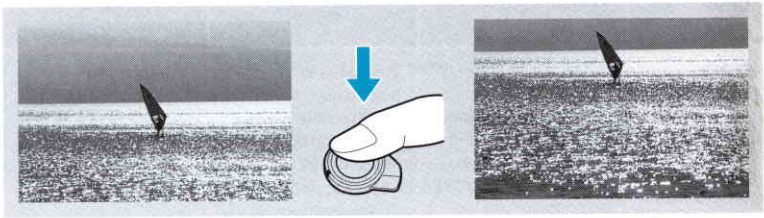
<Focus lock>

If the subject is not within a focusing frame with the desired composition, use the procedure described below to lock the focus on that subject.



❖ In the "SAF" (single auto focus) mode

1 Point the camera at the subject on which you want to focus, position the subject within a focusing frame, then half-press the shutter button.

The focus is adjusted automatically. When the subject is in focus, the focus mark ("○") lights in the viewfinder and the focus is locked at that position.

2 Still half-pressing the shutter button, position the camera to achieve the desired composition, then press the shutter button all the way in to take the picture.

- The focus is locked as long as the shutter button is half-pressed, so it does not change when the camera is repositioned.
- The focus lock is canceled when you release your finger from the shutter button.

◆ In the "CAF" (continuous auto focus) mode

1 Point the camera at the subject on which you want to focus, position the subject within the focusing frame, then half-press the shutter button.

The focus is adjusted continuously while the shutter button is half-pressed.

2 Check that the focus mark in the viewfinder is lit, then press the focus button.

The focus is locked when the focus button is pressed.

3 Still pressing the focus button, position the camera to achieve the desired composition, then press the shutter button all the way in to take the picture.

• The focus is locked as long as the focus button is pressed.

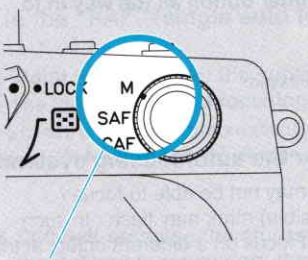
<Subjects that may cause problems for the autofocusing system>

For the subjects described below, the camera may not be able to focus automatically and the "▷ ◁" (focusing not possible) mark may flash. In such cases, either use the focus lock function to first focus on a different object at the same distance as the subject or adjust the focus in the manual focus mode.

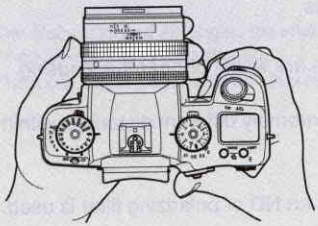
① Extremely bright or extremely dark subjects.
② Subjects which have little or no contrast.
③ When the sun or other strong light sources are within or near the focusing frame.
④ When there are two or more subjects at extremely different distances within the focusing frames.
⑤ Subjects with repeating patterns.
⑥ When the ambient light level is very low or an ND or polarizing filter is used.

Picture is in focus.

Picture is not in focus.



Focus dial



<Adjusting the focus>

Set the focus dial to "M".

Adjust the focus by turning the lens' focus ring manually.

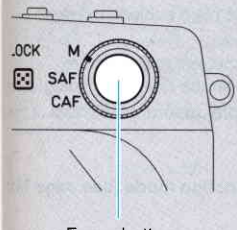
This camera is equipped with an FX-2 focusing screen as standard (full screen matte).
The image on the matte surface is clearly visible when the subject is in focus, blurry when subject is out of focus.

- If the manual focus mode is set, the selection of focus frame will be "Manual select mode".

In the manual focus mode, the focus indicators in the viewfinder show the result of measuring the distance to the subject within the selected focusing frame.

"▷" flashing: The camera is focused at a point further than the subject (focus far).
"○" lit: The subject is in focus.
"◁" flashing: The camera is focused at a point closer than the subject (focus near).

- When the object in the selected focusing frame is in focus, the focusing frame lights red.
- The focusing frame can be changed to suit the shooting purposes or applications. For details, see page 93.



Focus button

<One shot auto focus>

The autofocus mechanism can be used while in the manual focus mode. To do so, press the focus button. The camera adjusts the focus automatically while the focus button is pressed, and when the subject is in focus the focus is locked at that position.
Use this function for taking individual shots with the auto focus mechanism while using the camera in the manual focus mode.

4. Taking photos with the focus shifted in three different steps (Focus ABC mode)

This function allows to you to make three photographs in a series with focus shifted in each frame. The shift is from selected focus to closer to further away from the selected focusing distance. Use the Focus ABC when you are trying to achieve subtle differences in focusing effects.

For the first frame, focus manually. The camera adjusts the focus automatically for the second (focus near) and third (focus far) frames. Readjust the focus for the first frame each time you use the Focus ABC mode.

* ABC: Automatic Bracketing Control

<Amount of shift of the focus>

① The focus shifts by an extremely small amount, so the effects achieved when using this mode may not be apparent with general photography or when photographing with smaller apertures.

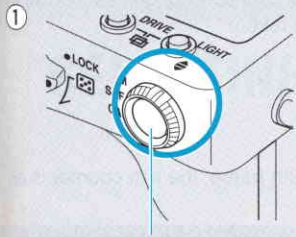
② The focus shifts by an amount equivalent to the depth of field at the maximum aperture of the mounted lens.

③ The effect achieved by shifting the focus depends on the lens being used, the shooting distance and the aperture. In general:

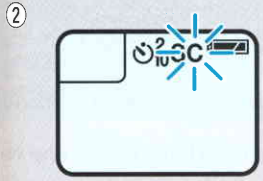
- The longer the shooting distance, the less apparent the effect on the resulting photographs.
- The smaller the aperture, the less apparent the effect on the resulting photographs.
- The greater the percentage of the picture occupied by the main subject, the less apparent the effect on the resulting photographs.
- The smaller the distance between the main subject and the rest of the picture (background or foreground), the less apparent the effect on the resulting photographs.
- The more the resulting photographs are enlarged, the more apparent the effect of the shifted focus.

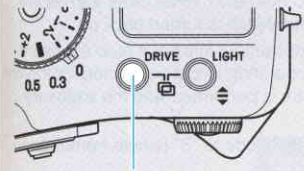
The following can be done by changing the custom function mode (see page 74):

- The amount of shift of the focus can be doubled.
- The first frame can be focused in the "SAF" mode.
- The third frame in the series can be cancelled.

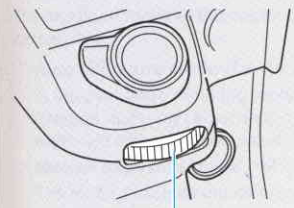


Focus dial





Drive mode button



Electronic dial

1 Set the focus dial to "▲▼" to set the Focus ABC mode. Set the focus mode to manual.

2 Set the drive mode to "C" (continuous shooting).

- For instructions on setting the drive mode, see page 23.

