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Advanced Techniques

| • Focusing techniques and details | Page 70~80 |
|---|----------------|
| Exposure techniques and details | Page 82~98 |
| Flash photography | Page 98~116 |
| ● Other functions | Page 120 - 124 |

Funktionen für Fortgeschrittene

| Fokussierfunktionen und Details | Seite 71~81 |
|--|-------------|
| Belichtungsarten und Details | Seite 82~98 |
| Blitzfotografie | |
| Sonstige Funktionen | |

Techniques avancées

| • Techniques de mise au point et détai | ls Page 71~81 |
|--|---------------|
| • Techniques d'exposition et détails | |
| Photographie au flash | Page 99~118 |
| Autres fonctions | |

Técnicas avanzadas

| rechicas y detailes de enfoque | Pagina / i ~ o i |
|-------------------------------------|------------------|
| • Técnicas y detalles de exposición | Página 82~99 |
| Fotografía con flash | Página 99~119 |
| Otras funciones | Página 121 ~ 125 |

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.

There are two methods.

<1>Focus lock activated by depressing the Shutter Release halfway

When the drive mode is "\(\sigma\)" (single-frame operation) or "\(\lfoat\)" (trap-focus mode), the focus lock is activated when the Shutter Release is depressed halfway and the subject is sharply focused.

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.

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.





<2>Focus lock using the AF Lock Button

When the drive mode is " $\ensuremath{\square}$ " (continuous shooting), use the AF Lock Button to activate the focus lock.

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

2 If the sharp-focus LED turns on, press the AF Lock Button at the side of the lens. The focus will be locked while the AF Lock Button is held depressed.

• Even if the auto-focus is still operating, the focus can be locked in that position with the aid of the AF Lock Button and the shutter can then be tripped anytime by depressing the Shutter Release all the way.

<2> Fokusspeicher mit AF-Speichertaste

Wenn Sie mit Serienbildbelichtung " " ' ' ' ' ' fotografieren, benutzen Sie die AF-Speichertaste, um die gewünschte Entfernungseinstellung festzuhalten.

1 Visieren Sie mit der Fokuszone Ihr Motiv an und drücken Sie den Auslöser halb herunter. Das Objektiv stellt sich auf das Motiv scharf und die grüne Fokus-Bestätigungs-LED leuchtet nach erfolgter Fokussierung auf.

Wenn die grüne Fokus-Bestätigungs-LED leuchtet, drücken Sie die AF-Speichertaste an der Seite des Objektivs. Die Entfernung wird bis zum Loslassen gespeichert.

 Selbst wenn sich der Autofokus noch bewegt, läßt sich eine Position mit Hilfe der AF-Speichertaste festhalten. Dann kann die Kamera jederzeit

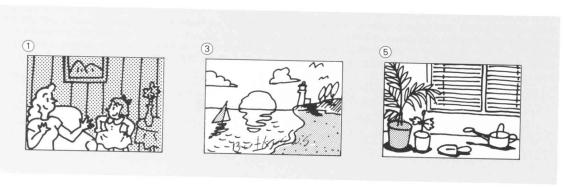
ausgelöst werden.

< 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;
- 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.



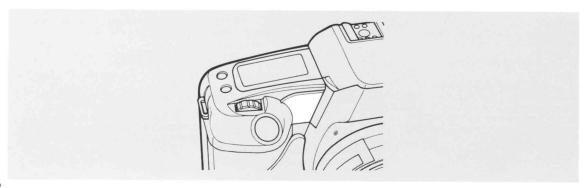
AF Supplementary Light

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-rellectivity 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.



Focusing Screen

The focusing screen has a focusing frame for focusing the subject with the auto-focus.

The camera's standard focusing screen is a matte screen. In addition, three focusing screens are available as optional accessories: matte screen for the Data Back, sectionned matte screen, and horizontal splitimage/microprism collar screen. Change screens as required.

Advanced-autofocus Function

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

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 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 FI.8 lens, the camera will display "1.7"; if you are using an F3.3 lens, it will display "3.5".

