

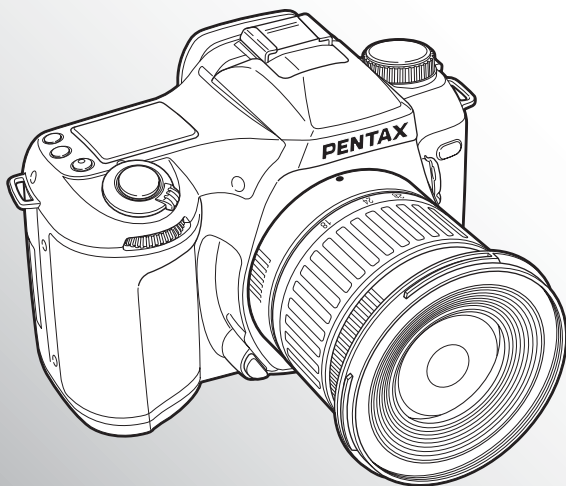
# PENTAX™

SLR Digital Camera

# *\*istD*

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## Operating Manual



For optimum camera performance, please read the Operating Manual before using the camera.

Thank you for buying the PENTAX *\*istD* Digital Camera. Please read this manual before using the camera in order to get the most out of all the features and functions. Keep this manual safe, as it can be a valuable tool in helping you to understand all the camera's capabilities.

### **Lenses you can use**

In general, lenses that can be used with this camera are FA J lenses and lenses that have an Aperture A (Auto) position.

To use any other lens or accessory, use the custom function settings to set the camera to allow shutter release in modes other than lens Aperture A.

Under the default settings, the camera will cease to operate.

See page 113 for setting custom functions.

### **Regarding copyrights**

Images taken using the *\*istD* that are for anything other than personal enjoyment cannot be used without permission according to the rights as specified in the Copyright Act. Please take care, as there are even cases where limitations are placed on taking pictures even for personal enjoyment during demonstrations, industrial enterprise or as items for display. Images taken with the purpose of obtaining copyrights also cannot be used outside the scope of use of the copyright as laid out in the Copyright Act, and care should be taken here also.

### **Regarding trademarks**

- CompactFlash and CF are trademarks of SanDisk Corporation.
- PENTAX is a trademark of PENTAX Corporation.
- *\*istD* is a trademark of PENTAX Corporation.
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- The USB driver uses software developed by inSilicon Corporation. Copyright © 2002 inSilicon Corporation. All rights reserved.
- This product supports PRINT Image Matching II.  
When used in combination, PRINT Image Matching II enabled digital still cameras, printers and software help photographers to produce images more faithful to their intentions.  
Copyright 2001 Seiko Epson Corporation. All Rights Reserved.  
PRINT Image Matching is a trademark of Seiko Epson Corporation.

### **To users of this camera**

- There is a possibility that recorded data may be erased or that the camera may not function correctly when used in surroundings such as installations generating strong electromagnetic radiation or magnetic fields.
- The liquid crystal panel used in the LCD display is manufactured using extremely high precision technology. Although the level of functioning pixels is 99.99% or better, you should be aware that 0.01% or fewer of the pixels may not illuminate or may illuminate when they should not. However, this has no effect on the recorded image.
- There is a possibility that the illustrations and the display screen of the LCD monitor in this manual are different from the actual product.

## FOR YOUR SAFETY

We have paid close attention to the safety of this product. When using this product, we request your special attention regarding items marked with the following symbols.



**Warning** This symbol indicates that violating this item could cause serious personal injury.



**Caution** This symbol indicates that violating this item could cause minor or medium personal injury, or material loss.



### **Warning**

- Do not disassemble or modify the camera. High voltage areas are present inside the camera, with the risk of electric shock.
- If the camera interior is exposed due to dropping or otherwise damaging the camera, never touch the exposed portion. There is the risk of electric shock.
- Wrapping the strap around your neck is dangerous. Take care that small children do not hang the strap over their necks.
- Do not look directly at the sun through the camera, as viewing the sun may damage your eyes, and / or parts of the camera (e.g.: shutter curtains, etc.)
- Be sure to store batteries out of the reach of children. Seek medical assistance immediately if accidentally swallowed.
- Always use the AC adapter specified exclusively for this product, with the specified power and voltage. Using an AC adapter not exclusive to this product, or using the exclusive AC adapter with an unspecified power or voltage can cause a fire, electric shock, or camera breakdown.
- If any irregularities occur during use, such as smoke or a strange odor, stop use immediately, remove the batteries or the AC adapter, and contact your nearest PENTAX service center. Continued use could cause a fire or electric shock.
- During thunderstorms, unplug and discontinue use of the AC adapter. Continued use could cause equipment failure, a fire, or electric shock.



### **Caution**

- Do not short the battery or dispose of the battery in fire. Do not disassemble the battery. The battery could explode or catch fire.
- Do not charge any batteries other than rechargeable Ni-MH batteries. The battery could explode or catch fire. Of the batteries that can be used in this camera, only the Ni-MH battery can be recharged.
- Remove the battery from the camera immediately if it becomes hot or begins to smoke. Be careful not to burn yourself during removal.
- Some portions of the camera heat up during use. There is the risk of low temperature burns when holding such portions for long periods.
- Do not place your finger on the flash when it is discharging as there is a risk of burns.

## PRECAUTIONS FOR BATTERY USAGE

- Misuse of the battery can cause hazards such as leakage, overheating, explosion, etc. The battery should be inserted correctly with regard to polarity (+ and -) marked on the battery and the camera.
- Battery performance may be temporarily hindered in low temperatures, but will recover in normal temperatures.
- Keep a spare battery on hand for replacement convenience when shooting outdoors or while traveling.
- If the built-in flash is used continuously, the battery may become warm, but it does not mean that the battery is faulty; it is one of the battery's characteristics.
- Replace the batteries at the same time. Do not mix battery brands, type or an old battery with a new one. It may cause explosion or overheating.

## Handling the Camera

- Always confirm that the camera is working properly when the camera has not been used for a long time, or before important occasions (weddings, trips, etc.). PENTAX is not responsible for consequential damages (costs incurred for photography, lost profits, etc.) arising from failure of this product.
- Do not clean the product with organic solvents such as thinner, alcohol, or benzene.
- Do not subject to high temperatures or high humidity. Do not leave the camera in a vehicle, as the temperature can get very high.
- Do not store the camera with preservatives and chemicals. Storage in high temperatures and high humidity can cause molding. Remove from case and store in a dry and well-ventilated location.
- This camera is not waterproof, and cannot be used in the rain or where the camera could get wet.
- Do not subject the camera to strong vibrations, shocks, or pressure. Use a cushion to protect the camera from vibrations of motorcycles, automobiles, or ships.
- The temperature range for camera use is 0°C to 40°C.
- The LCD display may appear black under high temperatures, but will return to normal as temperatures normalize.
- The LCD display may respond more slowly at low temperatures. This is due to liquid crystal properties, and is not a fault.
- Periodic inspections are recommended every one to two years to maintain high performance.
- Sudden temperature changes will cause condensation on the inside and outside of the camera. Place the camera in your bag or a plastic bag, retrieving the camera after decreasing the temperature difference.
- Avoid contact with garbage, mud, sand, dust, water, toxic gases, or salts. These could cause a camera breakdown. Wipe dry any rain or water drops on the camera.
- Use a blower or lens brush to remove dust accumulated on the lens or viewfinder. Never use a spray blower for cleaning as it may damage the lens or viewfinder screen.
- See "Precautions When Using a CF Card" (p.151) for details on the compact flash memory card (CF Card).
- Please do not press forcefully on the LCD monitor. This could cause breakage or malfunction.

