera.

Picture Size: 24 × 36mm

Lens Mount: Yashica AF mount

Shutter: Vertical-travel metal focal-plane shutter.

Shutter Speeds: Auto 8 sec. – 1/2000 sec.,
Manual B, 8 sec. – 1/2000 sec.

Exposure Control: ① Programmed auto exposure (P),

② Aperture-priority auto exposure (Av), ③ Shutter-speed-priority auto exposure (Tv), ④ Manual exposure (M), ⑤ CPU-matic control with built-in flash, ⑥ External flash.

Metering System: TTL center-weighted average light metering.

Metering Range: EV 1 – 20 (ISO 100, F1.8 lens).

Film Speed Setting: Automatic setting for ISO 25 – 5000 (1/3-step) with DX-coded film; the film speed is automatically set to ISO 100 with non-DX film.

Auto-focus System: TTL phase difference detection with CCD sensor module located in lower part of mirror box; shooting distance range selectable; focusing is effected by depressing the shutter release halfway; manual focusing possible; green LED turns on when the subject is in sharp focus; provided with AF supplementary light and moving-object prediction function.

Auto-focus Sensing Range: EV 2 – 19 (ISO 100).

Focusing Modes: Auto-focus, continuous auto-focus, trap focus, manual focus.

Focus Lock: After the subject is sharply focused in the single-frame exposure mode, the focus is locked by depressing the shutter release halfway.

AE Lock: Activated by AE lock button; quantity of light on subject is stored in memory.

Exposure Compensation: +2 EV – –2 EV (1/2-EV step), provided with automatic backlight compensation.

Self-timer: Electronic self-timer with 10 sec. delay; can be stopped after it has started; operation is indicated by self-timer LED and electronic sound.

Flash: Built-in flash; aperture control with distance information.

Guide number: Approx. 12 (ISO 100-m).

Illumination angle: Covers the field of view of 35mm lenses.

Recycle time: Approx. 3 sec. (with new battery, at ordinary temperature; according to Yashica testing standard).

Provided with red-eye reducing pre-flash capability.

The flash mark “” turns on in the viewfinder when the flash is fully charged.

The mark “” blinks (6 Hz) when the subject is not within the flash effective range.

External flashes can be used (but not in combination with the built-in flash).

Viewfinder: Penta-mirror eye-level finder 90% field of view, 0.75X magnification (with 50mm lens at infinity).

Focusing Screen: Matte screen.

Display in Viewfinder: Focusing frame, panorama frame, flash mark (“flash charged” signal, low-light warning), sharp-focus signal, program mark, exposure compensation, exposure indication in manual mode.

Display Panel: Drive mode, exposure mode, shutter speed/film speed, aperture value, shooting distance range, battery warning, exposure counter, flash mode indicator, ISO indicator, exposure compensation, exposure indication in manual mode, lens' focal length (with AF Power Zoom Lens only).

Drive Modes: Single-frame exposure, continuous shooting, self-timer, trap focus.

Film Loading: Auto loading; film advances automatically to frame No. 1.

Film Advance: Automatic with built-in motor; continuous film advance up to approx. 2 frames/sec.

Film Rewinding: Film is automatically rewound at the end of film; automatic stop when rewinding is completed; Mid-roll rewinding possible.

Accessory Shoe: Direct X-contact (with coupling contacts for dedicated flash) (synchronizes at 1/100 sec. or slower).

Camera Back: Can be opened by pushing down camera back lock; detachable camera back; provided with film check window and panorama indicator window; panorama adapter can be installed.

Power Source: One 6V lithium battery (2CR5).

Battery Check: Automatic check (Battery warning mark appears when battery voltage is reduced).

Battery Capacity: About 25 rolls of 24-exposure film can be exposed with 50% flash in AF mode (at ordinary temperature; according to Yashica testing standard).

Others: Contact for data back; provided with panorama adapter.

Dimensions: 148 (W) x 94 (H) x 68 (D) mm.

Weight: 400 g (without battery).

** Specification and design are subject to change without notice.*

To fully utilize the functions and capabilities of this camera, it is recommended to **use the interchangeable lenses and accessories specially designed by us for this camera.** We may not be able to make repair for the damage and troubles that might have occurred when it was used with products of other makers.

Technische Daten

Typ: Autofokus-Spiegelreflexkamera mit Schlitzverschluß für Kleinbildformat

Bildformat: 24 x 36 mm

Objektivanschluss: Yashica AF-Bajonett

Verschluß: vertikal ablaufender Metall-Schlitzverschluß

Verschlußzeiten: automatisch 8 s bis 1/2000 s
manuell 8 s bis 1/2000 s plus "B"

Auslöser: elektromagnetische Auslösung

Belichtungssteuerung: ① Programmautomatik (P),

② Zeitautomatik mit Blendenvorwahl (Av), ③ Blendenautomatik mit Zeitvorwahl (Tv), ④ manuelle Belichtungseinstellung (M),

⑤ Blitzautomatik (CPU-matic) mit eingebautem Blitzgerät,

⑥ Blitzen mit externem Blitzgerät

Belichtungsmessung: mittenbetonte TTL-Integralmessung

Meßbereich: EV 1 bis 20 (bei ISO 100/21° und Lichtstärke 1,8)

Filmempfindlichkeitseinstellung: Automatisch mit DX-codierten Filmen von ISO 25/15° bis ISO 5000/38° in 1/3-Stufen; bei Filmen ohne DX-Code automatisch auf ISO 100/21°.

Autofokus-System: TTL-Phasendifferenzverfahren mit CCD-Sensormodul im Boden des Spiegelkastens;

Fokussierbereichsvorwahl; Aktivierung durch Andrücken des Auslösers; manuelle Fokussierung möglich; grüne LED leuchtet als Schärfestätigung; AF-Hilfslicht; Bewegungserkennungs-Funktion.

Autofokus-Meßbereich: EV 2 bis 19 (für ISO 100/21°)

Fokussierfunktionen: Einzelbild-Autofokus, kontinuierlicher Autofokus, Fokus-Falle, manuelle Fokussierung.

Schärfespeicher: Nach Scharfeinstellung auf das Objekt in Einzelbild-Funktion kann Schärfe durch Andrücken des Auslösers gespeichert werden.

Belichtungsspeicher: Durch Drücken der AE-Speichertaste wird der gemessene Belichtungswert gespeichert.

Belichtungskorrektur: manuell halbstufig von -2 EV bis +2 EV; automatische Gegenlichtkorrektur