- In the manual exposure and shutter-speed-priority auto exposure modes, the shutter speeds can be set in 1-step increments, and the aperture in 1/2-step increments.
 Intermediate setting is impossible.
- In the shutter-speed-priority auto exposure mode or manual exposure mode, a shutter speed of 1/90 sec. can also be set. in addition.

| Shutter Speed Verschlußzeitanzeige Vitesse d'obturation Velocidad del obturador | | | Aperture Blendenanzeige Diaphragme Abertura, | |
|--|--------|---|---|-----------------------------|
| PROGR | RAM/Av | Tv/M | All exposure mit allen Belich Tous les modes Todos los modos | ntungsarten d'exposition |
| 2000 | 1400 | 2000 | 64 | F.4 |
| 1000 | | 1000 | 45 | 54 |
| 500 | 700 | 500 | 32 | 38 |
| 250 | 350 | 250 | 22 | 27 |
| 125 | 180 | 125 | 16 | 19 |
| 60 | 90 | 90 | 11 | 13 |
| 30 | 45 | 60 | 8.0 | 9.5 |
| 15 | 20 | 30 | 5.6 | 6.5 |
| 8 | 10 | 15 | 4.0 | 4.5 |
| 4 | 6 | 8 | | 3.5 |
| | 3 | | 2.8 | 2.4 |
| 2 | 0.7'' | 4 | 2.0 | 1.7 |
| 1'' | 1.5'' | 2 | 1.4 | |
| 2'' | 3'' | 1'' | | |
| 4'' | 6'' | 2" | | |
| 8'' | 0 | 4'' | | |
| | | 8" | | |
| | | bulb* bulb* Exposition prolongée* Pose* | | |

*For "M" mode only/*nur in M-Funktion/*Pour le mode "M" seulement/*Sólo para modo "M"

Programmed Automatic Control/Program Shift

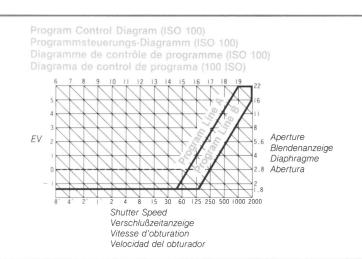
This control diagram shows the control range of shutter speeds and apertures in relation to the EV values in the programmed auto exposure mode.

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.



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

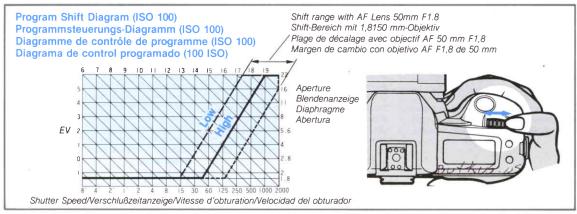
Line B: For lenses with focal lengths of 86mm or longer.

● 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, slide the Operating Lever to the right for "High", and to the left for "Low". Suppose, for example, that the correct exposure is F4, 1/125 sec. If you want to stop down the aperture to shoot, slide the Operating Lever toward "Low" so that the exposure is shifted to F5.6, 1/60 sec. Thus, you can select your desired shutter speed or aperture without changing the EV value.

- The program mark will blink in the viewfinder when program shift is effected. It will blink quickly when the program is shifted to "High" and slowly when it is shifted to "Low". The shifted shutter speed and aperture will be displayed in the Display Panel.
- After shooting with the shift function, be sure to clear it by sliding back the Operating Lever in the opposite direction. It can also be cleared by depressing the Program Reset Button or setting the Main Switch to "LOCK".



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.

Automatische Korrektur der eingestellten Werte

Wenn Sie mit Blendenautomatik und

Verschlußzeitenvorwahl fotografieren und die vorgewählte Verschlußzeit beim Blendenbereich des Objektivs für eine richtige Belichtung nicht ausreicht, wird die Verschlußzeit 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 Verschlußzeiten der Kamera erlaubt. Dann wird die Blende automatisch geöffnet oder geschlossen.

Exposure Compensation

If there is a great difference in brightness between the subject and its background, the subject will not be correctly exposed. In this case, use exposure compensation.

Exposure compensation can also be used for intentional over- and underexposure. There are two methods.

<1>Using the Exposure Compensation Button

Normally, the camera is set for normal exposure (without compensation). However, you can make exposure compensation in 1/2-EV steps up to ± 2 EV by using the Exposure Compensation Button.