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# Contents of this manual

This operating manual contains the following chapters.

## 1 Before using your camera

Explains camera characteristics, accessories and the names of various parts.

## 2 Getting Started

Explains your first steps from purchasing the camera to taking pictures. Be sure to read it and follow the instructions.

## 3 Basic Operation

Explains the simplest way to take pictures and play back images. Use it if you want to get started right away.

## 4 Shooting Functions

Explains how to take better pictures by using the various shooting functions.

## 5 Playback Functions

Explains how to play back images and how to delete.

## 6 Settings

Explains setting camera functions.




## 7 Connecting

Explains how to connect your camera to a TV or PC.

## 8 Appendix

Explains troubleshooting, introduces accessories sold separately and provides various resources.

The symbols used in this operating manual are explained below.

	Shows reference page number explaining a related operation.
	Shows information useful to know.
	Shows precautions to take when operating the camera.

# 1 Before using your camera

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# Camera Characteristics

1

Before using your camera

- Uses a 23.5×15.7mm CCD with 6.1 mega-pixels of effective pixels for high precision and a wide dynamic range.
- Small, light, and highly rigid among digital cameras with interchangeable lenses.
- Consecutive shooting at approximately three 2.6 per second (6 frames max.) with noise reduction off.
- Features a newly developed AF sensor, with 11-point distance measurement. (Center uses a wide cross area AF including 9 focus points.)
- Improved manual focusing using a viewfinder similar to a conventional 35mm SLR camera, but with 0.95× magnification. Also features a superimpose function, in which the focus points on the viewfinder illuminate red.
- Can use two CR-V3 lithium batteries, four AA lithium batteries, four AA Ni-MH batteries or four AA alkaline batteries.
- Features the two-dial hyper operating system.
- Can install the battery grip (sold separately) which uses the same batteries as the camera, extends battery life and has a vertical shutter release button.

This camera can be used with a variety of Pentax 35mm interchangeable lenses.

While the size of the CCD is 23.5×15.7mm, the format size of the 35mm camera is 36×24mm. As a result, the angle of view (the size and scale of the subject to be photographed) will differ from 35mm cameras when lenses of the same focal length are used to take pictures from the same distance.

The format size of a 35mm camera is approximately 1.5 times larger than the format size of this camera. As such, focal distance when the lens for 35mm format lens is attached to this camera will be equivalent to approx. 1.5 times more than the value noted on the lens.

# Checking Package Contents

The following accessories are packaged with your camera.



Hot shoe cover F $\kappa$   
(Supplied with camera)



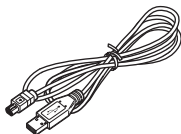
Eyecup F $\iota$   
(Supplied with camera)



ME Viewfinder cap



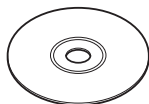
Body mount cover  
(Supplied with camera)



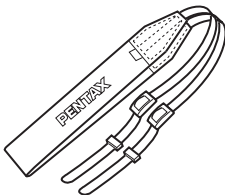
USB cable  
I-USB2



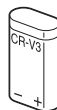
Video cable  
I-VC2



Software (CD-ROM)  
S-SW10



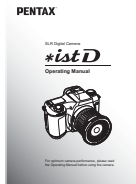
Strap  
O-ST10



Lithium batteries  
CR-V3 (two)



Lithium battery CR2016  
(Installed on camera)



Operating manual

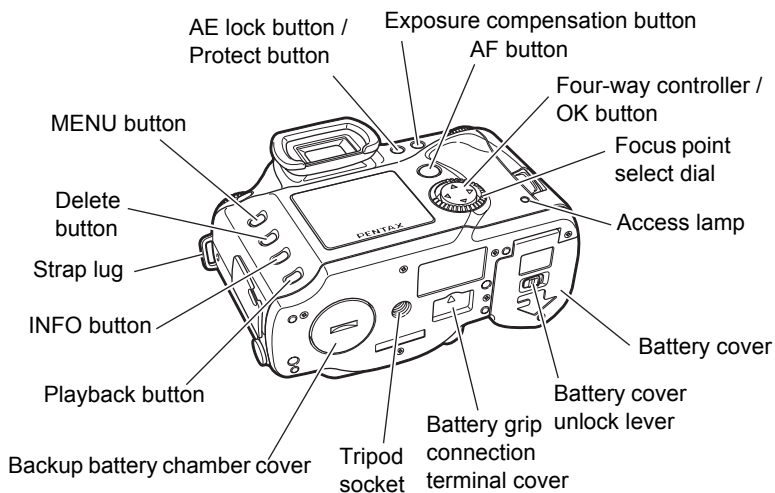
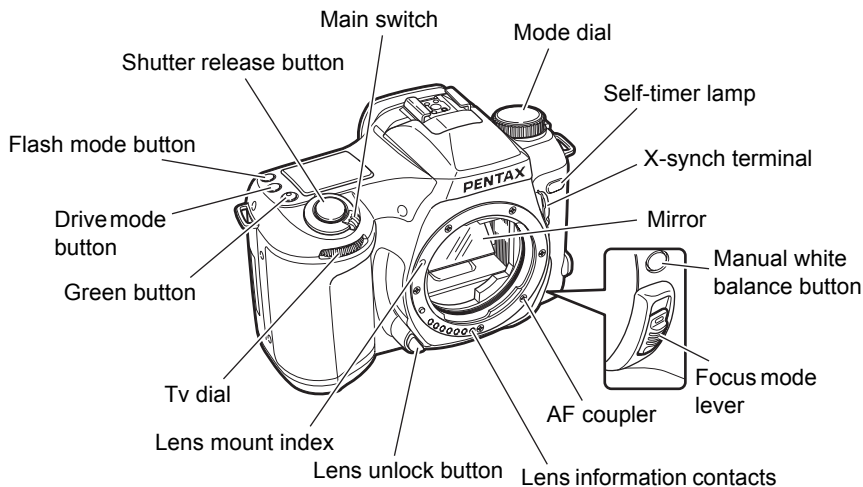


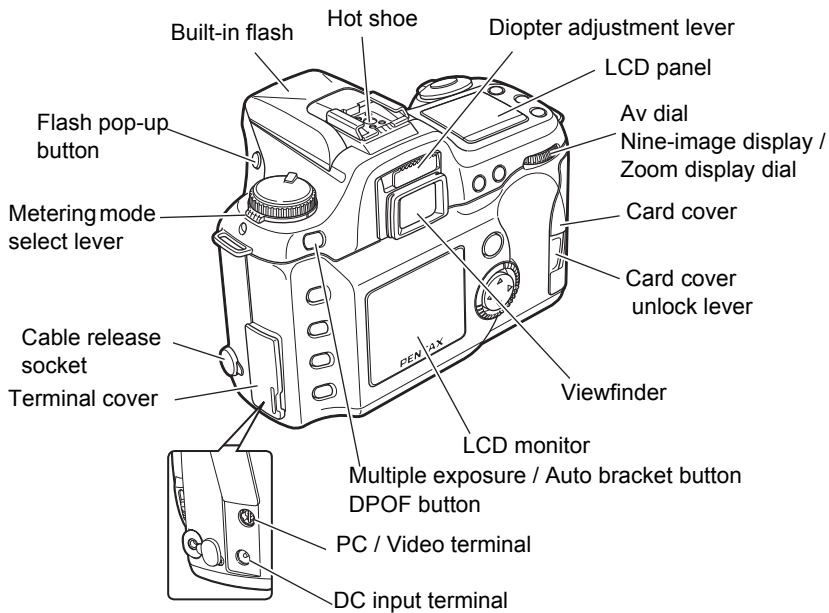
PENTAX PHOTO Browser  
PENTAX PHOTO Laboratory  
Operating manual

