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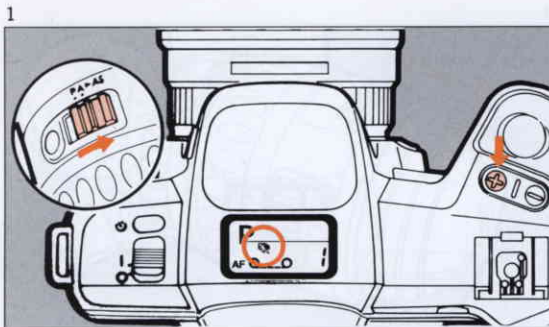
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You can define the composition of a picture through the viewfinder and store the image size (MAGNIFICATION) so that the camera automatically zooms to always obtain the stored image size (MAGNIFICATION) irrespective of the variation of camera-to-subject distance.

You can, for example, take a picture of a child approaching or going farther away, keeping the composition the same image size.

1. Holding the auto zoom switch on the lens in the [ AS ] position, press the white  $\oplus$  button until the [  ] is displayed in the LCD panel.



2. Press the shutter release button halfway down to focus on the subject, then maintain this position for a few moment.

\* At this time, the lens will automatically zoom to the memorized image size (MAGNIFICATION).



3. If you would like to override the memorized image size (MAGNIFICATION), press the shutter release button halfway down, and turn the power zoom ring to obtain the desired image size (MAGNIFICATION).

\* If you adjust the zoom after focusing, the focus may shift. Should this happen, simply raise your finger off the release button completely and press it down halfway again.

\* In defining the image size, setting the focal length to the middle of its range will provide the most versatility. For example, with the 28-80mm lens, set the focal length to around 50mm.



4. Pressing the shutter release button halfway down enables zooming so that the size of a subject stays constant with different camera-to-subject distances.

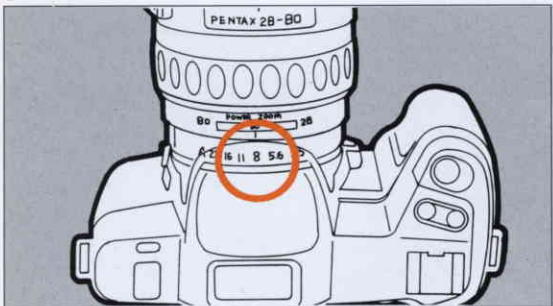
- \* Predictive autofocus function (page 17) cannot be used in the Image Size Tracking mode. So, this function is not recommended for fast moving objects.
- \* Pressing the shutter release button while zooming may not successfully achieve the specified image size; be sure to press the shutter release button only after the zooming is completed.
- \* If the camera-to-subject distance is too close or too far, you cannot obtain the specified image size because it is out of the range of focal length of the zoom lens. In addition, since the image size stored in memory works on the lens currently in use, you may not obtain the specified image size if the lens is replaced with another.
- \* Changing the focus-mode switch from [ AF ] to [ MF ] in the Image Size Tracking mode sets the camera to the Zoom Clip mode.
- \* The contents of memory will not be lost even if the main switch is turned off.
- \* Removing or exchanging a lens with the main switch turned on will cause the loss of memory; if you want to keep the contents of memory, turn off the switch first.
- \* If you store another image size value into memory, the previous value will be lost.

**Note:**

Removal of the battery will cause the loss of memory.



1



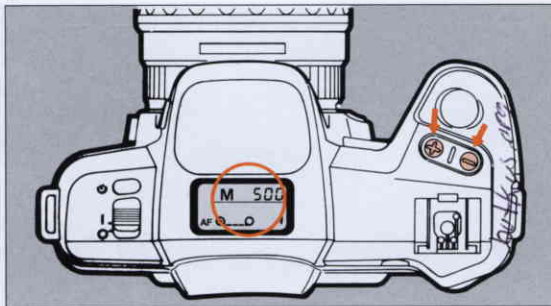
This function allows you to adjust the shutter speed and aperture.

Use this function if you wish to set one exposure setting regardless of the lighting conditions or if you wish to manually select your exposure settings.

With Metered Manual mode, only spot metering can be used. All light information is excluded from anywhere but the center portion of the frame. When adjusting the exposure setting, be sure that the subject falls within the center of the viewfinder.

1. Turn the aperture ring from the "A" position and set the lens at the desired f-stop.
- \* To release the "A" lock, turn the aperture ring while pressing the aperture A-lock button.

2



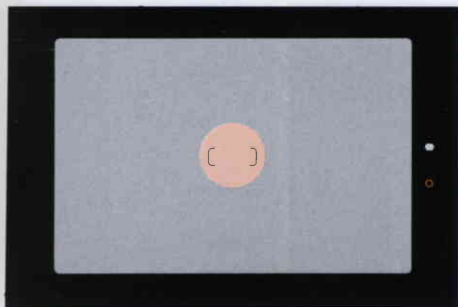
- \* The [ M ] indicator and shutter speed appear on the LCD panel.

2. Select the shutter speed.

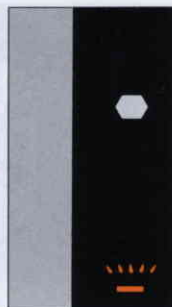
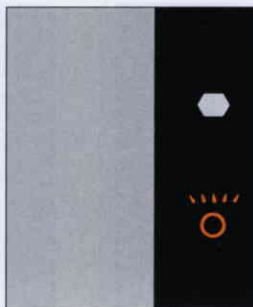
For a fast shutter speed, press the white  $\oplus$  button. For a slow shutter speed, press the Black  $\ominus$  button.

- \* Each time you press the button, the speed goes up or down incrementally. Holding either button down continuously changes the shutter speed in fast motion.

3



4



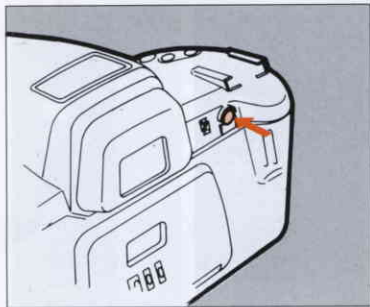
3. Position the subject in the center of the viewfinder.

- \* Spot metering measures the light readings only in the central section of the viewfinder. This reading may result in a significant discrepancy between the exposure in the center and exposure in the rest of the image unless you determine the exposure considering the brightness in the whole viewfinder.