3 Focus on the subject, then press and hold in the shutter button.

The camera automatically takes three frames: standard (focus position), focus near and focus far, in that order. When the drive mode is set to "S", the camera is set to the Focus ABC mode for single frame shooting.
When the drive mode is set to "$\overset{2}{\circlearrowleft}$" or "$\overset{10}{\circlearrowleft}$", the camera is set to the Focus ABC mode with a delay of 2 or 10 seconds prior to actual exposure after the shutter release button is pressed.

- When "Focus Far Off" is set for the custom function (see page 75), shooting stops after the second frame.

When shooting in the Focus ABC mode, the film counter changes as follows to indicate the order in which the photos are being taken:

Standard : Both digits flashing
Focus near : Only left digit flashing
Focus far : Only right digit flashing

For example, if the Focus ABC is used at the 18th frame, the film counter is as follows:

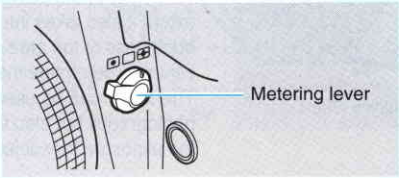
	1st frame	2nd frame	3rd frame	4th frame (repeated)
Focus position	Standard	Focus near	Focus far	Standard
Counter				
Display	Both left and right flashing	Left flashing	Right flashing	Both left and right flashing

- To cancel in the middle of the operation, set the Focus ABC dial to any position other than "⇕".
- If the main switch is turned off during the Focus ABC operation, three more frames are taken in order in the Focus ABC mode when the main switch is turned back on.
- When used together with the Exposure ABC mode (3-frame continuous auto exposure compensation mode, page 50), the Exposure ABC operation is first performed for the first frame (focus position), then the Focus ABC procedure is performed with the exposure value set for the first frame.
- To use a flash with the Focus ABC mode, set the drive mode to "S" (single frame) and check that the flash is charged before shooting.
- This mode cannot be used when a Contax 645 lens is mounted using the mount adapter.

SELECTING THE METERING MODE

This camera is equipped with three metering modes: evaluative metering, average metering and spot metering. The mode is selected with the metering lever.

To achieve highly effective photos with higher precision, read "Types of metering modes and their features" on the next page carefully and select the metering mode according to the shooting conditions and your desire to achieve a certain exposure effect.



<Exposure meter>

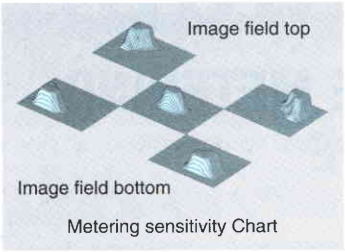
The exposure meter in the viewfinder indicates the following according to the exposure modes:

① **Auto exposure mode (Tv, Av or P mode):**
In the evaluative metering mode, the meter indicates the difference with the average metering value. In the average and spot metering modes it indicates the exposure compensation value.

② **Manual exposure mode ("M") and flash photography mode ("X"):**
The meter indicates the difference between the manual exposure setting and the camera-recommended autoexposure setting.

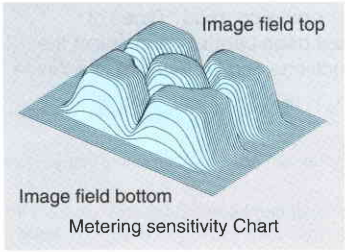
③ **Bulb mode:** Not displayed.

1. Types of metering modes and their features



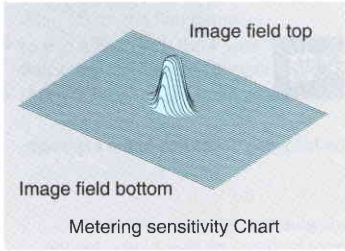
<Evaluative metering (" ⊞ " mark)>

With evaluative metering, the picture is divided into five sections, as illustrated. The autoexposure system calculates the appropriate exposure based on an analysis of subject conditions and positioning. Because of this, evaluative metering can be used not only for general photography but also when the subject is lit from behind, with virtually no exposure compensation or adjustment required.



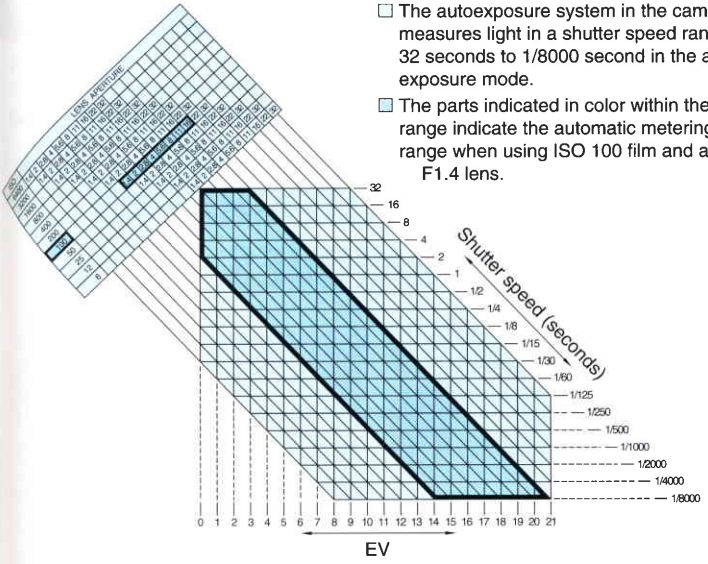
<Average metering (center-weighted average meter) (" ▢ " mark)>

In this mode, the light is measured with emphasis on the brightness of the subject at the center of the viewfinder. To a certain extent it also takes into consideration the brightness of the area surrounding the center to determine the exposure value. This mode can be used for general photography but also for easily determining the exposure for subjects in motion.



<Spot metering (" ⊡ " mark)>

In this mode, only the brightness value of the subject at the focusing frame at the center of the image in the viewfinder is measured.
Use spot metering in cases when the difference between the brightness value of the subject and the background is high. A good example is people lit from behind or standing in spot lights on theater stages. It can also be used for making very selective readings of specific areas within the scene.



- The autoexposure system in the camera measures light in a shutter speed range of 32 seconds to 1/8000 second in the auto exposure mode.
- The parts indicated in color within the range indicate the automatic metering range when using ISO 100 film and an F1.4 lens.