## Camera

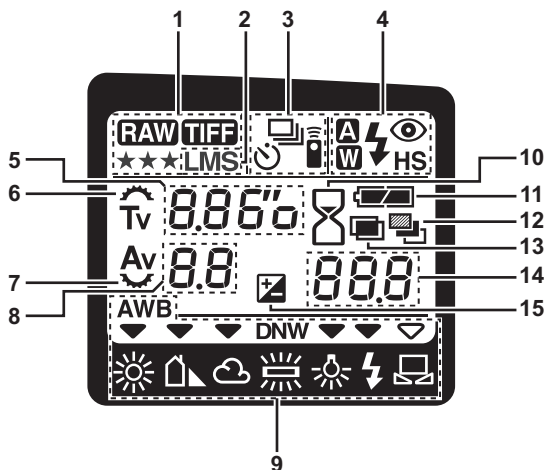
1

Before using your camera






## LCD Panel Indications



- |   |                        |    |                                   |
|---|------------------------|----|-----------------------------------|
| 1 | Quality level (p.52)   | 9  | White balance mode (p.55, 142)    |
| 2 | Recorded Pixels (p.51) | 10 | Busy                              |
| 3 | Drive mode (p.44)      | 11 | Battery exhaustion warning (p.24) |
| 4 | Flash mode (p.86)      | 12 | Auto Bracket (p.82)               |
| 5 | Shutter speed (p.62)   | 13 | Multiple exposure shooting (p.84) |
|   | Sensitivity (p.54)     | 14 | Number of recordable images       |
| 6 | Tv dial enabled (p.62) |    | Exposure compensation step (p.79) |
| 7 | Av dial enabled (p.64) |    | Multiple exposure frames (p.84)   |
| 8 | Aperture (p.64)        | 15 | Exposure compensation (p.79)      |

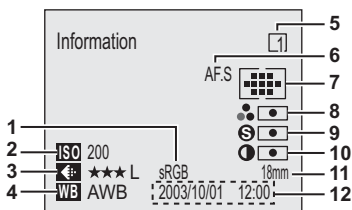


Turn the main switch to  to see the LCD panel in the dark. The LCD panel will light up for about 10 seconds. The LCD panel on the AF360FGZ will also light up when the AF360FGZ is used.

# LCD Monitor Indications

## 1. Capture Mode

Press the INFO button in capture mode to display the capture function settings on the LCD monitor.



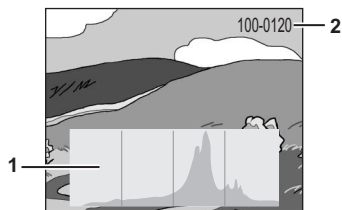
- |   |  |    |                     |
|---|--|----|---------------------|
| 1 | Color space (p.128)                        | 7  | Focus points (p.74) |
| 2 | Sensitivity (p.54)                         | 8  | Saturation (p.117)  |
| 3 | Quality level / Recorded pixels (p.51, 52) | 9  | Sharpness (p.117)   |
| 4 | White Balance (p.55, 142)                  | 10 | Contrast (p.118)    |
| 5 | Custom Function (p.115)                    | 11 | Lens focal length   |
| 6 | Focus mode (p.70)                          | 12 | Date and Time       |



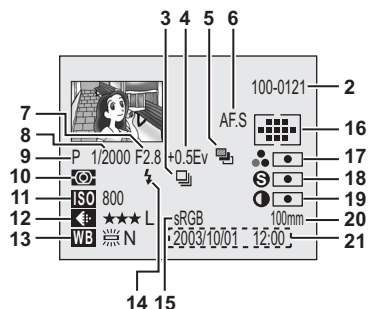
## 2. Playback

The camera switches between Normal Playback Screen → Histogram Display → Detailed Information Display every time you press the INFO button during playback.

### • Histogram



### • Detailed information

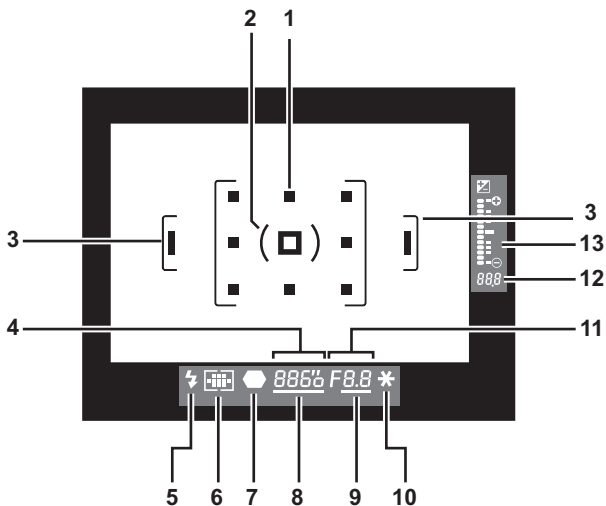


- |  |   |
|--|---|
| 1 Histogram  | 10 Metering mode (p.57)                 |
| 2 Folder name / File name (p.124)                      | 11 Sensitivity (p.54)                   |
| 3 Drive mode (p.44)                                    | 12 Recorded quality / pixels (p.51, 52) |
| 4 Exposure compensation step (p.79)                    | 13 White balance (p.55, 142)            |
| 5 Auto bracket / Multiple exposure (p.82, 84)          | 14 Flash mode (p.86)                    |
| 6 Focus mode (p.70)                                    | 15 Color space (p.128)                  |
| 7 Aperture value (p.64)                                | 16 Focus points (p.74)                  |
| 8 Shutter speed (p.62)                                 | 17 Saturation (p.117)                   |
| 9 Capture mode   | 18 Sharpness (p.117)                    |
| <input type="checkbox"/> :Green program AE mode (p.59) | 19 Contrast (p.118)                     |
| <b>P</b> :Hyper-Program (p.60)                         | 20 Lens focal length                    |
| <b>Tv</b> :Shutter speed-priority AE (p.62)            | 21 Captured date and time               |
| <b>Av</b> :Aperture-priority AE (p.64)                 |   |
| <b>M</b> :Hyper-Manual (p.66)                          |   |



Press the four-way controller (▲▼) in the histogram display to move the histogram display position up or down.

## Viewfinder Indications



- |   |                          |    |                             |
|---|--------------------------|----|-----------------------------|
| 1 | Focus points             | 8  | Tv dial enabled             |
| 2 | Spot metering frame      | 9  | Av dial enabled             |
| 3 | Autofocus frame          | 10 | AE Lock indicator           |
| 4 | Shutter speed            | 11 | Aperture value              |
| 5 | Flash status information | 12 | Number of recordable images |
| 6 | Focus points indication  |    | Exposure compensation step  |
| 7 | Focus indicator          | 13 | Bar graph                   |



The focus points are superimposed in red when the shutter release button is pressed halfway down. The superimpose function can be canceled using the custom function. See page 115 for setting Custom Functions.