4. Press the shutter release button lightly, and [ + ], [ - ], or [ ○ ] exposure indication appears in the viewfinder. [ + ] means overexposure, [ ○ ] means correct exposure, and [ - ] means underexposure. By setting the aperture with the aperture ring and adjusting the shutter speed with the White [ + ] button or Black [ - ] button, you can determine the setting for your camera.

### Exposure Warning:

The exposure indicators in the viewfinder blinks as a warning when a subject is too bright or too dark, or when the proper combination of the shutter speed and aperture is not selected. As long as the indicators are blinking, proper exposure cannot be obtained. If [ + ] is blinking, set the aperture ring to a smaller sized f-stop. If [ - ] is blinking, set the aperture ring to a larger sized f-stop. To set the proper exposure, adjust the aperture and shutter speed until the display stops blinking and you get the [ ○ ] indication in the viewfinder. Use an ND filter if the [ + ] indicator does not stop blinking or a flash if the [ - ] indicator does not stop blinking even after the aperture has been adjusted.




### Hyper-Manual Mode

Hyper Manual is a convenient manual exposure mode that enables you to obtain the correct exposure level with a press of a button.


The Hyper-Manual mode allows you to work in the full manual mode, setting both aperture and shutter speed, then with the press of the Hyper button you are switched from the full manual mode to an automatic mode which is similar to the aperture priority exposure mode.

When you press the Hyper button, the shutter speed is automatically selected by the camera based on the aperture you manually selected.

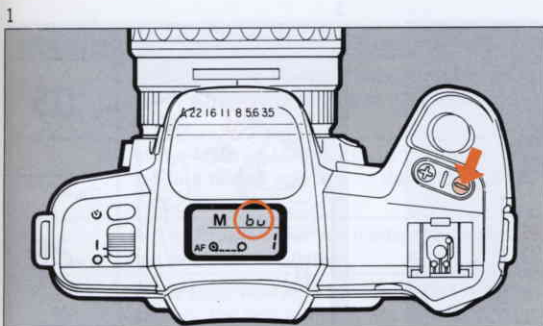
Proper speed and exposure is selected, you will see the [  ] exposure indicator in the viewfinder.

If you adjust the picture framing, the exposure indicator may change to [ + ] or [ - ]. To set the exposure for the new scene, singly press the Hyper button again.

If the [ + ] or [ - ] exposure indicator blinks after pushing the Hyper button, the camera can not set the proper exposure because the lighting conditions are out of the meter coupling range.

- \* The [  ] indication appears in the LCD panel while the Hyper button is being pressed.



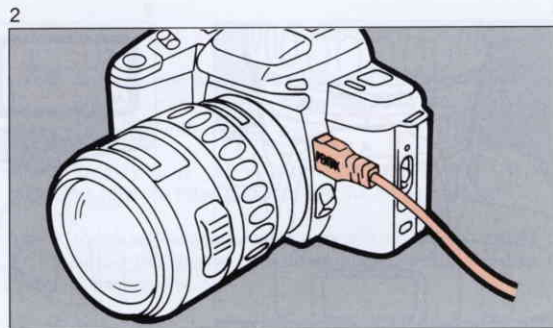


Use the bulb function for long-time exposure, such as fireworks and night scenes.

The shutter stays open as long as the shutter release button is held down.

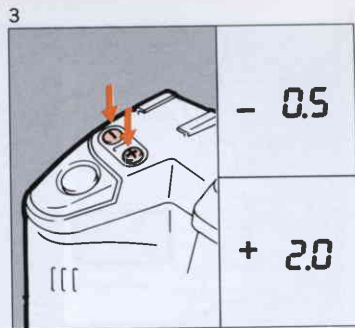
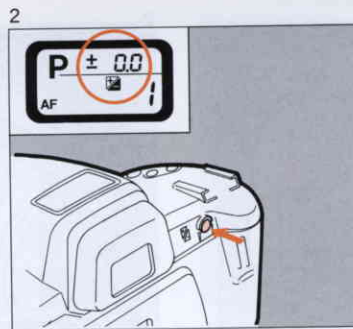
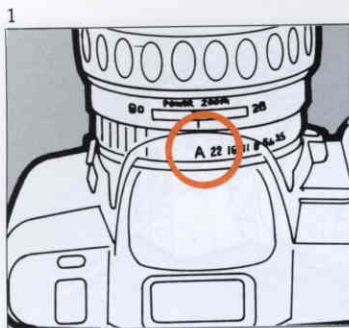
1. Press the Black  $\ominus$  button in the Metered Manual mode until the [ b ] indication appears in the LCD panel.

\* In the bulb mode, no exposure indications appear in the viewfinder.




2. Use a solid tripod and connect the optional Cable Switch F for firing the shutter without vibrating the camera.







\* With one fresh 6 V lithium battery, a long-time exposure of approximately 12 hours is possible under normal temperature.



The exposure compensation system is used to change the basic exposure value or to intentionally under- or overexpose the subject in the AE mode.

1. Set the camera to the Programmed AE mode. (Set aperture to the A position).
2. Press the Hyper button. The [ ± 0.0 ] and [  ] indicators appear in the LCD panel.
3. Press the White ⊕ button or Black ⊖ button to select the desired exposure compensation. The selected exposure compensation value appears in the LCD panel.

- \* Lightly pressing the shutter release button shows the [ + ] or [ - ] indication in the viewfinder.
- \* The exposure compensation range is from -3.0 to 3.0 EV with 0.5 step increments.
- \* To return to the normal Programmed AE mode, press the Hyper button again. The override setting disappears.
- \* When shooting with the Pentax dedicated TTL flash unit, the exposure compensation system functions.
- \* You can also clear the exposure compensation by turning off the Main Switch.

Viewfinder	Remarks
 <b>+</b> ** 1	In the Metered Manual mode, the aperture is set to a brighter aperture or the subject is too bright.
 <b>—</b> ** 2	In the Metered Manual mode, the aperture is set to a darker aperture or the subject is too dark.
 <b>P</b> ** 3	In the Programmed AE mode, the subject is too bright or too dark.
 	In the Programmed AE mode, a flash is necessary, or the lens in use is not appropriate for adequate flash coverage.
	Battery warning.

† All the LEDs being displayed blink.

- \* The warnings are indicated by a blinking light.
- \* The (.....) means a blinking indicator.