<Automatic metering range>

This table shows the mutual relationship between aperture, shutter speed and EV (exposure value). For example, when using ISO 100 film and an f/1.4 lens in the average metering mode, the automatic metering range is the range indicated by the points where the line extending diagonally from 16 (the Planar T *50 mm minimum aperture is f/16) and "1.4" (the maximum aperture) on the aperture table's ISO 100 section intersects with the vertical line (the EV line) and horizontal line (the shutter speed line). Thus, that is EV "0" to EV "21".

- The EV expresses the combinations of aperture and shutter speed that achieve the same exposure effect on film. For example, the table shows that at EV 13 the same exposure effect can be achieved at f/16 at 1/30 and f/8 at 1/125 second. While the EV represents an equivalent exposure the image effects of faster and slower shutter speeds and larger and smaller apertures differ.

APPLIED PHOTOGRAPHY TECHNIQUES

This camera allows for a wide range of creative possibilities.

1. Taking photos with the aperture priority mode "Av" (aperture priority auto exposure) mode ("Av" stands for "Aperture value".)

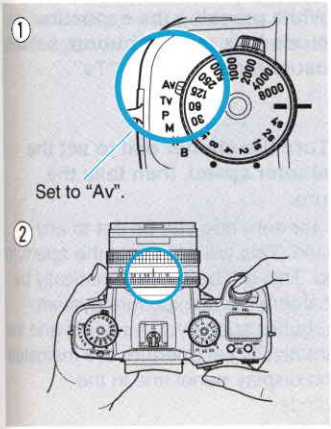
In this mode, when the aperture is set the camera automatically sets the shutter speed for a correct exposure. The zone of sharpness (depth of field) depends on the aperture value. Refer to the examples below and adjust the aperture according to your purpose. For details on depth of field, see page 58.

Example 1: When photos are taken with a larger aperture, the zone of sharpness (depth of field) is narrower. Use a larger aperture when you want the subject to stand out against a less sharp background.

Example 2: When photos are taken with a smaller aperture, the zone of sharpness is greater. Use a smaller aperture when you want both the subject and the background to be sharp.

Example 1: Large aperture

Example 2: Small aperture



1 While pressing the exposure mode lock release button, set the exposure mode lever to "Av".

2 Turn the lens' aperture ring to set the aperture, then take the picture.

The shutter dial can be set to any position. This will not affect the shutter speed, as the camera will select the appropriate speed automatically.
The aperture you have set and the automatically selected shutter speed are indicated on the display panel and in the viewfinder.

2. Taking photos with shutter speed priority settings "Tv" (shutter priority auto exposure) mode ("Tv" stands for "Time value".)

When you select the shutter speed in this mode the camera automatically selects the aperture for the correct exposure. This mode is suited for setting fast shutter speeds for freezing the motion of moving subjects, photographing at slow shutter speeds to create an intentional blur in moving subjects or to set a shutter speed that will insure steady pictures when using long-range telephoto lenses handheld.

Example 1: To freeze the action of a moving subject, set a fast shutter speed.

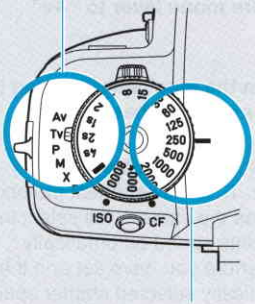
Example 2: To express the movement of water, for example, set a slow shutter speed.

- When using a slow shutter speed, use a tripod to prevent camera shake.

Example 1: Fast shutter speed

Example 2: Slow shutter speed

① Set to "Tv".



② Set the shutter speed.

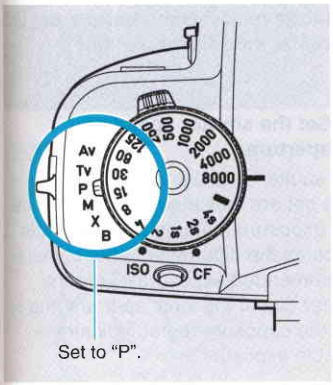
1 While pressing the exposure mode lock release button, set the exposure mode lever to "Tv".

2 Turn the shutter dial to set the shutter speed, then take the picture.

The aperture ring can be set to any position. This will not affect the aperture value. This will be set automatically by the camera's autoexposure system. The shutter speed you have set and the automatically set aperture are indicated on the display panel and in the viewfinder.

3. Taking photos in the program auto mode "P" (program auto exposure) mode

In this mode, the camera automatically selects the combination of the aperture and shutter speed most suitable for the brightness of the subject. This mode is convenient when you want to take photographs easily without worrying about the exposure settings.



Set to "P".

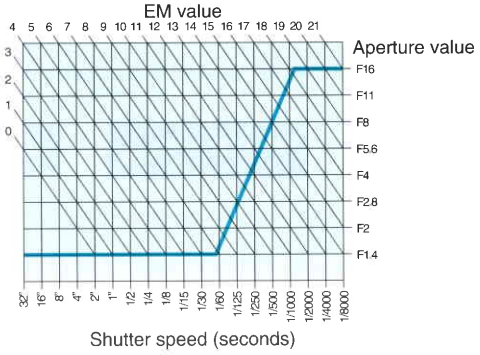
1 While pressing the exposure mode lock release button, set the exposure mode lever to "P".

2 Take the picture.

The automatically set aperture and shutter speed are indicated on the display panel and in the viewfinder. The aperture ring and shutter dial can be set to any position.

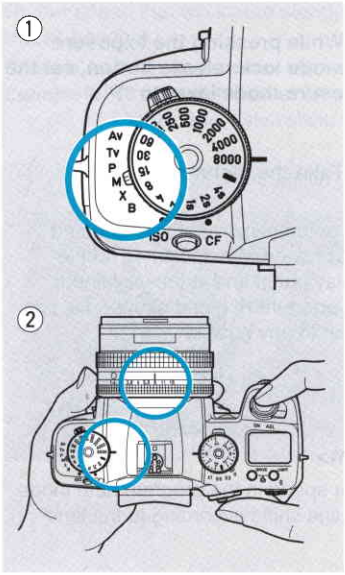
<Program auto mode control diagram>

The combinations of the aperture and shutter speed in the program auto mode are as shown on the diagram. This program line shifts according to the lens' focal distance. (F1.4/50 mm lens, ISO 100)



4. Taking photos with the exposure set manually "M" (manual exposure) mode

In this mode, you set the aperture and shutter speed yourself. This mode can also be used to intentionally achieve over- or under-exposure effects. Refer to the exposure meter display in the viewfinder to set the exposure.