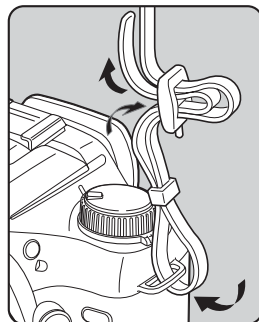
# 2 Getting Started

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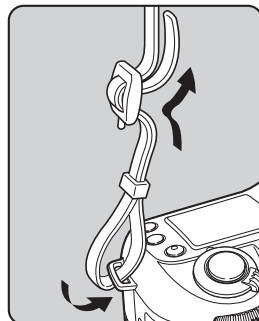
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# Attaching the Strap

- 1** Pass the end of the strap through the strap lug, then secure to the inside of the clasp.

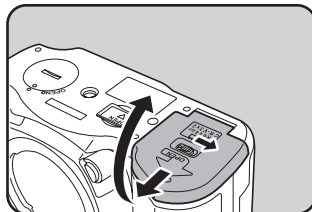


- 2** Pass the other end of the strap through the other strap lug on the camera, then secure to the inside of the clasp.

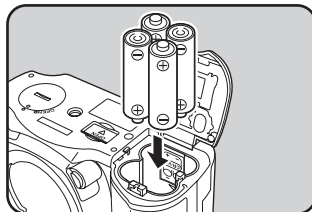


Load batteries in the camera. Use two CR-V3, or use four AA lithium batteries, AA Ni-MH batteries, or AA alkaline batteries.

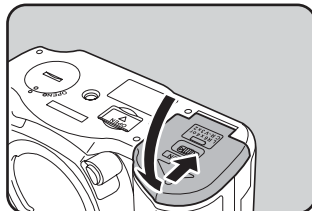
- 1** Open the battery cover by pushing the battery cover unlock lever as shown in the illustration and slide the battery cover toward the lens before flipping it open.



- 2** Insert the batteries according to the + / - indicator in the battery chamber.



- 3** Press down on the batteries with the battery cover to close and slide it as shown in the illustration.



- Please use the AC adapter when using the camera for a prolonged period. (p.25)
- Check the battery orientation if the camera will not operate properly after replacing the batteries.
- The optional battery grip D-BG1 is also available.



- AA lithium batteries, AA alkaline batteries and CR-V3 are not rechargeable.
- Do not open the battery cover or remove the batteries when the power switch is on.
- Remove the batteries when you will not use the camera for a long while. Otherwise, the battery may leak.
- If the date and time settings have been reset when you insert new batteries after a long while, follow the procedure for "Setting the Date and Time" p.29.
- Insert batteries correctly. Batteries inserted backwards can cause a camera breakdown.
- Replace all the batteries at the same time. Do not mix battery type, brands or an old battery with a new one.

## Batteries

You can use a variety of batteries with your camera. Battery performance differ by battery type. Please choose the type that best suits your purpose.

### CR-V3

The provided CR-V3 is a long-life battery and is convenient for trips.

### AA Ni-MH battery

These are rechargeable for multiple uses and are economical.


### AA lithium batteries




It is recommended that you use these batteries in cold climates. It shows a fine performance in such cold temperatures.

### AA alkaline batteries

You can use readily available AA alkaline batteries when your usual batteries run out. AA alkaline batteries may not adequately handle all the camera functions under certain conditions. We do not recommend their use except in emergencies.

## Battery level indicator

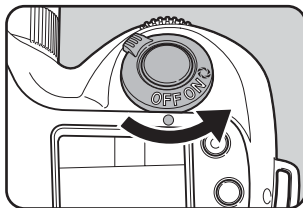
You can confirm remaining battery life by checking the  displayed on the LCD panel.

	:	Adequate power
↓	:	
	:	Battery is running low
↓	:	
	:	Battery is exhausted
↓	:	
[Battery Depleted]	:	The camera turns off after displaying this message.

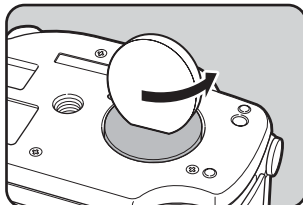
## Backup battery

When the backup battery is nearly exhausted, the date and time setting screen will appear on the LCD monitor when you change the camera batteries. When this happens, change the backup battery (CR2016). (Replace the battery once every five years.)

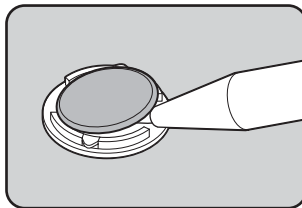
### 1 Turn off the camera.



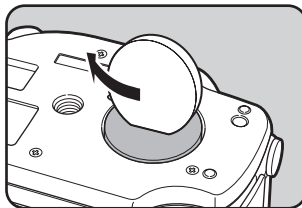
### 2 Use a coin to remove the backup battery chamber cover.



- 3** Remove the backup battery from the backup battery chamber cover using a pen tip or similar object and insert a new backup battery with the + facing towards the cover.



- 4** Close the backup battery chamber cover until it clicks.



## Number of Captures and Playback Time (new batteries)

Batteries (temperature)		Normal recording	Flash photography		Playback time (min.)
			50% use	100% use	
CR-V3	(20°C)	Approx. 1000	Approx. 900	Approx. 800	Approx. 600
	(0°C)	Approx. 650	Approx. 600	Approx. 500	Approx. 400
AA Lithium	(20°C)	Approx. 900	Approx. 800	Approx. 700	Approx. 400
	(0°C)	Approx. 800	Approx. 700	Approx. 600	Approx. 350
Ni-MH	(20°C)	Approx. 450	Approx. 400	Approx. 350	Approx. 300
	(0°C)	Approx. 400	Approx. 350	Approx. 300	Approx. 250
AA-Alkaline	(20°C)	Approx. 110	Approx. 100	Approx. 80	Approx. 120
	(0°C)	Not applicable	Not applicable	Not applicable	Approx. 60

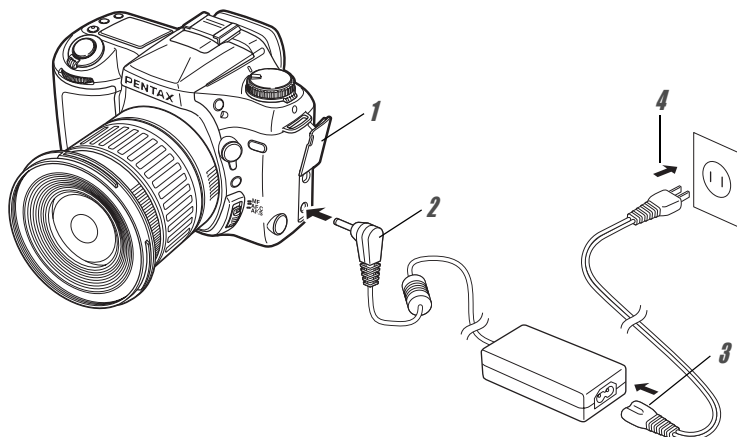
- These figures are based on PENTAX measuring conditions and may vary by capture mode or shooting conditions.



- Battery performance temporarily decreases as the temperature decreases. When using the camera in cold climates, have extra batteries on hand, keeping them warm in your pocket. Battery performance will return to normal when returned to room temperature.
- AA alkaline batteries may not adequately handle all the camera functions. We do not recommend their use except in emergencies.
- When traveling overseas, taking pictures in cold climates, or when you will be taking a lot of pictures, please have extra batteries ready.
- For image storage capacity when using the Battery Grip D-BG1, see p. 146.