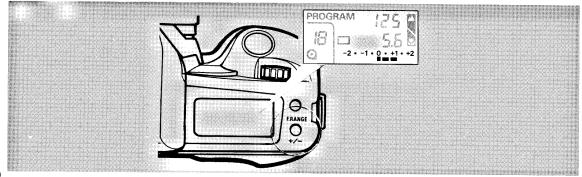
Set your desired compensating value so that it is displayed in the Display Panel.

① Each time the Exposure Compensation Button is depressed, the compensating value will change in 0.5-step increments as follows:

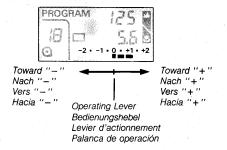
(Returns to the initial value)

$$0 \rightarrow +0.5 \rightarrow +1.0 \rightarrow +1.5 \rightarrow +2.0$$

$$-2.0 \leftarrow -1.5 \leftarrow -1.0 \leftarrow -0.5 \leftarrow$$



- ② You can also set the compensating value by sliding the Operating Lever while holding the Exposure Compensation Button depressed. The compensating value will change by 0.5 step by operating the Operating Lever each time.
- No compensating value is displayed in the Display Panel when the compensating value is "0" (without compensation).
- After taking pictures with exposure compensation, be sure to reset the compensating value to "0".
- The compensating value is also reset to "0" by depressing the Program Reset Button or setting the Main Switch to "LOCK".



(By depressing the Exposure Compensation Button) (Bei gedrücter Belichtungskorrekturtaste) (En appuyant sur le bouton de compensation d'exposition) (Presionando el botón de compensación de exposición)

< For backlighted 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 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.







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<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.

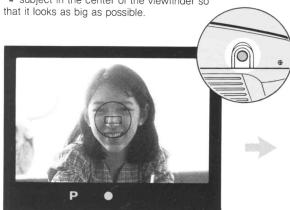
First, compose your picture and frame the main subject in the center of the viewfinder so

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.





Automatic Backlight Compensation

When there is a backlighted 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 backlighted to prevent it from being underexposed.

Flash Photography

If the subject is dimly lighted, use flash to prevent camera shake.

You can also use flash in daylight if the main subject is dark in backlight.

For flash photography, not only the camera's built-in flash, but also some optional external flashes can be used.

Automatische Gegenlicht-Korrektur

Wenn sich das Hauptmotiv im Gegenlicht in der Bildfeldmitte befindet, würde es normalerweise wegen des hellen Hintergrundes unterbelichtet.

In diesem Fall korrigiert die Kamera die Belichtung automatisch und sorgt für eine ausgewogene Belichtung.

Blitzfotografie

Wenn das Motiv nur schwach beleuchtet ist, sollten Sie einen Blitz verwenden, um Verwackeln zu vermeiden. Sie können Blitz auch bei Tageslicht zur Aufhellung von Schatten einsetzen.

Blitzfotografie ist nicht nur mit dem eingebauten Blitz, sondern auch mit externen Blitzgeräten möglich.

Using the Built-in Flash

The built-in flash allows you to take automatic flash pictures on the CPU-matic method. In automatic flash photography based on the CPU-matic method, the aperture is automatically adjusted according to the shooting distance. When shooting against a dark background or using the flash as fill-in light, too, exposure is controlled by the CPU to provide correct exposure.

<Using the built-in flash>

1 Set the Main Switch to "ON", then put your fingers on the Flash Knob on both sides of the flash head and push them up. When the flash is set to the shooting position, its charging operation will start.

• The flash cannot be recharged when the shutter speed and aperture do not appear in the Display Panel. In this

case, first depress the Shutter Release halfway to show them in the Panel.

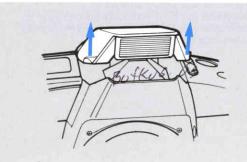
2 As soon as the flash is fully charged, the flash mark " in the viewfinder will turn on.

3 After making sure the flash mark "\$ " turns on, depress the Shutter Release to shoot.

• If the flash mark does not turn on, the shutter will not trip when you depress the Shutter Release.