#### Correction to stop the blinking displays

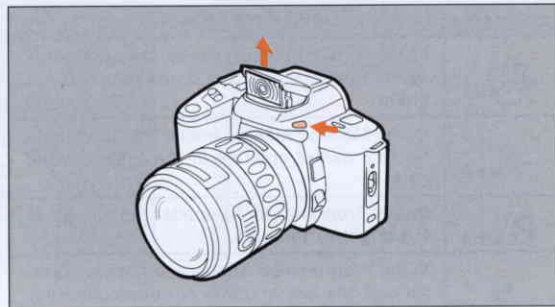
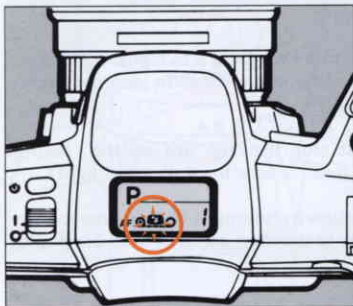
\*\* 1 Decrease the aperture by setting it to higher numbers or adjust the shutter to a faster speed to stop the display from blinking.

If the display does not stop blinking, use an ND (Neutral Density) filter (a filter that reduces the amount of light).



\*\* 2 Increase the aperture by setting it to lower numbers or adjust the shutter to a slower speed to stop the display from blinking.


If the display does not stop blinking, use a flash or other lighting equipment.

\*\* 3 If the subject is too bright, use an ND filter. If the subject is too dark, use a flash.





### (1) Daylight Synchronization function

This function is useful in backlit scenes in which exposure compensation is required to brighten a subject. The Multi(6)-segment metering function automatically reads the lighting conditions for overall exposure balance. The [  ] indication on the LCD panel and the [  ] indication in the viewfinder will start blinking if the metering system recommends daylight synchronization for a more balanced exposure. [Applicable only in the Programmed AE mode.]

Push the [  ] button to pop-up the flash unit from the camera body.

It is possible to take pictures with overall well-balanced exposure because the built-in flash works as a Programmed TTL Auto flash.

- \* The [  ] indicator on the LCD panel and the [  ] indication in the viewfinder may not blink even in the backlight condition when the subject is not centered. Use the built-in flash to cope with this situation.
- \* A subject may be shadowy even in normal lighting situations. Use the built-in flash to compensate for the under-exposure.

## (2) Using the Flash in the Metered Manual mode

To determine the flash range for the subject you are photographing, set the lens to the manual lens apertures and apply the following formulas.

\*\* GN = Guide Number

Maximum flash distance =  $GN \div \text{Aperture you selected}$

Minimum flash distance =  $\text{Maximum flash distance} \div 5$

If you already know the focus distance, use the following formula to determine the aperture.

$GN / \text{Focus distance} = \text{aperture}$

If the calculated aperture number doesn't exist on your lens aperture ring, use the next smallest aperture number.

The table below shows the equivalent guide number for various film speed.

ISO film speed	Guide number
ISO 25	GN 6
ISO 50	GN 8.5
ISO 100	GN 12
ISO 200	GN 17
ISO 400	GN 24

The following is an example using ISO100 film and a f/3.5 aperture setting.

1. Calculate the distance of the flash.

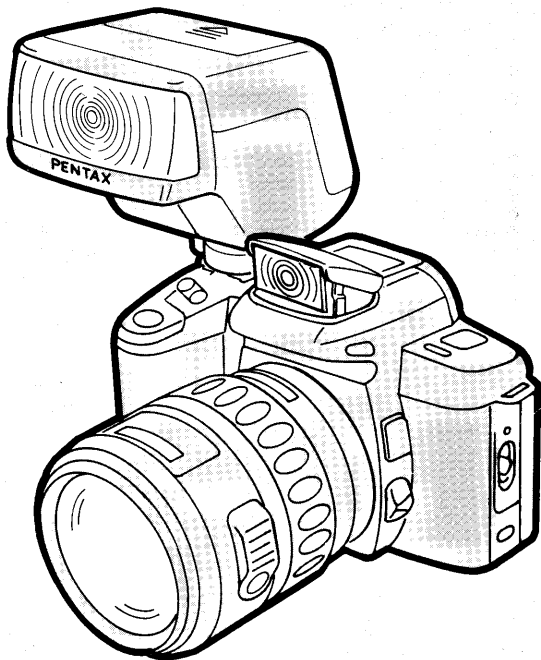
$$GN12 \div f/3.5 = 3.4m$$

$$3.4 \div 5 = 0.68m$$

2. In this example, you can take a picture using the flash at a distance ranging from 0.7m to 3.4m.


### Note:

When shooting an object that is close and another that is further away in the same picture, setting the aperture for the object that is further away causes the closer object to be overexposed.



In situations where the built-in flash is not sufficient, such as large gatherings, use a Pentax dedicated flash.

**(1) Using the TTL Auto mode flash function**

1. Remove the hot shoe cover and attach the Pentax dedicated flash unit.
2. Set the flash mode to the TTL Auto position. Set the camera to the Programmed AE mode.
3. Turn on the flash power switch.
4. To confirm that the flash has been charged, lightly press the shutter release button. When the flash ready lamp lights up, the [  ] indicator in the viewfinder turns on.
  - \* After charging, the shutter speed changes to 1/100 automatically.
5. Focus and shoot.
  - \* Slow speed sync flash is possible if the camera is set to the Metered Manual mode.

## (2) Overview of flash functions

Camera functions	TYPE A	TYPE B	TYPE C	TYPE D	TYPE E
After charging, the camera changes automatically to the flash's sync speed.	○	○	○	○	○
The aperture is adjusted automatically in the Programmed AE mode.	○	○	○	○	Note 1
Flash confirmation in the viewfinder.		○	○	Note 2	
TTL Auto flash mode.	○	○	○	○	
Slow speed synchronization in the Metered Manual mode	○	○	○	○	○
AF spotbeam		○	○		
Trailing curtain flash sync		○	○		
Contrast control mode		○			

### Note 1:

With AF260S<sub>A</sub>, AF240Z, AF200S<sub>A</sub> and AF160S<sub>A</sub>, the aperture is automatically set.

### Note 2:

With only AF140C, the auto flash confirmation signal appears in the viewfinder.

When using older flash types "AF140", "AF160", and "AF200S", adjust the aperture as displayed on the flash calculation panel on the rear of the flash unit. The aperture and shutter speed are adjusted automatically in the Programmed AE mode when using the AF260S<sub>A</sub>, AF240Z, AF200S<sub>A</sub> or AF160S<sub>A</sub>.