## Using the AC Adapter



We recommend using the AC adapter D-AC10 (optional) when using the LCD monitor for a long time or when connecting to your PC.

- 1** Make sure the camera is turned off before opening the terminal cover.
- 2** Connect the DC terminal on the AC adapter to the DC input terminal on the camera.
- 3** Connect the AC plug cord to the AC adapter.
- 4** Plug the AC cord into the power outlet.

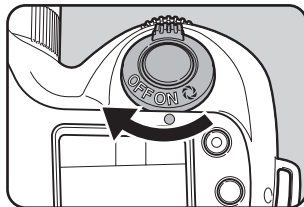


- Make sure the camera is turned off before connecting or disconnecting the AC adapter.
- Make sure connections are secure between the camera, AC adapter, AC plug cord terminal and the power outlet. Disconnection while the camera is recording or reading data on the CF card will corrupt your data.
- When using the AC adapter, be sure to read the AC adapter D-AC10 operating manual.
- Connecting the AC adapter will not charge the rechargeable batteries in your camera.

## 1 Turn the main switch to ON.

The camera will turn on.

Turn the main switch to OFF to turn off the camera.



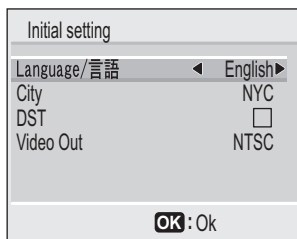
- Always turn the camera OFF when not in use.
- Turn the main switch to the power symbol to illuminate the LCD panel for about 10 seconds. The depth of field can also be checked in the viewfinder by turning the main switch to the power symbol position. See page 138 for preview display.
- Auto Power Off will be activated when you do not perform any operations within a set period of time. (Default setting is 1 minute)

The first time the camera is turned on after purchasing, the “Initial Setting” screen appears on the LCD monitor. Follow the procedure below to set the language displayed on the LCD monitor and the current date and time. Once setting is done, these will not need to be set again when turning your camera on.

## Setting the Display Language

You can choose the language in which the menus, error messages, etc. are displayed from the following: English, French, German, Spanish, Italian and Japanese.

### 1 Turn the camera on.



### 2 Use the four-way controller (◀▶) to select your applicable language.

The default setting is English.

### 3 Press the four-way controller (▼).

The screen for setting the [City] will be displayed.

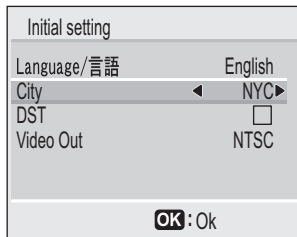


You can change the setting after it has been made. Refer to “Setting the Display Language” p.27.

## Setting the Home Town

You can choose the city (Home Town) in which you will use the camera.

- 1 Use the four-way controller (◀▶) to select your applicable city (Home Town).



- 2 Press the four-way controller (▼).

The screen for setting the [DST] will be displayed.



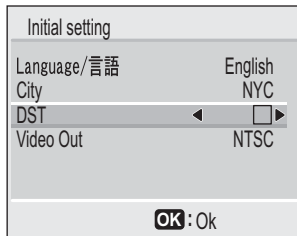
- See p.92 for the list of cities and corresponding code names.
- You can change the setting after it has been made. Refer to “Setting the World Time” p.120.

## Setting the D.S.T. Mode

You can choose whether or not to display the D.S.T (Daylight Saving Time) mode.

- 1 Use the four-way controller (◀▶) to select  (on) or  (Off).

The default setting is  (Off).



- 2 Press the four-way controller (▼).

The screen for setting the [Video Out] will be displayed.



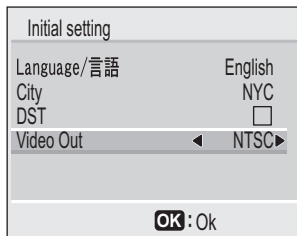
- You can change the setting after it has been made. Refer to “Setting the World Time” p.120.

## Setting the Video Output Format

You can choose the output format (NTSC or PAL) for playing back pictures using a TV monitor.

### 1 Use the four-way controller (◀▶) to select the video output format.

The default setting is NTSC.



### 2 Press the OK button.

The screen for setting the [Date and Time] will be displayed.



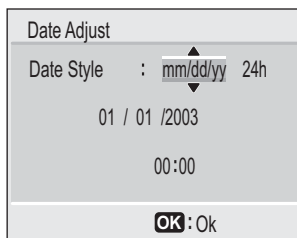
You can change the setting after it has been made. Refer to “Selecting the Video Output Format” p.123.

## Setting the Date and Time

Set the current date and time and the display style.

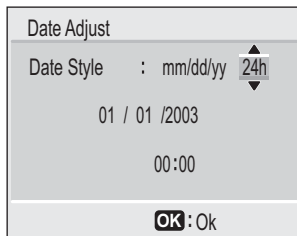
### 1 Use the four-way controller (▲▼) to select the date and time display style.

▲▼ are displayed above and below the display style.



### 2 Press the four-way controller (▶).

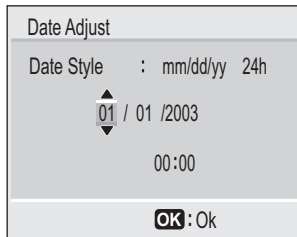
▲▼ are displayed above and below “24h”.



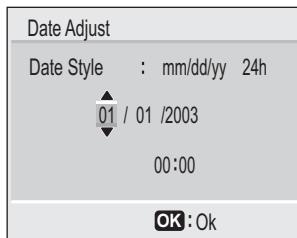
**3** Use the four-way controller (▲▼) to select 24h (24-hour display) or 12h (12-hour display).

**4** Press the four-way controller (▶).

▲▼ is displayed above and below the month.

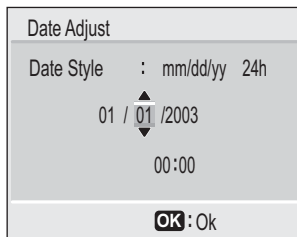


**5** Use the four-way controller (▲▼) to change the month.



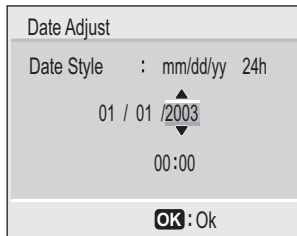
**6** Press the four-way controller (▶).

▲▼ are displayed above and below the date.



**7** Use the four-way controller (▲▼) to set the date and press the four-way controller (▶) again.

▲▼ are displayed above and below the year.



**8** Repeat step 7 to set the year, hour and minutes.

## 9

**Press the OK button.**

The camera is ready to take a picture. When you set the date and time using the MENU button, you will return to the Menu screen. Press the OK button again.



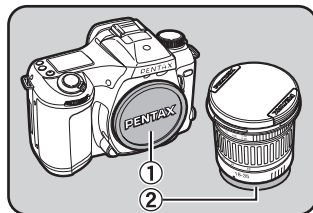
Press the OK button to set the clock to 0 seconds when the clock reaches 00 second.



- If you press the MENU button before initial settings are complete, your settings will be cancelled, but you can take pictures. If this occurs, the Initial settings screen is appeared the next time the camera is turned on.
- Your settings can be changed later from the Menu screen. To access the menu, see “Changing the Date Style and Date / Time” p.120.