• If the flash mark blinks, your subject is outside the flash range. Change the shooting distance so that the flash mark turns on with steady light. If the subject is too far, use an external flash that can emit a large quantity of light.

• If you do not take your flash picture immediately after the flash is fully charged, depress the Shutter Release halfway before you shoot to make sure that the mark " 4 " turns on.





 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 |
|---------|--|---|
| PROGRAM | Automatically set to 1/90 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 1/90 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 1/90 sec. or faster, it will switch to 1/90 sec.; if it is slower than 1/90 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. |
| М | If the shutter speed has been set to 1/90 sec. or faster, it will switch to 1/90 sec.; if it is slower than 1/90 sec., the set speed will persist. | Aperture which has been set manually. |
| | | |

 Nach völligem Aufladen des Blitzes können Zeit und Blende der Kamera eingestellt werden. Die Einstellmöglichkeiten bei den Belichtungsarten ergeben sich wie folgt:

| | Verschlußzeit | Blende |
|---------|--|---|
| PROGRAM | automatisch 1/90s | Die von Entfernung und Umgebungshelligkeit abhängigen Blendenwerte werden verglichen, der kleinere wird automatisch eingestellt. |
| Av | automatisch 1/90s | Die von Entfernung und Umgebungshelligkeit abhängigen Blendenwerte werden verglichen, der kleinere wird automatisch eingestellt. |
| Tv | manuell, bei 1/90s oder kürzer mit 1/90s, sonst wie eingestellt | Die von Entfernung und Umgebungshelligkeit abhängigen Blendenwerte werden verglichen, der kleinere wird automatisch eingestellt. |
| М | manuell, bei 1/90s oder kürzer mit 1/90s, sonst wie eingestellt | manuell |
| | | |

- The camera will not operate before flash charging is completed.
- The illiumination 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.
- * After taking flash pictures, push down the Flash Head.
- When shooting with an AF Converter or AF Extension Tube, set the aperture manually. (For details, refer to page 116).

< Guide Number>

The guide number differs with the ISO speed of the film you are using. Refer to the following table.

< Leitzahl >

Die Leitzahl hängt von der Empfindlichkeit des verwendeten Films ab, wie in der folgenden Tabelle angegeben:

< Nombre guide >

Le nombre guide diffère en fonction de la sensibilité ISO du film utilisé. Reportez-vous au tableau suivant :

< Número guía >

El número guía difiere con la sensibilidad ISO de la película que está usando. Consulte la siguiente tabla.

| ISO | Guide Number Leitzahl Nombre guide Número guía |
|------|---|
| 25 | 5.5 |
| 50 | 7.7 |
| 100 | 11 |
| 200 | 15 |
| 400 | 22 |
| 800 | 31 |
| 1600 | 44 |
| 3200 | 62 |

< Effective Range of the Built-in Flash >

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

< Arbeitsbereich des eingebauten Blitzes >

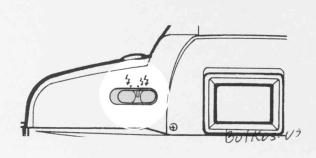
| Filme- mpfind- lichkeit- (ISO) | Arbeitsbereich | | |
|---|----------------|--|--|
| | 1,8/50mm | 3,5—4,5/28—70mm (bei Brennweiten von 35mm) | |
| 25 | ca. 0.7m-3m | ca. 0,7m-2 m | |
| 50 | ca. 0,7m-4m | ca. 0,7m—2.5m | |
| 100 | ca. 0,7m-6m | ca. 0.7m—3.5m | |
| 200 | ca. 0,7m-6m | ca. 0,7m—5 m | |
| 400 | ca. 1 m-6m | ca. 1 m—6 m | |
| 800 | ca. 1,5m-6m | ca. 1,5m—6 m | |
| 1600 | ca. 2 m-6m | ca. 2 m—6 m | |
| 3200 | ca. 3 m-6m | ca. 3 m—6 m | |

< Pre-flash Mode with the Built-in Flash >

Though rarely, a person's pupils may turn out red on the picture when it is taken in dim light (red-eye effect). The pre-flash mode is useful for reducing this effect. First, set the Pre-flash Switch to " # ".