1 While pressing the exposure mode lock release button, set the exposure mode lever to "M".

2 Set the shutter speed and aperture.

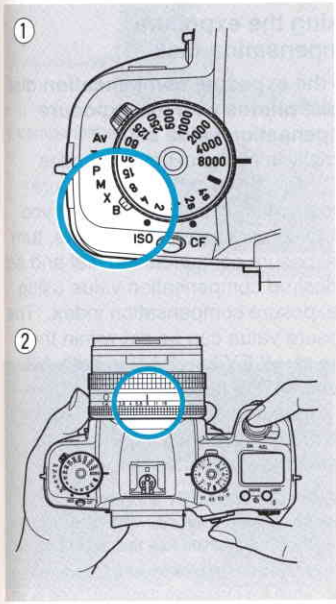
The shutter speed and aperture you have set are indicated in the viewfinder. The exposure meter in the viewfinder indicates the difference to the camera-recommended exposure. Turn the shutter dial or the lens' aperture ring so that the exposure meter indicates a suitable exposure.

3 Adjust the focus, then take the picture.

Examples of exposure meter displays

1EV over | Camera Recommended | 2EV or more under

Use the bulb mode for nighttime or astronomical photography requiring long exposure times.



1 While pressing the exposure mode lock release button, set the exposure mode lever to "B".

"buLb" is displayed in the shutter speed section of the viewfinder display panel.

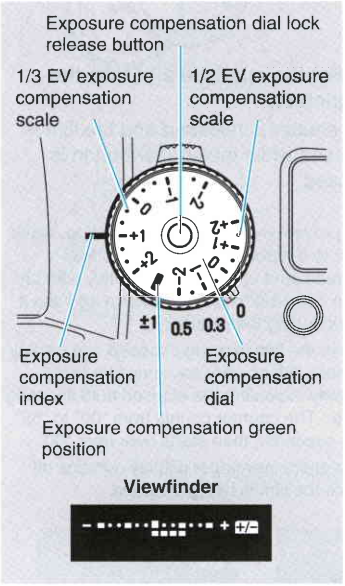
2 Set the aperture and take the picture.

The shutter is released and the film is exposed while the shutter button is pressed.

- To prevent the camera from shaking, either fix it to a tripod or place it on a stable surface, and connect a separately sold LA type cable switch to the camera and use it when taking the picture.
- While the film is being exposed, the display panel's film counter switches to a timer display indicating the elapsed bulb shooting time. The counter counts from "00" to "59" (59 seconds), then starts over from "00".
- The entire viewfinder display remains off while the film is being exposed.

6. Taking photos with exposure compensation

Exposure compensation can be used to help render tonal values on film properly and to add personal nuances to certain scenes. In most cases the evaluative meter will handle tough exposure conditions. Exposure compensation is most often used when photographing with center-weighted or spot metering mode. For example, subjects such as white snow in daylight read by a spot meter should be compensated anywhere from +1 to −2 EV, otherwise the meter's tendency to meter to middle gray will result in gray rather than white snow rendition. You can also use exposure compensation to deliberately underexpose certain scenes for increased color saturation or overexpose for a high key effect.
Exposure can be compensated using the two methods described below.



<Using the exposure compensation dial>

Use the exposure compensation dial to take photos with the exposure compensation value set.
Normally in all the exposure modes ("Av", "Tv", "P" or "M"), the exposure compensation dial is set to "0". If you wish to compensate the exposure, turn the exposure compensation dial and set the desired compensation value using the exposure compensation index. The exposure value can be set within the range of +2 EV to −2 EV in both 1/3 EV and 1/2 EV steps.
The exposure value and the "+" or "−" mark are displayed on the exposure meter in the viewfinder.

- To switch between 1/3 EV and 1/2 EV, turn the exposure compensation dial while pressing the exposure compensation lock release button.
- Not displayed on the viewfinder's exposure meter when the evaluative metering mode is set.

Exposure mode	What is compensated
Aperture priority auto (Av)	Shutter speed
Shutter priority auto (Tv)	Aperture
Program auto (P)	Aperture and shutter speed

- In the "M" mode, the exposure cannot be compensated with the exposure compensation dial. Compensation is set manually and is displayed on the exposure meter in the viewfinder. To compensate the exposure, turn the shutter speed dial or aperture ring so that the desired difference (amount of compensation) is displayed on the exposure meter.
- After taking the picture, be sure to set the exposure compensation dial back to "0".

(+ compensation)

(no compensation)

When the subject is lit from behind

Compensate within the range of +1/3 EV or +1/2 EV to +2 EV.

In the average metering mode, when the percentage of the picture occupied by a bright background is large (for example people with a light, a bright sky or the sea behind them, people in front of a window, etc.), the people tend to be under-exposed and appear as dark silhouettes. In such cases, compensate the exposure within the range of +1/3 EV or +1/2 EV to +2 EV to increase the exposure on the main subject.

(- compensation)

(no compensation)

When the background is dark

Compensate within the range of −1/3 EV or −1/2 EV to −2 EV.

When the percentage of the picture occupied by a dark background is large (people standing in spotlights, etc.), if the photo is taken in the average metering mode the people tend to be over-exposed. In such cases, compensate the exposure within the range of −1/3 EV or −1/2 EV to −2 EV to reduce the exposure.

<Taking photos with the Exposure Autobracketing Mode (Exposure ABC mode)>

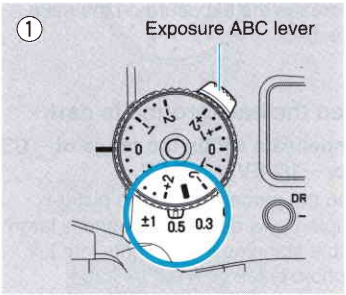
The Exposure ABC mode can be used to automatically take a series of three photographs with three exposures: standard, overexposed and underexposed.

Use this when shooting under difficult lighting conditions to ensure correct exposure.

* ABC stands for "Automatic Bracketing Control".

In the Exposure ABC mode, exposure is compensated according to the exposure mode set.

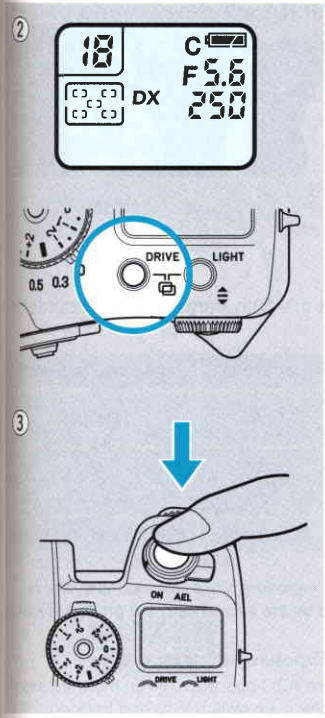
Exposure mode	What is controlled
"Av" (aperture priority auto)	Shutter speed
"Tv" (shutter priority auto)	Aperture
"P" (program auto)	Aperture and shutter speed
"M" (manual exposure)	Shutter speed



1 The Exposure ABC mode is set when the Exposure ABC lever is moved to set the compensation range.

The compensation range can be set to ±0.3 EV, ±0.5 EV or ±1 EV.