### Warning:

Use of flash units made by other manufacturers may damage the circuitry of your camera.

● TYPE A: Built-in flash

● TYPE B: AF330FTZ

● TYPE C: AF400FTZ, AF240FT

● TYPE D: AF400T, AF280T, AF200T, AF140C, AF080C

● TYPE E: AF260S<sub>A</sub>, AF240Z, AF200S<sub>A</sub>, AF200S, AF160S<sub>A</sub>, AF160, AF140

ADDITIONAL FUNCTIONS

### AF330FTZ

- \* The flash mode switches to the Programmed TTL Auto mode when used with this camera (Refer to p.49). Daylight sync flash is possible because the aperture adjusts automatically according to subject brightness.
- \* The flash unit automatically projects an AF spotbeam for dark and hard-to-autofocus subjects to assist the camera's autofocus system.
- \* Incorporating a coupled auto zoom mechanism, this flash automatically changes the illumination angle according to the focal length of the lens.
- \* You can use the Contrast Control mode [Refer to the instruction manual for your flash.]
- \* Even when using the flash unit in manual mode, its mode switches automatically to the Programmed TTL Auto mode if the camera is in the Programmed AE mode.
- \* The flash power automatically turns off if it is left unused about three minutes after charging. To charge again, press the shutter release button halfway down.

### AF240FT, AF400FTZ

- \* The flash mode switches to the Programmed TTL Auto mode when used with this camera (Refer to p.49). Daylight sync flash is possible because the aperture adjusts automatically according to the subject brightness.
- \* Even when using the flash unit in manual mode, its mode switches automatically to the Programmed TTL Auto mode if the camera is set to the Programmed AE mode.
- \* The flash power automatically turns off if it is left unused about five minutes after charging. To charge again, press the shutter release button halfway down.
- \* The flash unit automatically projects an AF spotbeam for dark and hard-to-autofocus subjects to assist the camera's autofocus system.



## AF200T, AF280T, AF400T

- \* The flash mode switches to the TTL Auto mode when used with this camera. It is not recommended to use the daylight sync mode because the aperture is automatically set at f/4 [At ISO 100].
- \* When using Two-Level Auto or Three-Level Auto (red, green, or yellow settings), the aperture changes as shown in the table. After charging, the shutter speed changes to 1/100.

(at ISO 100)

	AF400T	AF280T	AF200T
Red	f/4	f/4	f/2.8
Green	f/8	f/8	f/5.6
Yellow	f/11	—	—

(AF200S<sub>A</sub>: f/4 at ISO 100)

### TTL Auto Flash:

TTL auto flash is an exposure control function that calculates and controls the output of the flash according to the amount of light that comes to the film plane back through the lens. It is an accurate exposure control that measures only reflected light from the subject.

[You can use TTL Auto flash with AF330FTZ, AF400FTZ, AF400T, AF280T, AF240FT, AF200T]

### Programmed TTL Auto Flash:

Calculate the amount of light reaching the film and controls flash output based on a program which automatically selects aperture and shutter speed. Programmed TTL Auto Flash also allows daylight synchronization.

[You can use Programmed TTL Auto Flash with the built-in flash or the AF400FTZ, AF330FTZ, AF240FT]

### Slow-speed synchronization:

Ordinary flash synchronization does not allow for the proper exposure of the low light background, as the shutter speed is too fast. Slow speed sync allows the flash to properly expose the subject. The shutter stays open to properly expose the low light background.

### (3) Precaution for Using Pentax Dedicated Flash Units

1) When using type D flash in the MS [Manual Synchro] or M [Manual] mode, adjust the aperture as determined by the flash calculation panel on the rear of flash unit. (TYPE D flash).

You cannot obtain proper exposure if the camera is set to the Programmed AE mode.

2) When using a Pentax dedicated flash in addition to the built-in flash, the dedicated external flash has priority function control over the built-in flash. Be sure that all flashes have been charged.


3) Using the optional "Hot Shoe Adapter F" makes it easier to mount the "AF080C Ring Light Control Pack" onto the hot shoe.

Functions	Lens (Mount) *1				
	FA Lens	F Lens	A Lens	M Lens	S Lens
Auto Focus: Lens alone	○	○	×	×	×
With AF Adapter 1.7x	—	—	○*3	○*3	×
Manual Focus: FI System *2	○*4	○*4	○*4	○*4	×
Matte Screen	○	○	○	○	○
Power Zoom	○*5	×	×	×	×
Zoom Clip Mode	○*5	×	×	×	×
Image Size Tracking Mode	○*5	×	×	×	×
Programmed AE Mode	○	○	○	×	×
Metered Manual Mode	○	○	○	○	○
Programmed TTL Auto Flash Mode	○	○	○	×	×
TTL Auto Flash Mode	○	○	○	○	○
Manual Flash Mode	○	○	○	○	○

**Note 1:**

For more details about lens mounts, refer to inside cover.

**Note 2:**

Manual focusing based on the [  ] indicators in the viewfinder [FI=Focus Indicator]

**Note 3:**

For lenses with maximum aperture of 2.8 or brighter.  
[See Instruction manual for AF Adapter for details]

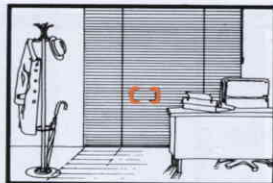
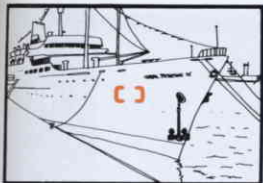
**Note 4:**

For lenses with maximum aperture of 5.6 or brighter.

**Note 5:**

For Pentax FA zoom lenses only.

The "Snap-in-Focus" can be used in combination with a Pentax K<sub>A</sub>-or K-mount lens. Set the focus mode switch to [AF]. Adjust the focus manually at the point you expect to capture the subject and hold the shutter release button all the way down. The shutter will release automatically as soon as the subject moves into the prefocused area.  
(Cable Switch F can be used.)



Autofocus is an exceptionally high-performance mechanism, but it is not perfect. Depending on the subject brightness, contrast, shape, and size, the focus may not work as in the case of focusing using the [  $\square$  ] of the viewfinder. Use the focus-lock technique on a subject which is both near the actual one and at an equal distance from the camera or use the matte area in the viewfinder for focusing.