• In this mode, the flash will fire twice at an interval of approximately a second. After the first firing (pre-flash), the Self-timer LED will blink until the flash fires for the second time. Because the shutter trips when it fires for the second time, take care not to move the camera or that the subject does not move after the first firing of flash.

- After the flash has fired for the first time in the continuous-shooting mode, the focus remains locked until it fires for the second time. Caution is required when shooting a moving object.
- The pre-flash function does not operate in the trap focus mode " ♠", even if the Pre-flash Switch is set to " ♣ "



< Fill-in Flash >

In the following cases, use flash as fill-in light. Both the subject and background will turn out perfectly 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 backlighted person.
- ② When the subject's face is dark in the shade of a tree or illuminated by sunlight filtering through foliage;

• As soon as the flash is fully charged, the shutter speed in an auto exposure mode (PROGRAM, Av or Tv) will be automatically set to 1/90 sec. for normal photography. The exposure warning LED may blink when you take your picture with fill-in flash.

In this case, do not use flash. Take your picture in a usual way without flash.

Without Flash Ohne Blitz Sans éclair Sin flash



With Flash Mit Blitz Avec éclair



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< 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. Procedure:

With normal Flash Mit gewöhnichem Blitz Avec flash normal Con flash normal



Make sure the flash mark " \$ " turns on in the viewfinder, depress the AE Lock Button, hold it there and depress the Shutter Release all the way to take your picture. In an auto exposure mode (PROGRAM, Av or Tv), the camera will choose a proper shutter speed in the range of 1/90—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.

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



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 (PROGRAM, 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 1/90 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 1/90 sec. or slower. Determine the aperture by following the instructions in the flash manual
- The optional CONTAX RTF540 flash cannot be directly mounted on the camera. Also, do not connect the release plug of the RTF540 flash's cord to the camera. Malfunction may result if you do.
- Use dry batteries as the power source of the electronic flash when using the YASHICA PRO-50 DX which is sold separately. If you use AC power, it may cause malfunction of the camera.
- Some marketed general electronic flash which apply a high voltage to the X-connection point cannot be used for this camera. Perform a camera operation test by flashing before taking a picture when using 114 a marketed general electronic flash for this camera.

Fotografieren mit externem Blitz

Obwohl diese Kamera mit eingebautem Blitz ausgestattet ist, können Sie auch externe Blitzgeräte einsetzen (als Zubehör erhältlich), in dem Sie sie in den Zubehörschuh schieben. Es können aber interner und externer Blitz nicht zugleich eingesetzt werden. Für die diese Kamera empfiehlt sich besonders der CS-240 AUTO als Ergänzung. Es ist ein Gerät mit Sensor-Messung und Leitzahl 24. Bei Verwendung zusammen mit diese Kamera Belichtungsautomatik (PROGRAM, Av, Tv) werden Verschlußzeit und Blende automatisch eingestellt, was die Blitzfotografie sicher und komfortabel macht. Wenn Sie mit manueller Belichtungseinstellung (M) fotografieren, müssen Sie beachten, daß die Blende nicht automatisch bestimmt wird. Mit dem CS-240 AUTO können Aufhellblitz und Langzeit-Synchronisation wie mit dem eingebautem Blitz genutzt werden.

- Einzelheiten entnehmen Sie bitte der Bedienungsanleitung zum CS-240 AUTO.
- Wenn Sie ein anderes Blitzgerät mit System-Blitzkontakten als das CS-240 AUTO verwenden, vergewissern Sie sich, daßdie Kamera auf manuelle Belichtung (M) geschaltet ist. Längere Verschlußzeiten der Kamera werden automatisch auf 1/90s gestellt, längere wie vorgewählt gesteuert. Für die manuelle Blendenwahl beachten Sie bitte die Angaben in der Blitz-Bedienungsanleitung. Stellen Sie die Betriebsart am Blitz auf manuell oder Sensor- Automatik-Funktion.
- Wenn Sie normale, handelsübliche Blitzgeräte verwenden, stellen Sie die Belichtungsfunktion der Kamera auf manuell (M) und die Verschlußzeit auf 1/90s oder länger. Stellen Sie die Blende entsprechend der Blitz-Bedienungsanleitung ein.
- Der als Sonderzubehör erhältliche CONTAX-Blitz RTF540 kann nicht direkt an der Kamera befestigt werden. Achten Sie auch darauf, das Auslöserkabel des Blitzes RTF540 nicht an die Kamera anzuschließen, da dies eine Funktionsstörung verursachen kann.
- Verwenden Sie Trockenbatterien als Stromquelle für das Blitzgerät YASHICA PRO-50DX (Sonderzubehör). Die Verwendung von Netzstrom kann zu Funktionsstörungen der Kamera führen.