- When the exposure compensation dial is set to anything other than "0", the Exposure ABC mode functions based on that compensation value.
- The camera measures the light value and sets the corresponding compensation each time a series of photos is taken. To use the Exposure ABC mode without being influenced by changes in the surrounding brightness, lock the exposure beforehand.
- After taking the series of pictures, be sure to set the Exposure ABC lever back to "0".
- It is not possible to use the Exposure ABC mode together with flash.



2 Set the drive mode to "C" (continuous shooting).

- For instructions on setting the drive mode, see page 53.

3 Focus on the subject then press and hold in the shutter button.

Three frames are taken using the set compensation range: standard, over and under, in that order.

When the drive mode is set to "S", the camera is set to the Exposure ABC mode for single frame shooting. When the drive mode is set to "$\overset{2}{\circlearrowleft}$" or "$\overset{10}{\circlearrowleft}$", the camera is set to the Exposure ABC mode with a delay of 2 or 10 seconds between pressing on the shutter release and exposure.

When shooting in the Exposure ABC mode, the film counter changes as follows to indicate the order in which the photos are being taken:

Standard : Both digits flashing
Over : Only left digit flashing
Under : Only right digit flashing

- The "E" mark lights in the viewfinder.

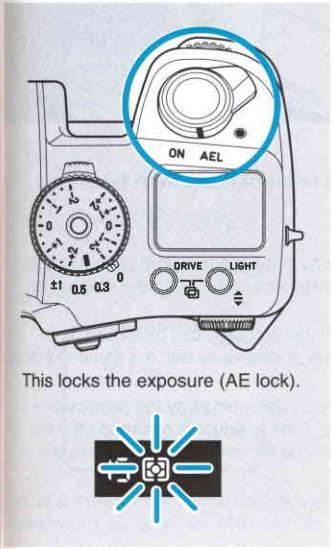
For example, if the Exposure ABC is used at the 18th frame, the film counter is as follows:

	1st frame	2nd frame	3rd frame	4th frame (repeated)
Focus position	Standard	Over	Under	Standard
Counter	18	19	20	21
Display	Both left and right flashing	Left flashing	Right flashing	Both left and right flashing

- If the compensation range exceeds the camera's exposure limits (for example, above 1/8000 second or at larger apertures than offered by the lens in use) the photos are taken within those limits.
- To cancel in the middle of the operation, set the Exposure ABC lever to "0".
- If the main switch is turned off during the Exposure ABC operation, three more frames are taken in order in the Exposure ABC mode when the main switch is turned back on.
- The exposure order can be switched to over → standard → under. (Page 74)

<Taking photos with the AE lock>

AE lock allows you to hold a certain exposure value even if the light changes or the composition is altered. It allows you to customize exposure in autoexposure modes. Use it when the subject is lit from behind or when you want to take a series of photos of a moving subject with a constant exposure.



This locks the exposure (AE lock).

1 Position the main subject in the center of the viewfinder, then switch the main switch from "ON" to "AEL".

This locks the exposure (AE Lock).

When you want to set the exposure on a select area within the frame, set the metering lever to the spot metering position then lock the exposure.

- When the exposure is locked, the metering mark in the viewfinder flashes.
- Set the AE lock mode while the display in the viewfinder is lit.

2 Reposition the camera for the desired composition, then take the picture.

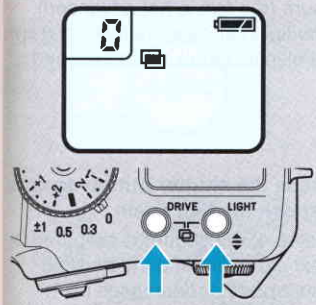
- When the exposure is locked, the exposure remains in the memory and photos can be taken as many times as you want with the same exposure value. To save energy, the mark turns off after 16 seconds.
- In the continuous shooting mode (drive mode "C") the exposure can be locked on a moving subject so that it is possible to take multiple photographs with the same exposure regardless of changes in the background.
- When AE Lock is set the camera stores the exposure determined by the combination of the shutter speed and aperture. In the "Av" mode, if the aperture is changed after the exposure is locked, the shutter speed is shifted so that the overall exposure remains constant.
- If the position of the exposure compensation dial is changed while the exposure is locked, the exposure compensation changes, depending on the exposure mode, as shown below.

Exposure mode	What is compensated
Aperture priority auto (Av)	Shutter speed
Shutter priority auto (Tv)	Aperture
Program auto (P)	Aperture and shutter speed

7. Taking Multiple exposure

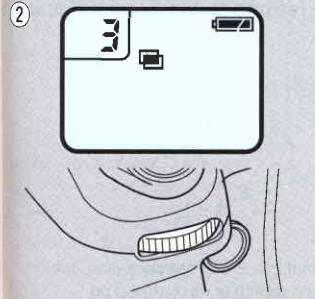
With the multiple exposure function, unique photographs can be taken by superimposing different subjects or the same subject several times within the same frame.

① Multiple exposure setting mode

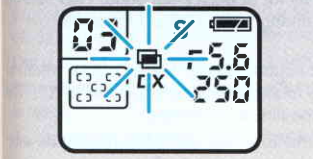


Press simultaneously for at least 2 seconds

②



③ Multiple exposure shooting mode



1 Press the "DRIVE" button and "LIGHT" button (" ▣ ") simultaneously for at least 2 seconds to set the multiple exposure mode.

The " ▣ " mark and "0" (multiple exposure number) appear on the display panel.

2 Turn the command dial to set the number of multiple exposures.

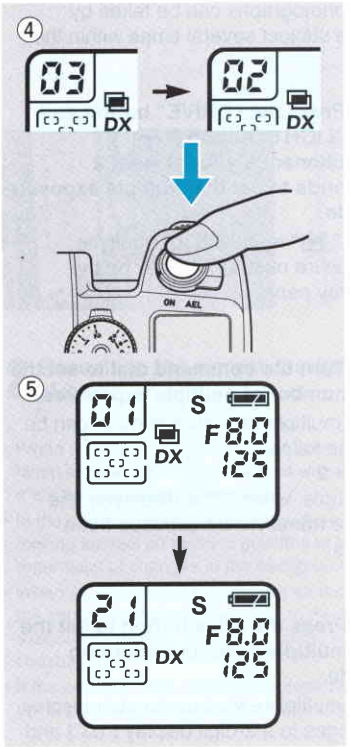
The multiple exposure number can be set as follows:
0 ⟷ 2 ⟷ 3 ⟷ ... ⟷ 9. For example, when "3" is displayed, the same frame will be exposed three times.