# Attaching the Lens

- 1** Remove the body mount cover ① and the lens mount cover ② in the illustration.

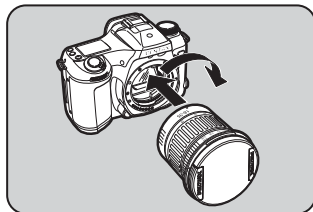


2

Getting Started

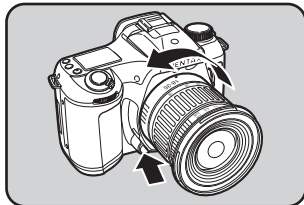
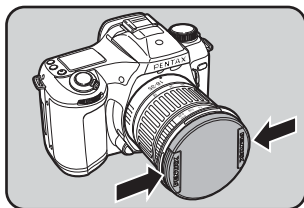
- 2** Align the red dots on the camera and the lens, and secure by turning the lens clockwise until it clicks.

Turn the lens to the left to confirm that it is locked in place after attaching the lens.



- 3** Remove the front lens cap by pushing the indicated portion inward.

To detach the lens, hold down the lens unlock button and turn the lens counterclockwise.







- The body mount cover ① is a cover for shipping purpose to prevent scratches and block dust. For long-term camera storage, the optional accessory “Body Mount Cap K” is available, and has a lock mechanism.
- Turn the camera OFF before attaching or removing the lens to prevent unexpected lens movement.
- Be sure to put the lens down with the lens mount side facing upward to protect the lens information contacts and AF coupler of the lens against damage after removal.
- We assume no responsibility nor liability for damages resulting from the use of lenses made by other manufacturers.
- The camera body and lens mount incorporate lens information contacts and an AF coupler. Dirt, dust, or corrosion may damage the electrical system. Clean the contacts with a soft dry cloth.

# Installing / Removing the CF Card

Captured images are recorded on the compact flash (CF) card. Make sure the camera is turned off before installing or removing a CF card (market product).



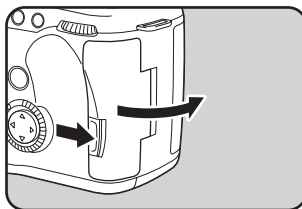
You can also use a Microdrive™ in addition to a CF card.

2

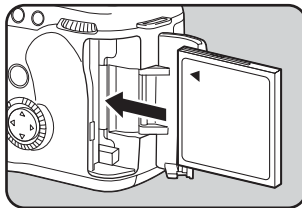
Getting Started

## Installing

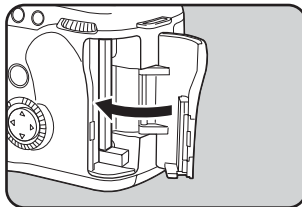
- 1 Push the card cover unlock lever in the direction indicated to open the card cover.**



- 2 Insert the card all the way with the CF card label toward the LCD monitor.**



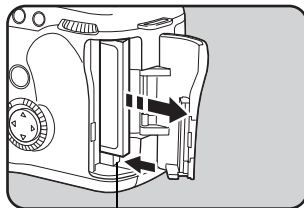
- 3 Close the card cover.**



## Removing

**1** Push the card cover unlock lever in the direction indicated to open the card cover.

**2** Press the card eject button to remove the CF card.



Card eject  
button

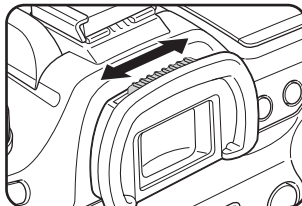
**3** Close the card cover.

# Adjusting the Viewfinder Diopter

Adjust the viewfinder to match your eyesight.

- 1** Look through the viewfinder and point and camera at a well-lit scene. Then move the diopter adjustment lever left or right.

Adjust the position until the autofocus frames and the focus points in the viewfinder are in clear focus.



- You can adjust the diopter from  $-2.5\sim+1.5\text{m}^{-1}$  (Per meter).

# **3 Basic Operation**

---

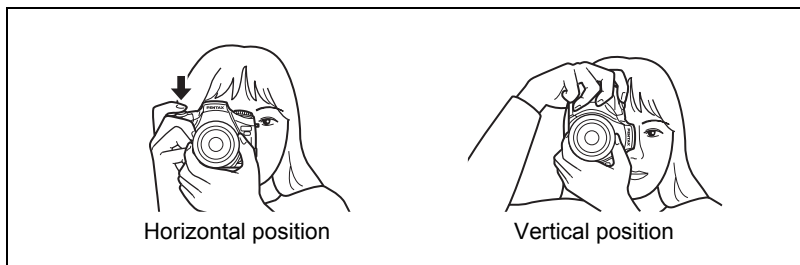
<b>Basic Operation (Shooting).....</b>	<b>38</b>
<b>Basic Operation (Playback).....</b>	<b>41</b>

# Basic Operation (Shooting)

## Holding the Camera

How you hold the camera is important when taking pictures.

- Hold the camera firmly with both hands.
- Press the shutter release button gently when taking a picture.



3


Basic Operation

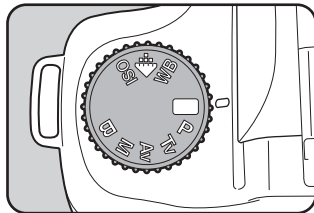


- To reduce camera shake, support your body or the camera on a solid object - a table, tree, or a wall for instance.
- Although there are individual differences among photographers, in general the shutter speed for a hand held camera is  $1/\text{focal length} \times 1.5$ . For example, it is  $1/75$  of a second for a focal length of 50mm and  $1/150$  of second for 100mm. A tripod should be used for shutter speeds slower than this.
- When using an telephoto lens, a tripod that is heavier than the total weight of the camera and lens is recommended to avoid camera shake.

## Taking Pictures

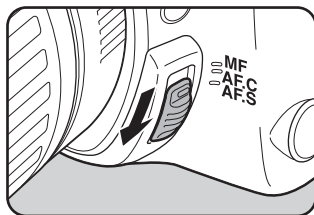
### 1 Set the camera to green program AE mode.

Set the mode dial to .  
(p.59)



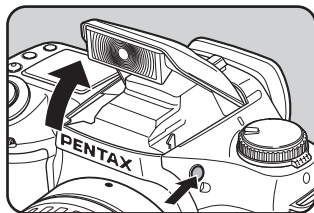
### 2 Set the focus mode to Autofocus.

Set the focus mode lever to **AF.S**.  
(p.70)



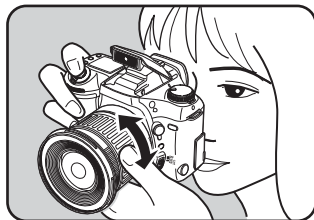
### 3 Press the flash pop-up button to activate the flash.

You do not need to pop-up the flash when you do not intend to use it.



### 4 Adjust the size of the subject.

Turn the zoom ring to determine the size of the subject.  
(p.81)

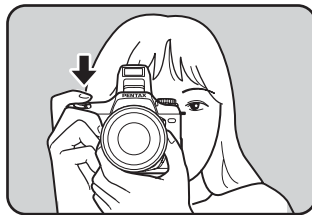


## 5 Adjust the focus and take a picture.

Position the subject within the autofocus frame and press the shutter release button to take the picture (p.17).

The flash fires automatically based on light conditions.