#### Factors that Make Autofocusing Difficult

- 1) Extremely low contrast subjects such as white walls in the AF frame.
- 2) Subjects which don't reflect much light in the AF frame.
- 3) Subjects which are moving too fast.
- 4) Subjects with horizontal lines or with finely detailed patterns in the AF frame.
- 5) Multiple subjects in the foreground and background of the AF frame.
- 6) Subjects positioned against reflected light, strong backlight or on extremely bright background.

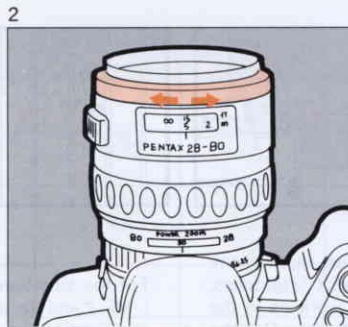
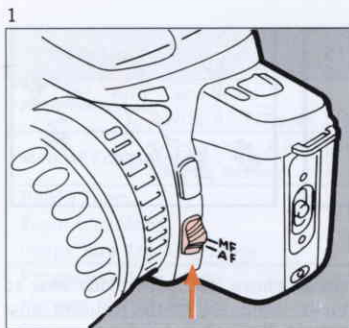
#### Note:

For the situations mentioned above, set focus mode lever to [ MF ] and focus manually using the matte focusing area surrounding the AF frame.

#### Warnings About Accessories...


The following conditions do not allow autofocusing or manual focusing using the FI (Focus Indication) system in the viewfinder. Focus manually using the matte focusing area surrounding the AF frame. (See page 53.)

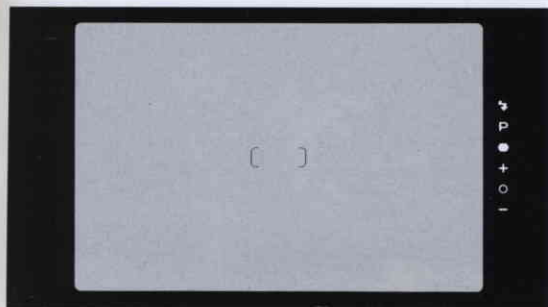
- 1) When using special effects filters or "Magic Image Attachment" or "Stereo Adapters."
- 2) A half mirror incorporated into the autofocus system reduces the effectiveness of the autofocus when used with an ordinary polarizing filter. Use a circular polarizing filter with autofocus.
- 3) When using Extension Tubes or an Auto Bellows.




When using older K<sub>A</sub>- or K-mount lenses with a maximum aperture of f/5.6 or brighter, you can manually adjust the focus based on the FI (Focus Indication) system in the viewfinder. An electronic beep signals that the subject is in focus.

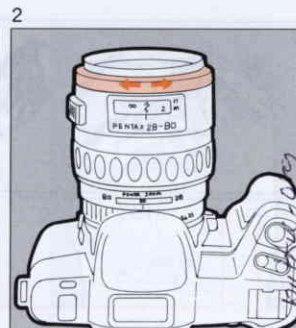
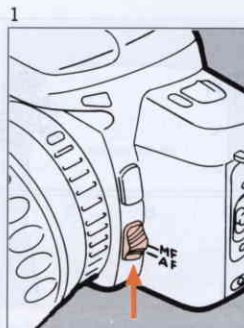
- \* K<sub>AF</sub>- and K<sub>AF2</sub>-mount lenses set at [ MF ] operate the same way.
- \* Screw mount lenses mounted on the camera with the optional "Mount Adapter K" cannot be focused utilizing the FI (Focus Indication) system in the viewfinder.

1. Set the focus mode lever to the [ MF ] position.
  2. While looking through the viewfinder, lightly press the shutter release button and turn the focusing ring of the lens to the left or right.
  3. When you obtain proper focus, the [  ] indicator in the viewfinder turns on. To take a picture, press the shutter release button.
- \* A short beeping sound will be heard when proper focus is obtained.

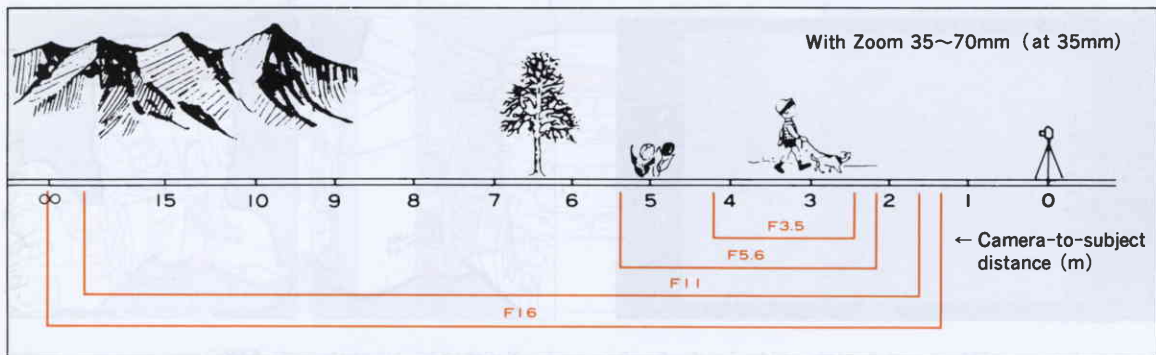


The following situations do not allow manual focus adjustment using the FI (Focus Indication) system in the viewfinder. Manually adjust the focus using the matte area of the viewfinder.

- 1) When the [  ] indicator does not confirm focus for hard-to-autofocus subjects.
- 2) When a lens with maximum aperture smaller than f/5.6 is used.
- 3) Bellows 100mm f/4, shift 28mm f/3.5 (shift position), reflex lens.
- 4) Screw mount lens with "Mount Adapter K" attachment.



1. Set the focus mode lever to [ MF ].
2. While looking through the viewfinder, turn the focusing ring of the lens to the right or left. Adjust the focus until the image comes clear on the screen.



Depth of field refers to the range around the optimum focusing point of the subject in which the elements at different distances are in focus.

#### The range allowed for focusing

The depth of field increases as the aperture becomes smaller, as the focal length of the lens becomes shorter, and as the subject is positioned farther away. By changing apertures, you can control the depth of field and create different visual effects.