3 Press the drive button to set the multiple exposure shooting mode.

The multiple exposure number display changes to a 2-digit display ("03") and the " ▣ " mark starts flashing.

- Note that the multiple exposure mode is canceled if the main switch is turned off before any exposures have been taken in the multiple exposure mode.

" ▣ " lit: Multiple exposure setting mode
" ▣ " flashing: Multiple exposure shooting mode



4 Press the shutter button once to expose the film one time.

When the shutter button is pressed once, the film is exposed one time, and only the shutter is prepared for the next exposure (the film is not advanced). The multiple exposure number display on the display panel decreases by 1.

5 Press the shutter button again to expose the film again.

As in step 4, the shutter is prepared for the next exposure and the multiple exposure number decreases by 1.

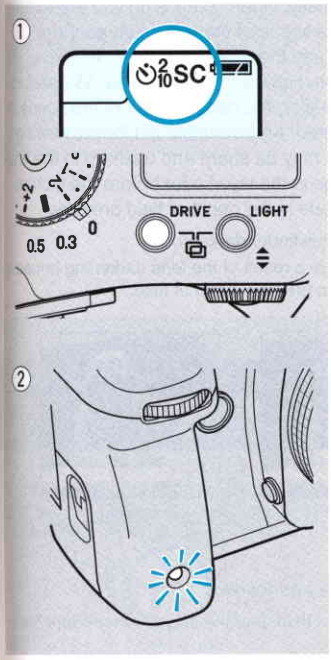
When the last exposure is made, the film is advanced and the display panel returns to the normal display.

- If the main switch is turned off in the middle of the multiple exposure operation, the multiple exposure operation continues when the main switch is next turned on.
- To change the multiple exposure number in the middle of the multiple exposure operation, press the drive button and light button simultaneously for at least 2 seconds. This sets the multiple exposure mode. Use the command dial to change the number of multiple exposures, then follow the procedure from step 3.
- To cancel multiple exposure shooting before all the exposures have been made, return to the multiple exposure setting mode and change the multiple exposure number to "0". The multiple exposure shooting mode is canceled and the film is advanced.
- When the self timer is set, the camera is set to the multiple exposure shooting mode with a delay of 2 or 10 seconds after the shutter release has been pressed.

There are two self timer modes.

"$\overset{2}{\underset{10}{\circlearrowleft}}$" **(10 seconds):** Use this mode to include yourself in the photograph.

"$\circlearrowleft^2$" **(2 seconds) :** Use this mode to prevent camera shake when the shutter is released (when taking close-ups, making photocopies, etc.).



1 Set the drive mode to "$\overset{}{\underset{10}{\circlearrowleft}}$" or "$\circlearrowleft^2$".

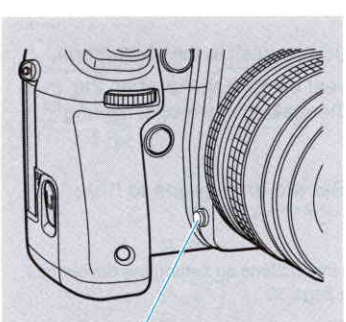
- For instructions on setting the drive mode, see page 53.

2 Adjust the focus, then press the shutter button.

The self timer is activated and the shutter is released after 10 or 2 seconds. The self timer LED on the front of the camera flashes while the self timer is operating.

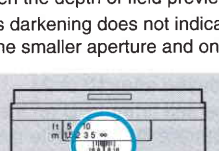
- If you are not looking through the viewfinder when an auto exposure is made the exposure made be adversely affected due to light entering through the eyepiece. In such cases, close the eyepiece shutter before taking the photo.
- Use a tripod when taking photos with the self timer.
- If the shutter button is pressed after the self timer has been activated, the self timer time is reset.
- To cancel the self timer after it has been activated, turn the main switch off.

9. Checking the depth of field

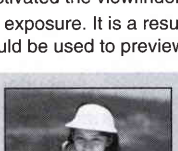


Depth of field defines the perception of sharpness in a photograph of subjects at different distances from the camera. It is affected by the focal length of the lens, the distance from the camera to the subject and the aperture setting of the lens. Normally, when composing you are looking at the scene at the maximum aperture, thus see the shallowest depth of field of the scene. However, when the taking aperture is smaller, the depth of field of the scene is affected. An invaluable aid for previewing what may be sharp and unsharp in the final image in the viewfinder before the picture is made is the depth of field preview.

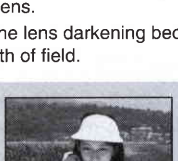
- When the depth of field preview is activated the viewfinder darkens.
- This darkening does not indicate the exposure. It is a result of the lens darkening because of the smaller aperture and only should be used to preview depth of field.



Depth of field scale



F1.4



F16

<About depth of field>

With the same lens, the depth of field changes as follows:

① The smaller the aperture the greater the depth of field, and the larger the aperture the shallower the depth of field.

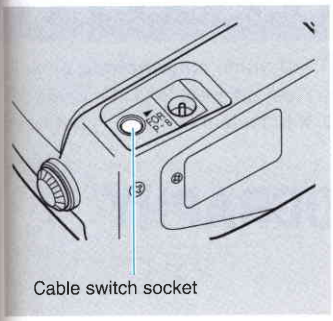
② The greater the distance to the subject, the greater the depth of field, and the closer the distance to the subject, the shallower the depth of field.

③ The depth of field also depends on the lens. The shorter the focal length, the greater the depth of field, and the longer the focal length the shallower the depth of field. The depth of field is deeper behind the focused subject than in front.

Depth of field scale

This scale can be used to check the actual range of the depth of field when using different lenses.

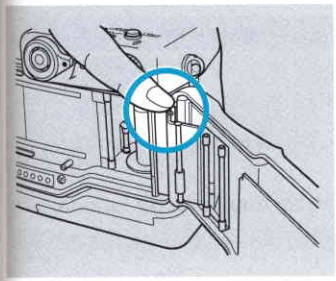
10. Cable switch socket



This is a contact for connecting an LA type cable switch or when using the auto bellows. The electronic signals from the connected accessory are transmitted through this contact to operate the shutter.

- When taking photographs using an LA type cable switch and shooting automatically without looking through the viewfinder, it may not be possible to achieve the proper exposure due to light entering through the eyepiece. In such cases, close the eyepiece shutter when taking the photo.

11. Replacing the camera back



The camera back can be removed and replaced with the separately sold D-10 data back (page 86). Remove the camera back by pressing down on the release pin.