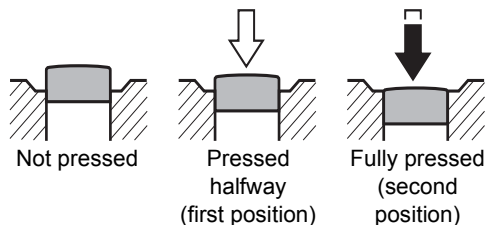
Push the flash down by hand after you finish taking pictures.



### 3

## OPERATING THE SHUTTER RELEASE BUTTON

The shutter release button has two positions.



Pressing it down halfway (first position) turns on the viewfinder and LCD display indications and the autofocus system operates. Pressing it fully (second position) takes the picture.



- Press the shutter release button gently to prevent camera shake when taking a picture.
- Practice pressing the shutter release button halfway to learn where the first position is.
- The viewfinder indications stay on for about 10 seconds (initial value) after the button is released from the halfway position. Pressing the shutter release button halfway down keeps the LCD indicator on.

## Instant Review

Instant Review displays the image immediately after taking a picture. The Instant Review default setting displays for 1 sec. Press the Delete button (⏏) to display the delete screen while the image is displayed. Press the four-way controller (▲) to select [Delete] and press OK. The image is deleted.



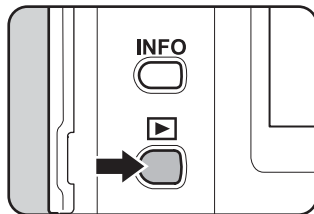
## Playing Back Images

You can play back the still pictures.

### 1 Press the playback button (▶) after taking a picture.

The most recently captured image is displayed on the LCD monitor.

Press the Playback button again, or press the shutter release button halfway to return to capture mode.



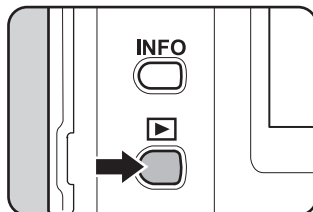
- Pressing the four-way controller (▼) will rotate the image 90°, 180° and 270°. The image captured in vertical position can be displayed for easy viewing. (Only the display is rotated. The recorded image is not updated.)
- The image with the highest file number is shown first when you switch to the playback screen.
- You can enlarge the image displayed on the LCD monitor by turning Nine-image Display / Zoom Display dial. (p.100)
- If no images are stored, the "No Image" message is appeared.

## Selecting Previous or Next Images

You can play back the still pictures, cycling through one at a time.

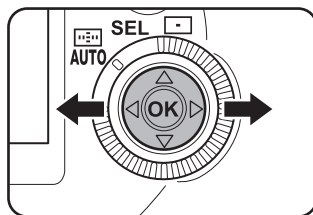
- 1 **Press the playback button (▶) after taking a picture.**

The captured image is displayed on the LCD monitor.



- 2 **Press the four-way controller (◀ or ▶).**

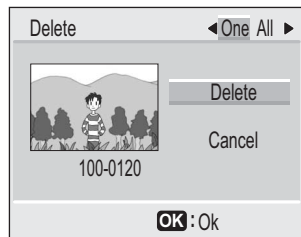
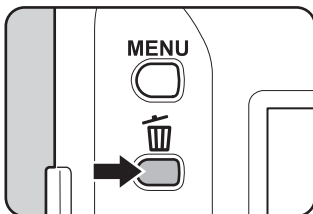
- ◀ Displays the previous image.
- ▶ Displays the next image.



## Deleting Images

Press the Delete button (🗑️) to display the Delete screen when the image is displayed. Press the four-way controller (▲) to select [Delete] and press OK. The image is deleted.

Press the Playback button again or press the shutter release button halfway to return to capture mode.






# 4 Shooting Functions

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Selecting the Drive Mode.....	44
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# Selecting the Drive Mode



This camera has four drive modes. Set the mode dial to your desired capture mode before selecting the drive mode. (p.59)

<input type="checkbox"/>	Single-frame	One picture is taken each time the shutter release button is pressed. This is the most common drive mode. (p.44)
	Consecutive shooting	Pictures can be taken consecutively while the shutter release button is held down. (p.45)
	Self-timer shooting	Self-timer mode (p.46)
	Remote control shooting	The shutter can be released with the remote control unit. (p.49)

4

Shooting Functions

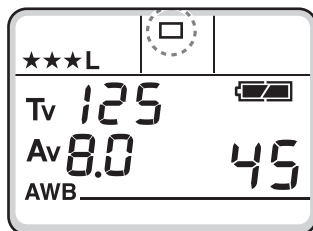
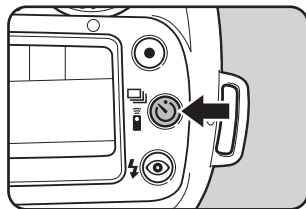


The Self-timer shooting [] and the Remote control shooting [] modes will be reset to the Single-frame drive mode when the camera is turned OFF and then ON.

## Single-frame shooting

One picture is taken each time the shutter release button is pressed. This is the most common drive mode.

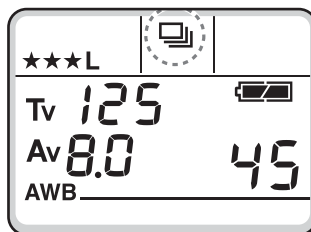
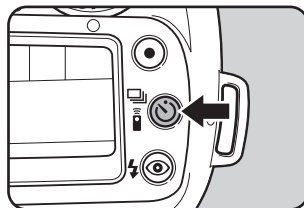
- 1 Press the drive mode button [] until [] appears on the LCD panel.



## Consecutive Shooting

Pictures can be taken consecutively while the shutter release button is held down.

- 1 Press the drive mode button [ ] until [ ] appears on the LCD panel.



- 2 Press the shutter release button halfway down to focus on the subject.
- 3 Press the shutter release button completely.

Pictures are taken consecutively while the shutter release button is fully pressed. Take your finger off of the shutter release button to stop taking consecutive pictures.



- When the focus mode lever is set to **A.F.S** (single), the focus is locked in the first frame position and used for subsequent continuous frames.
- When the focus mode lever is set to **A.F.C** (continuous), the focus is adjusted for each shot. However, note that the shutter will release even if the focusing is not complete.
- The shutter cannot be released until charging is complete when using the built-in flash. Use a custom function to enable shutter release before the built-in flash is ready. See page 115 for setting Custom Functions.

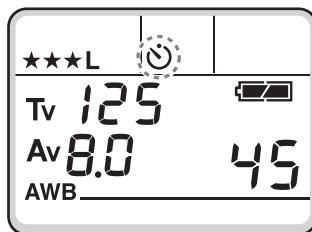
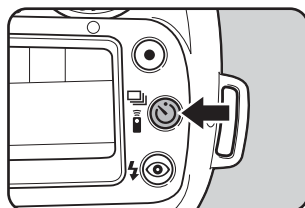
## Self-Timer shooting

Use the self-timer mode to include the photographer in the picture. The shutter will be released about 12 seconds after the shutter release button is pressed.

- 1** Mount the camera to a tripod.



- 2** Press the drive mode button [⏻] until [⏻] appears on the LCD panel.



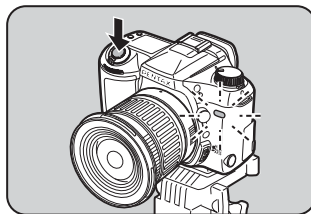
### 3 Press the shutter release button halfway down to compose and focus on the subject by looking through the viewfinder.

The focus indicator [●] lights up when the subject is in focus.