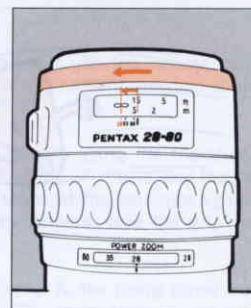
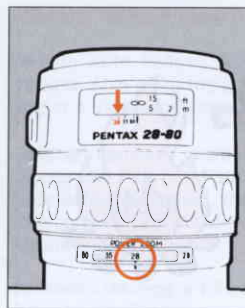
- \* Some zoom lenses do not have a depth-of-field scale due to mechanical reasons.



Aperture set at  $f/4$



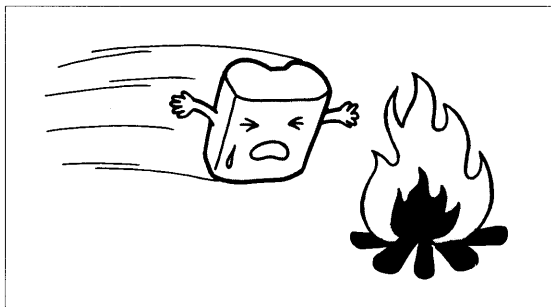
Aperture set at  $f/22$



When taking pictures with infrared film and an "R2" or "O2" filter, it is necessary to adjust the focus because the point of focus is not the same with infrared light as it is with visible light. Autofocus cannot adjust the focus for infrared pictures. Once the camera adjusts the focus, set the focus mode lever to [MF]. Next, memorize the focus point on the lens distance scale and turn the focusing ring so the point you memorized aligns with the infrared index.

As shown in the figure, if the focal length scale is set at 28, adjust the distance scale to 28 on the infrared index.

- \* Refer to your film guide for setting the exposure for infrared pictures. The optimum exposure cannot be achieved in the Programmed AE mode. Instead, set the exposure in the Metered Manual mode.



- \* When storing the camera in a bag or a case, make sure the main switch is turned off, to avoid accidental shutter release and unnecessary battery consumption.
- \* When the built-in flash is used continuously, the battery may become warm, but it does not mean the battery is faulty; it is one of the battery's characteristics.

#### Battery life

General Photography		Approx. 120 rolls
Flash Photography	50% flash usage time	Approx. 40 rolls
	100% flash usage time	Approx. 20 rolls
Bulb exposure time		Approx. 12 hours

- According to Pentax testing conditions
- Applicable to the use of a fresh lithium battery [2CR5], 24-frame film, room temperature.

- \* Use one lithium "2CR5" battery.
- \* Use battery properly. Improper use may cause the battery to overheat which may result in rupture and chemical seepage. Be sure to check the polarities before inserting the battery.
- \* Disassembling, damaging, charging, or heating battery may cause battery to rupture.
- \* Low temperatures may decrease battery performance but the battery will return to normal performance at normal temperature.
- \* When traveling or shooting outdoors, carry an extra supply of batteries.



## Special accessories (optional)

### ● Cable switch F

Shutter release cord for this camera and SFX<sub>N</sub>/SF1<sub>N</sub> and SF7/SF10 models.

### ● Magnifier F<sub>B</sub>

An accessory for close-up. It magnifies the viewfinder image.

### ● Flash AF330FTZ

Built-in auto zoom flash with AF spotbeam, guide number 33. Contrast Control Flash mode, leading and trailing curtain flash synchronization.

### ● Flash AF240FT, AF400FTZ

Auto flash with AF spotbeam, guide number 24 for AF240FT and guide number 40 for AF400FTZ.

AF400FTZ also incorporates a zoom flash head. Leading and trailing curtain flash synchronization.

### ● Hot shoe adapter F, 5P sync cord F

Adapter and cord which allow separation of the AF240FT, AF330FTZ, and AF400FTZ from the camera.

### ● AF adapter 1.7X

Adapter for autofocus photography with a K<sub>A</sub>- or K-mount lens with a maximum aperture of f/2.8 or brighter.

## Warning About Accessories:

● With Auto Bellows A, you can not use the double cable release. Also place the grip side of the camera up when shooting in a vertical position.



● When vertically positioning a camera using the tripod connector of a PENTAX F300mm F4.5ED ( IF ) lens, and the grip side is facing upward, the lock screw of the lens hits against the camera. To avoid hitting the camera, face the grip side down.


● When attaching a 645 lens adapter K, the fixing screw may hit against the camera body. To avoid this, change the position of the screw.

● When attaching a PENTAX M reflex 2000mm F13.5 lens to the camera, the vertical-horizontal converter lock screw of the lens may hit against the camera body. To avoid accidents, change the position of the lock screw.

● When attaching an AF280T, AF200T, AF240Z, or AF200S<sub>A</sub> flash to the hot shoe of the camera, you may not be able to access the black ⊖ button.

Refer to the problems and solutions listed below before calling customer support.

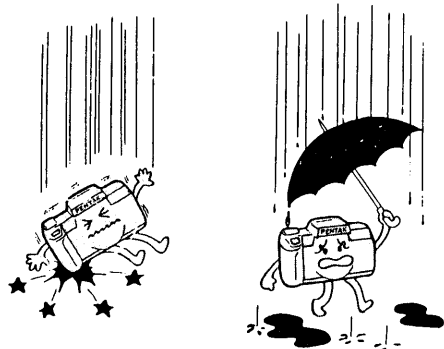
Symptoms	Causes	Remedies	Reference
Shutter does not release.	The Main Switch is not on.	Turn on the Main Switch.	p.7
	The battery warning [  ] indication appears.	Replace the battery.	p.7
	The battery is not inserted properly.	Re-insert the battery properly.	p.6
	The camera is in the self-timer mode.	Clear the self-timer mode.	p.29
	Built-in flash is charging.	Wait until charging is complete.	p.20
Indicators do not appear on the LCD panel.	The Main Switch is not on.	Turn on the Main Switch.	p.7
	The battery has not been inserted.	Insert battery.	p.6
	The battery is not inserted properly.	Re-insert the battery properly.	p.6
	The battery is dead.	Replace the battery.	p.7
The camera cannot focus the subject.	AF frame is not placed on the subject.	Place the subject into the AF frame before taking a picture.	p.16
	Camera is too close to the subject.	Move the camera farther away from the subject.	p.16
	The zoom lens is in the macro setting.	Get out of the macro setting or adjust the position of the camera by moving closer or farther from the subject.	
	The camera is in the [ MF ] manual focus mode.	Set the camera to the [ AF ] autofocus setting.	
	The subject is difficult to autofocus.	Use the focus-lock technique on a subject which is both near the actual one and at an equal distance from the camera, or use the matte area in the viewfinder for focusing.	p.30 p.53
The LED indicator in the viewfinder blinks.	Battery is low.	Replace the battery.	p.7
The [  ] indicator in the viewfinder is blinking.	The camera is too close to the subject or a subject that is difficult to autofocus cannot be focused.	Use the focus-lock technique or focus using the matte area.	p.30 p.53