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• Einige handelsübliche Blitzgeräten geben hohe Spannung an den X-Kontakt ab und können mit dieser Kamera nicht verwendet werden. Lösen Sie zur Überprüfung der Kamerafunktion einen Testblitz aus, bevor Sie ein handelsübliches Blitzgerät an diese Kamera anschließen.

www.orphancameras.com

Taking Pictures with the Built-in Flash Using 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 (PROGRAM, Tv or Av). 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 1/90 sec.

If you are shooting in the manual exposure mode (M), you can use a shutter speed of 1/90 sec. or slower and "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.

F-number set on the lens x 1.6 (= Required aperture) = $\frac{\text{Guide number*}}{\text{Subject distance (m)}}$

* The guide number differs with the ISO speed of the film. For details, refer to page 104.

• If you are shooting with extension tubes, set the camera to the manual exposure mode (M). The useable shutter speeds are 1/90 sec. or slower and "bulb". The correct aperture can be calculated with the flash's guide number by using the following formula.

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

* The guide number differs with the ISO speed of the film. For datails, refer to page 104.

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.

Using the Self-timer

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

■ Mount the camera on a tripod.

2 Depress the Drive Mode Button to show " $\ensuremath{\mathfrak{G}}$ " on the Display Panel.

The self-timer cannot be used during bulb exposure.

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.

• To stop the self-timer after it has started, set the Main Switch at "LOCK".

• When taking pictures with the self-timer in an auto exposure mode (PROGRAM, Tv or Av), extraneous light entering through the viewfinder may affect the exposure. Because this camera is designed to detarmine 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.

• If you want to use flash (built-in flash or optional external flash) when taking picture with the self-timer, always make sure the flash is fully charged before you shoot. If you are using an optional external flash in particular, caution is required because the self-timer will stop running when the flash has just been fully charged while the self-timer is operating.

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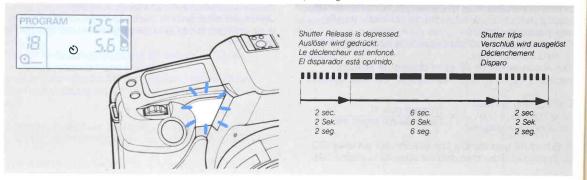
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Bulb Exposure

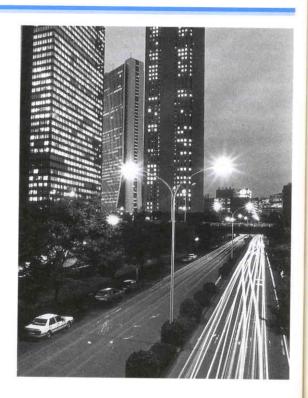
If you are taking nighttime pictures or pictures of stars or the sky at night, use bulb exposure.

Set the exposure mode to "M" and set the shutter speed to "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 trip the shutter with the Cable Switch L (optional accessory) connected to the camera's Release Socket.

- The exposure counter will indicate the time in seconds that has passed during bulb exposure. It will count from "0" to "59" (seconds) and repeat this cycle.
- When the camera is set to "bulb", do not take pictures in the trap focus mode or with the self-timer.



Changing the Camera Back

To print the date or time on your picture, detach the Camera Back and attach the Data Back DA-1 or DA-2 (optional accessory) in place.

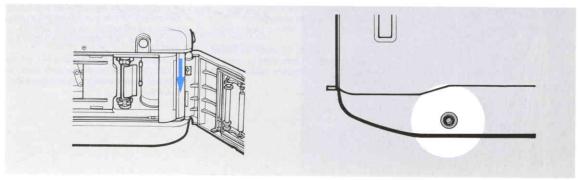
The Camera Back can be detached by pushing down the disengaging pin.