FLASH PHOTOGRAPHY

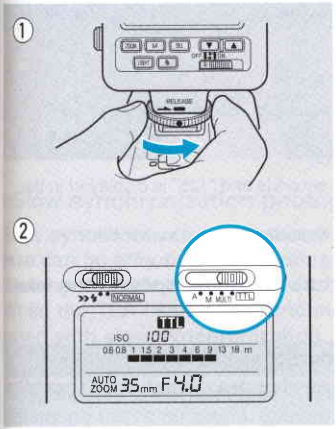
This camera is equipped with a "TTL direct metering" function for controlling the flash automatically from the camera when it is used together with a Contax TLA flash system.
When using the TLA360 flash, be sure to read both to "Taking photos using a Contax TLA flash" (page 61) and "Taking photos using a Contax TLA360 flash" (page 66).
When using a non-dedicated flash with only an X contact, set the exposure mode lever to 70 page.

1. Taking photos using a Contax TLA flash

The flash is automatically controlled from the camera.

<Taking photographs using the TTL auto flash function>

The amount of light from the flash reflected off the subject onto the film is measured (TTL direct metering) to control the intensity of the flash.



1 Mount the flash on the camera's accessory shoe and turn on the flash.

2 Set the flash to the "TTL auto mode".

Once the flash is charged, the "ϟ" mark lights in the viewfinder and the shutter speed is set automatically.

◆ Av (aperture priority auto) mode

Metered value of natural light	Automatically set shutter speed	(Display)
32 to 1/60 sec.	1/60 sec.	"60" lit
1/60 to 1/250 sec.	1/60 to 1/250 sec.	"60" to "250" lit
1/250 to 1/8000 sec.	1/250 sec.	"250" lit

◆ Tv (shutter priority auto) mode

Shutter dial setting	Automatically set shutter speed	(Display)
4 (32) to 1/250 sec. "( )" – when command dial set	4 (32) to 1/250 sec.	Same as shutter dial setting
1/250 to 1/8000 sec.	1/250 sec.	"250" lit

❖ P (program auto) mode

Metered value of natural light	Automatically set shutter speed	(Display)
32 to 1/60 sec.	1/60 sec.	"60" lit
1/60 to 1/250 sec.	1/60 to 1/250 sec.	"60" to "250" lit
1/250 to 1/8000 sec.	1/250 sec.	"250" lit

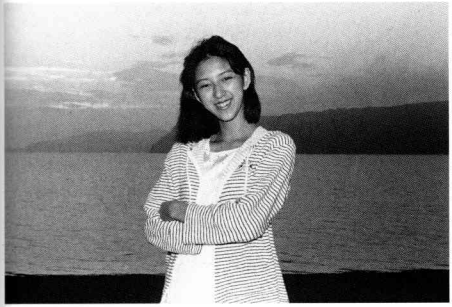
❖ M (manual), X (flash) and B (bulb) modes

- In the "M" mode, the shutter speed is not set automatically. Be sure to set it to 1/250 seconds or slower.
- The set shutter speed is displayed in the viewfinder.
- In the "X" mode, the shutter speed is set to 1/125 seconds and "125" is displayed in the viewfinder.
- In the "B" mode, the bulb mode is set and "buLb" is displayed in the viewfinder.

3 Use the following table to set the aperture or shutter speed, then take the picture.

Exposure mode	Aperture or shutter speed
P	No setting is necessary. The camera makes the settings automatically.
Av, M, X and B	Set the aperture. The photograph is taken with the set aperture.
Tv	Set the shutter speed to 1/250 seconds or slower. The appropriate aperture for the ambient light is set automatically. When the subject is bright, the aperture is automatically reduced.

- If the flash exposure is correct, the "ϟ" mark in the viewfinder flashes for 2 seconds.
- If the "ϟ" mark does not flash after exposure, the picture was under-exposed. Open the aperture or shorten the shooting distance and take the photo again.
- When taking close-ups, the picture may be over-exposed even if the "ϟ" mark flashes after the photo was taken. Take the photo within the distance range indicated in the flash's operating instructions.
- Be sure to set the Exposure ABC lever to "0".
- When taking photos with the drive mode set to "C" (continuous shooting mode), make sure the flash is fully charged before continuing to photograph.
- The coupling range of film speeds is ISO 25 to 800 (without exposure compensation).



Slow synchronization photography

Normal flash photography

<Slow synchronization photography>

Slow synchronization with the shutter speed set at 1/30 second or slower less can be effective for shooting evening or night views using a flash. Slow synchronization often adds more ambient light to the final picture. When the TLA flash's TTL auto mode is used, photographs can easily be taken with slow synchronization.

♦ When the exposure mode is set to "P" or "Av"

Determine the composition, then set the main switch to "AEL". The shutter speed is locked at the metered value of the ambient light. Check that the flash is charged, then take the photo.

♦ When the exposure mode is set to "Tv"

Determine the composition, then set the main switch to "AEL". The aperture is locked at the metered value of the ambient light. Check that the flash is charged, then take the photo.

♦ When the exposure mode is set to "M"

Set the shutter speed to 1/30 seconds or less. Adjust the aperture to set the exposure to the metered value of the ambient light so that the exposure meter indicates that the exposure is appropriate, then check that the flash is charged and take the photo.

• The shutter speed is slow when slow synchronization is used, so use a tripod to prevent camera shake.

Daylight synchronization photography

When no flash is used

<Daylight synchronization photography>

When taking photos outdoors, for example of people in bright sunlight or lit from behind, the people tend to be dark in the resulting photo. In such cases, photos in which both the people and the background are well exposed can be achieved by using a TLA flash and the TTL auto mode.

❖ When the exposure mode is set to "P"

In bright scenes, the aperture and shutter speed are adjusted automatically and the daylight synchronization mode is set.

❖ When the exposure mode is set to "Tv"

In bright scenes, the aperture is adjusted automatically and the daylight synchronization mode is set.

❖ When the exposure mode is set to "Av"

If "250" flashes in the shutter speed indication after the flash is charged, the picture will likely be overexposed. Decrease the aperture so that a shutter speed of under 250 is displayed, then take the picture.

❖ When the exposure mode is set to "M" or "X"

When in the "M" mode, set the shutter dial to "250" or less. Adjust the aperture so that the exposure meter in the viewfinder indicates that the exposure is appropriate, then take the photo.