Symptoms	Causes	Remedies	Reference
Built-in flash does not charge.	The battery is dead.	Replace the battery.	p.7
The [  ] indicator in the viewfinder is blinking in the Programmed AE mode.	The subject is too dark or when shooting a backlit subject.	Use of flash is recommended.	p.19
The [ + ], [ - ], or [ P ] indicator in the viewfinder is blinking.	The subject is too bright or too dark during Programmed AE or Metered Manual mode. The aperture is not set correctly in the Metered Manual mode.	If the subject is too bright or too dark, use an ND filter or flash. If the aperture is set incorrectly in the Metered Manual mode, adjust the aperture.	p.43
Zoom Clip mode can not be set.	The lens is set at manual zoom. The auto zoom switch of the lens is set at [ P ].	Push the power zoom ring of the lens out forward until [POWER ZOOM] appears. Set the auto zoom switch of the lens to [ A ].	p.31 p.32
The Image Size Tracking mode can not be set.	The focus-mode switch of the camera is in the [ MF ] manual focus setting. The lens is set at manual zoom. The auto zoom switch of the lens is set at [ P ].	Set the focus-mode switch of the camera at [ AF ] autofocus setting. Push the power zoom ring of the lens out forward until [POWER ZOOM] appears. Set the auto zoom switch of the lens to [ A ].	p.31 p.37
The power zoom does not work.	The lens is set at manual zoom.	Push the power zoom ring of the lens out forward until [POWER ZOOM] appears.	p.24
	The built-in flash is being charged.	Wait until charging is completed.	p.24
While shooting, the zooming automatically operates.	The camera is in the Image Size Tracking mode.	Clear the Image Size Tracking mode.	

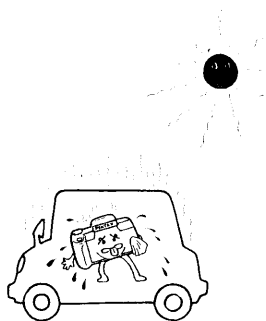
# TAKING CARE OF YOUR CAMERA

Your Pentax camera is a sophisticated, precision instrument built to give long-lasting, reliable service. It will serve you well if you treat it right, with proper handling and reasonable care. The major causes of damage are:

1. Dropping or banging the camera against immovable objects, which can damage the camera in many ways.
2. Water damage, particularly if the camera is submerged in salt water. Your camera is not water-proof! It must be protected from salt breeze, salt spray at the beach, splashing liquid of any kind, and shielded from the rain. If your camera does get soaked, wipe it dry immediately and rush it to a Pentax service center.



3. Dirt and sand can cause serious damage to the shutter and other moving parts of the camera. Your camera needs periodic cleaning to keep it operating properly. To remove dirt and dust, you need lens-cleaning fluid, lens-cleaning tissues, bulb-type ear syringe, camel's hair-brush, etc. Never use a solvent such as paint thinner or alcohol.
4. Humidity and temperature extremes should be avoided. Keep your camera out of direct sunlight, car trunks, and glove compartments. Shooting outdoors in winter presents a problem since batteries won't function if they get too cold. In cold weather carry your camera under your coat or jacket to keep the batteries warm. The temperatures at which this camera should function properly are approx. 50° ~ -10°C.



Sudden changes in temperature will often cause moisture to condense inside, or outside your camera. This is a possible source of rust, which may be extremely harmful to the mechanism.

Furthermore, if the camera is taken from a warm temperature to a sub-freezing one, further damage may result from the formation of icelets.

Thus, sudden temperature changes should be avoided as much as possible. As a guide, a temperature change of 10° C should be allowed to take place gradually over a period of at least 30 minutes.

If this is not possible, keeping the camera in its case or bag will help somewhat in minimizing the effects of a rapid temperature change.

5. Vibration experienced when you are traveling in a car, plane, or ship, can cause screws to loosen. To minimize this problem use foam-rubber padding about one inch thick to line the bottom of your camera bag.
6. When mounting your camera on a tripod, make sure the tripod screw is no longer than 5.5mm, which is the depth of your camera's tripod socket. If you use a longer screw, you will possibly puncture the tripod socket, after which the camera will not function properly.

### Precautions on LCD Display

- In temperatures over approximately 60°C, the LCD display may darken. It will return to its normal condition under normal temperature.
- In low temperatures, the LCD display may respond more slowly. This is due to the characteristics of the liquid used and is not a malfunction.

### Backup Circuit for LCD Display

Even when the battery is removed for replacement during shooting, the built-in backup circuit retain data such as the frame number and the ISO film speed in memory until a new battery is inserted.