Release Socket

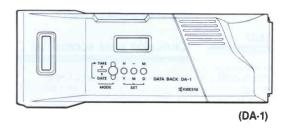
The Release Socket is a contact for connecting the Cable Switch L or Auto Bellows, It transmits electric signals from these accessories to operate the shutter.

When taking pictures with these accessories in an auto exposure mode, the shutter will trip as soon as the lens is focused on the subject. If you want to trip the shutter at the moment you like, take pictures in the manual-focus mode by switch the AF/MF Selector to "MF"

• Do not connect an ordinary, commercially available cable release to this Release Socket because malfunction may result.



Dedicated Accessories (optional)





< Data Back DA-1/DA-2>

This quartz-controlled liquid crystal data back can be used in place of the standard Data 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).



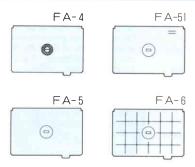


<AF Converter 1.6X>

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.



< 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:

< Focusing Screens, FA Type>

FA-4, FA-5, FA-6 and FA-51

There are four focusing screens. In addition to the standard matte screen (FA-5), three optional focusing screens are available: matte screen for Data Back (FA-51), sectioned matte screen (FA-6), and horizontal splitimage/microprism collar screen (FA-4). Change these screens depending on your shooting object

and the lens used.

Specifications

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

Picture Size: 24 × 36 mm Lens Mount: Yashica AF mount.

Shutter: Vertical-travel metal focal-plane shutter.

Manual B, 8 sec.—1/2000 sec.

Shutter Release: Electromagnetic release, provided with special release socket.

Exposure Control:

1) Programmed auto exposure (PROGRAM).

(2) Aperture-priority auto exposure (Av).

3 Shutter-speed-priority auto exposure (Tv), (4) Manual exposure,

(5) CPU flash 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 with DX-coded film, ISO 25-5000 (1/3-step); 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: focusing range limited by focusing range selector; 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 advanced-autofocus function. Auto-focus Sensing Range: EV 2—19 (ISO 100).

Focusing Modes: Auto-focus, continuous auto-focus, trap focus, Manual focus (MF).

Focus Lock: Activated by the AF Lock button. The focus is also locked by depressing shutter release halfway in the single-frame mode, after the subject is sharply focused.

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 steps) with automatic backlight compensation.

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

Flash: Built-in flash, aperture control with distance information:

guide number: 11 (ISO 100/m);

illumination angle: covers the field of view of 35 mm lenses:

charging time: approximately 2.5 sec. (at normal temperature using a new battery; according to our testing standards):

pre-flash capability for reducing red-eye effect.

- Flash mark " 4" turns on in the viewfinder when flash is fully charged.
- Flash mark " 4 " blinks when the subject is not within flash effective range. External flash can also be used (but not with built-in flash).

Viewfinder: Pentaprism eye-level finder, 95% field of view, 0.82X magnification (with 50 mm lens at infinity).

Focusing Screen: Standard matte screen with focusing frame, interchangeable screens available.

132

Display in Viewfinder: Focusing frame; sharp focus LED (green LED); Program mark; flash mark; exposure warning LED (red).

Display Panel: Exposure mode, shutter speed/film speed, aperture, focusing range indicator, exposure compensation, battery warning mark, exposure counter, film advance/redification.

♦ , ♠), ISO indicator.

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

Film Advance: Automatic with built-in motor.

Film Rewinding: Automatic with built-in motor; automatic stop when rewinding is completed; film can be rewound in mid-roll.

Exposure Counter: Automatic resetting, additive type. **Accessory Shoe:** Direct X-contact hot-shoe (with dedicated flash contacts); synchronizes at 1/90 sec. or slower

Drive Mode: Single-frame, continuous shooting, self-timer, and trap-focus modes can be selected;

continuous shooting up to about 1.8 frames/sec.

Camera Back: Can be opened by pushing down camera back lock; detachable; provided with film check window.

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

Battery Check: Automatic check; battery warning mark shows when battery voltage is reduced.

Battery Capacity: About 25 rolls of 24-exposure film can be exposed in AF mode (50% with flash) at ordinary temperature—according to our testing standards. **Obters:** Contact for data back

* Specifications 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.