Second curtain synchronization

First curtain synchronization

<Second curtain synchronization>

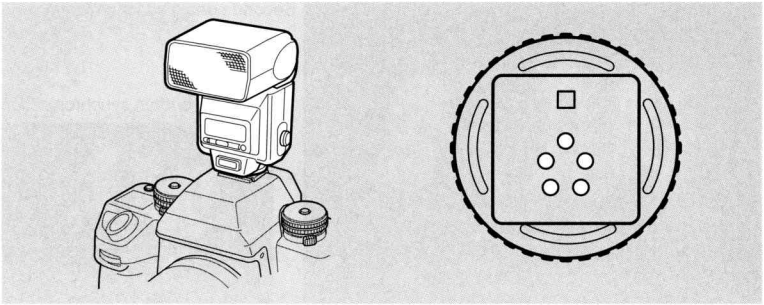
Taking photographs with second curtain synchronization is effective for shooting moving subjects using slow synchronization.

Normally with flash photography the flash is emitted directly after the shutter's front curtain has finished traveling (first curtain synchronization). When this camera is used together with a Contax flash equipped with the second curtain synchronization function, the flash can be emitted directly before the shutter's rear curtain starts traveling (second curtain synchronization).
The "ghost" movement of the subject thus appears more natural.

- For instructions on second curtain synchronization settings, refer to the flash's operating instructions.
- Exposure is controlled in the same way as with regular flash photography (first curtain synchronization).

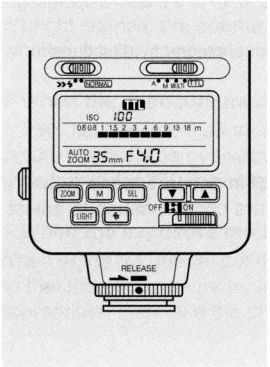
<Using the exposure compensation dial>

With TTL auto photography, the flash's intensity is set in accordance with the camera's exposure system. You can also use exposure compensation to adjust the flash intensity, thus achieve certain effects.



The TLA360 flash has a guide number 36 (ISO 100/35 mm lens angle of view When used with this camera it offers the six functions described below in addition to regular TTL auto flash photography.

- These functions can be used when the flash unit is directly attached to the accessory shoe on the camera top. The flash system is not automatically set when it is used off the accessory shoe and through the TLA extension code or TLA lighting system.
- With Contax TLA flashes equipped with the flash auto set function, the flash mount has five contacts.



<1. Auto set function>

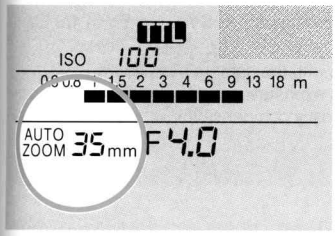
Function Flash photography mode	Auto setting of film speed	Auto setting of aperture value
TTL auto	○	○
External metering auto	○	—
Manual	○	○
Multi-flash	○	○

○: The camera's settings are automatically set for the flash as well (after the flash is charged).

—: The flash is not automatically set.

<2. Auto setting of the angle of illumination>

The flash's angle of illumination is set automatically according to the focal length of the lens mounted on the camera.



❖ Making the setting

Mount the flash on the camera's accessory shoe and turn it on the flash. The angle of illumination is set automatically according to the lens mounted on the camera.
The flash display panel indicates the automatically set angle of illumination for the focal distance of a 35 mm lens.

- The focal length of the lens is set to 24 mm, 28 mm, 35 mm, 50 mm, 70 mm or 85 mm.
- When a zoom lens is mounted, this function works automatically in conjunction with the lens setting within the above range.
- The focal distances indicated on the zoom lens' focal distance scale and on the flash may not be exactly the same, but this presents no problem with respect to luminous intensity distribution characteristics.
- If the lens is replaced when "AUTO ZOOM" is indicated on the flash, the angle of illumination is reset according to the new lens.

<3. Manual setting of the angle of illumination>

When the flash's zoom button is pressed, the manual setting mode is set. The zoom focal length switches each time the zoom button is pressed. Display the desired focal distance on the display panel.

<4. Flash intensity compensation>

This is available only in the TTL auto flash photography mode. Compensation is not possible in other modes.

- The flash intensity can be compensated within the range of −3 EV to +1 EV in 1/3 EV steps.
- The flash intensity is compensated in conjunction with the camera's exposure compensation value. If for example the camera's exposure compensation is "+1" and the flash's compensation is set to "+1", the flash intensity compensation is "+2EV".

1 Press the flash's "SEL" button.

- The compensation scale appears on the display panel and the "+/−" mark flashes.

2 Use the flash's "▲" and "▼" (up and down) buttons to set the compensation scale to the desired value.

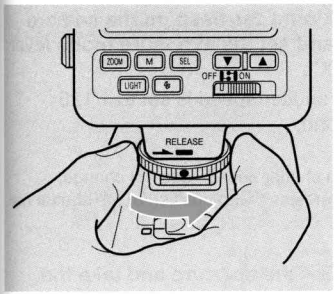
3 Press the "SEL" button again.

The "+/−" mark stops flashing, remaining lit, and the compensation is set.

- The compensation scale on the flash's display panel indicates the compensation value for the flash.
- If the flash's compensation value is set to "0" (no compensation), the compensation scale turns off after 8 seconds.

<5. "Auto off" and "auto on" functions>

When the flash's power switch is set to "auto off", the flash's power turns off automatically after approximately 80 seconds. When the camera's shutter release button is half-pressed, the flash automatically turns on and charging starts.
These functions help save power when using the flash for long periods of time.

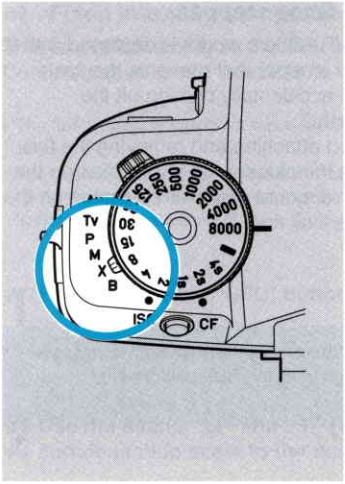


<6. Shoe stopper>

The TLA360's mount is equipped with a shoe stopper that prevents the flash from accidentally coming off the camera.
When attaching and removing the flash from the camera, be sure to line up the flash's mount mark with the mark on the shoe lock ring.

* The TL360 is equipped with a variety of other functions as well. Be sure to read the TL360's operating instructions to take advantage of all the flash photography possibilities the TL360 has to offer.

3. Taking photos using other flashes with the X contact



1 Mount the flash on the camera and set the exposure mode lever to "X".

The shutter speed is set to 1/125 second.

- The shutter speed does not change, regardless of the position of the shutter dial.

2 Set the aperture and take the picture.

Determine the aperture by following the flash's operating instructions.

- For non-direct contact flashes requiring cords, connect the flash to the synchronization terminal on the side of the camera.