# SPECIFICATIONS

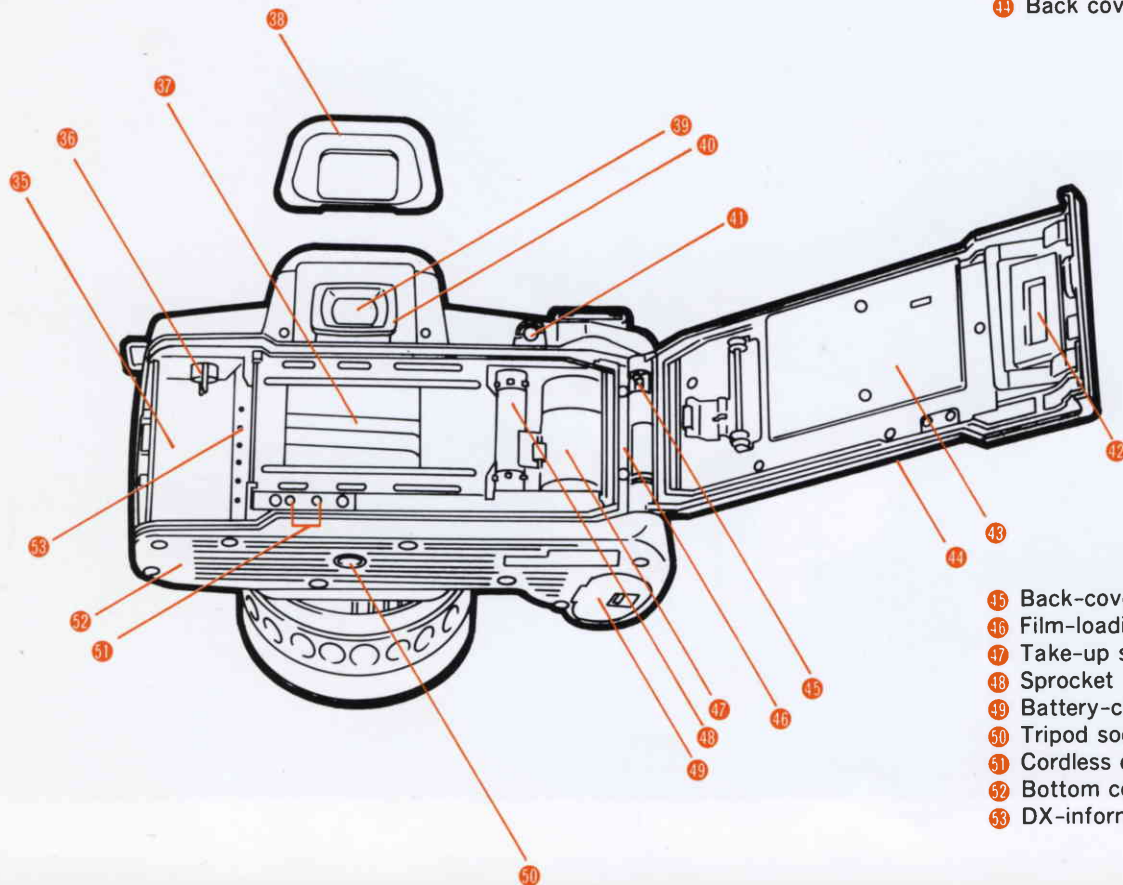
<b>Type:</b>	TTL AE/AF35mm SLR with built-in TTL auto flash.
<b>Format:</b>	24×36mm.
<b>Film:</b>	35mm cartridge film. DX-coded film with ISO 25-5000: non-DX coded films are set to ISO 100.
<b>Exposure modes:</b>	Programmed AE and Metered Manual.
<b>Shutter:</b>	Electronically controlled vertical-run focal-plane shutter. Programmed AE from 1/2000 to 4 sec. (stepless) and Metered Manual from 1/2000 to 1 sec., bulb. Electromagnetic release, shutter lock with Main Switch off.
<b>Lens mount:</b>	Pentax Bayonet K <sub>AF2</sub> -Mount (K-mount with AF coupler, lens information contacts and power contacts)
<b>Lens:</b>	K <sub>AF2</sub> -and K <sub>AF</sub> -mount lens, K <sub>A</sub> -and K-mount lens (autofocus is possible with AF adapter)
<b>Focusing System:</b>	Pentax TTL phase matching autofocus system, Usable illumination range: EV1 to EV18 (with f/1.4 lens at ISO100)
<b>Power zoom:</b>	3-speed power zoom, Zoom Clip Mode, Image Size Tracking Mode.
<b>Viewfinder:</b>	Penta-mirror finder, Aspheric-micro-matte focusing screen. Field of view: 91%, magnification: 0.77× (50mm,∞), -1 diopter eyepiece.
<b>Viewfinder LED indication:</b>	Focus information: in-focus (green lamp is lit), front focus and back focus signals and unable-to-focus indicator (green lamp blinks). Exposure information: programmed AE: [ P ] display, out-of-metering range: [ P ] blinking, Exposure compensation: [ + ], [ - ] display, Metered Manual mode: [ + ], [ ○ ], [ - ] display, [ + ] is overexposure, [ ○ ] is correct exposure, [ - ] is under-exposure, out-of-metering range: [ + ], [ - ] blinking, Flash charge completion, flash-recommended display or inappropriate lens warning: blinking.
<b>External LCD indication:</b>	Focus mode, exposure mode, shutter speed, flash recommendation, low-light warning, charge completion, inappropriate lens warning, exposure counter, film loading/winding/rewinding, film loading error, self-timer, low battery warning, exposure compensation indication, Zoom Clip and Image Size Tracking Mode.
<b>Self-timer:</b>	Electronically controlled type with delay time of approx. 12 sec. Start by shutter release button, Cancellation after activation is possible. Operation confirmation by beeping sound.
<b>Mirror:</b>	Swing-up-type instant-return with AF secondary mirror.
<b>Film loading:</b>	Auto loading, Closing the back cover will automatically wind film to first frame.

- Film advance/rewind:** Automatic winding/rewinding, auto rewinding starts at end of roll. Auto stop upon completion of rewinding. Rewinding time: approx. 15 sec. with 24-exposure film. Film rewinding/completion of rewinding displayed by LCD.  
Auxiliary rewind button will rewind film in mid-roll.
- Exposure control:** TTL multi(6)-segment metering by SPD cell. Metering range from EV1 to EV21 at ISO100 with 50mm f/1.4 lens. Spot metering in Metered Manual Mode.
- Built-in flash:** Retractable TTL Auto Flash (RTF), Guide number: 12 (ISO 100 in meters). Covers angle of view for 35mm wide-angle lens. Sync speed: automatically switches to 1/100 sec., Daylight sync flash, slow speed sync flash in Metered Manual Mode.
- Flash sync:** Via hot shoe with X-contact which couples with Pentax dedicated auto flash units.
- Power source:** One 6V lithium battery (2CR5)
- Back cover:** Interchangeable for accepting Data Back Fc
- Dimensions:** 146.0 (W) × 92.5 (H) × 66.5(D) (5.7" × 3.6" × 2.6")
- Weight:** 490 grams (17.3 oz.) without battery

**SPECIFICATIONS ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTIFICATION OR ANY OBLIGATION ON THE PART OF THE MANUFACTURER.**

- 35 Film chamber
- 36 Rewind shaft
- 37 Shutter curtain
- 38 Eyecup Fc

- 39 Viewfinder eyepiece
- 40 Viewfinder-accessory groove
- 41 Hyper button
- 42 Film-information window
- 43 Pressure plate
- 44 Back cover



- 45 Back-cover-release pin
- 46 Film-loading mark
- 47 Take-up spool
- 48 Sprocket
- 49 Battery-chamber cover
- 50 Tripod socket
- 51 Cordless contacts
- 52 Bottom cover
- 53 DX-information pins





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