### 4 Press the shutter release button completely.

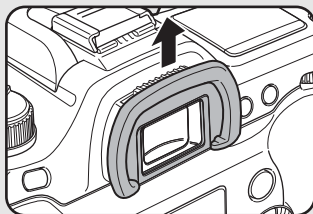
The self-timer lamp starts blinking slowly and blinks rapidly two seconds before the shutter is released. Also the audible PCV signal is heard and the rate increases for the last two seconds. The shutter will be released about 12 seconds after the shutter release button is pressed fully.



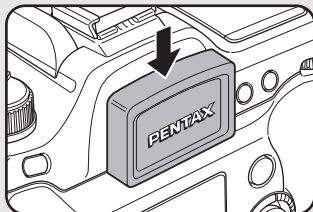
4



- The audible PCV signal can be turned off. See page 119.
- Exposure may be affected if light enters the viewfinder during self-timer operation in any capture mode other than **M** (metered manual exposure). Attach the provided viewfinder cap or use the AE lock function (see page 69).
- Remove the Eyecup FL by pulling one side upward when using accessories such as the viewfinder cap.



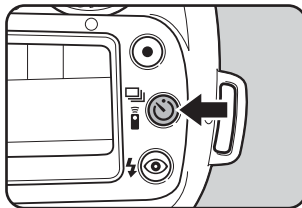
Removing the Eyecup



Attaching the viewfinder cap

## 5 Press the drive mode button [🔄] after the picture is taken.

The drive mode returns to single-frame shooting from self-timer shooting.



Press the drive mode button to cancel the self-timer operation before it is completed.

## 4

### Mirror lock up function

When this function is set, the mirror stays up and the shutter is released about 2 seconds later when the shutter release button is pressed. You can reduce camera shake caused by mirror movement with mirror lock up.

Follow the procedure below to take a picture with the mirror lock up:

- 1 In Custom Function, set “Self-timer delay time” to “2 sec”. See page 115 for setting Custom Functions.
- 2 Press the drive mode button until 🔄 appears on the LCD panel.
- 3 Focus on the subject and then press the shutter release button completely.

The mirror stays up and the picture will be taken 2 seconds later.

AE lock is enabled with the exposure value immediately before the mirror goes up.



## Remote Control Shooting


The shutter can be released with the remote control unit (optional). The shutter will be released 3 seconds after the shutter release button on the remote control unit is pressed.

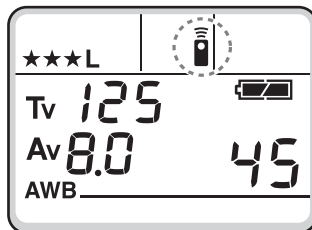
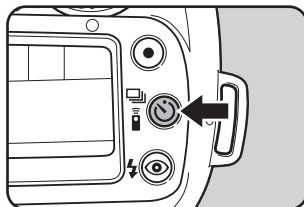
### 1 Mount the camera to a tripod.



### 2 Press the drive mode button [ ] until [ ] appears on the LCD panel.

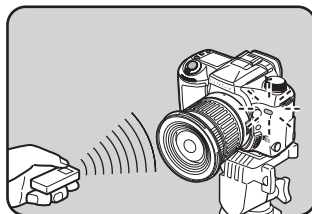


- The camera is not focused by operating the remote control. Focus on the subject first before operating the remote control.
- The self-timer lamp will blink letting you know the camera is in remote control wait status when you display .



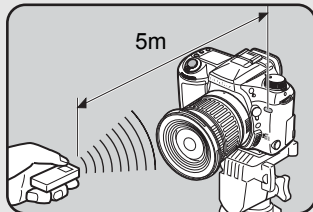
### 3 Press the shutter release button on the remote control towards the camera.

The shutter will be released 3 seconds after the shutter release button on the remote control unit is pressed. When the picture is taken, the self-timer lamp lights for 2 seconds and will then resume blinking. Press the drive mode button after the picture is taken. The drive mode returns to single-frame drive mode.





- The operating distance of the remote control unit is approx. 5m from in front of the camera.
- Remote control shooting with the capture mode set to **B** (bulb) mode will allow bulb shooting while the shutter release button on the remote control unit is pressed.
- Exposure may be affected if light enters the viewfinder during remote control operation in any capture mode other than **M** (metered manual exposure). Attach the provided viewfinder cap or use the AE lock function (see page 69). See page 47 for attaching the viewfinder cap.
- You can use a custom function to change the remote control operation time from 3 seconds to immediate operation. See page 115 for setting Custom Functions.
- Press the drive button or turn the main switch off to stop the remote control operation after it has been activated.
- The remote control may not operate in backlit conditions.
- The remote control does not work while the flash is being charged.
- When using the built-in flash, raise the flash into position first.
- The camera automatically returns to single-frame drive mode after the remote control shooting mode is left unused for 5 minutes.
- The remote control unit battery can send a remote control signal about 30,000 times. Please contact PENTAX service center to exchange the battery. (This will involve a fee.)



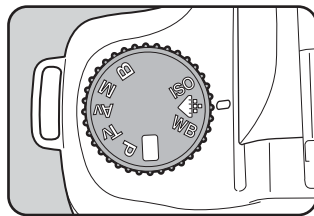
# Setting the Recorded Pixels and Quality Level

## Setting the Recorded Pixels

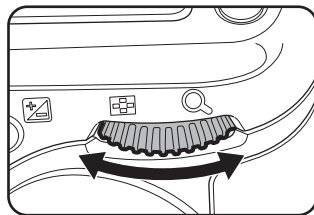
You can select the number of recorded pixels from L (3008 × 2008), M (2400 × 1600) and S (1536 × 1024). The more pixels there are the larger the image size and file size. The image file size will also differ according to quality level settings.

L	3008 × 2008	Suited for printing on A3 paper.
M	2400 × 1600	Suited for printing on A4 paper.
S	1536 × 1024	Suited for printing on A5 paper.

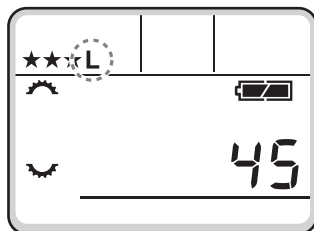
- 1 Set the mode dial to .



- 2 Select the recorded pixels with the Av dial.



- 3 Confirm the recorded pixels on the LCD panel.



## 4 Set the mode dial to your desired capture mode.

The camera is ready to take a picture.




- Pressing the green button while setting the recorded pixels will make the size revert to the default value (L).
- You can set a custom function to set the recorded pixels for S to 1536 × 1024, 1152 × 768, or 960 × 640. See page 115 for setting Custom Functions.
- The Recorded Pixels cannot be selected if the Quality Level is set to RAW. (Fixed at 3008 × 2008)

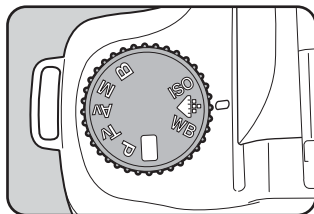
## Setting the Quality Level

You can set the image compression rate.

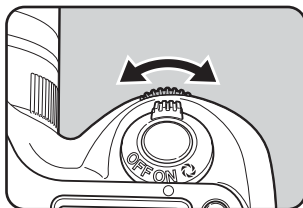
The image file size will also differ according to Recorded Pixels settings.

<b>RAW</b>	RAW	Raw data, just as it was captured. You can process this on your PC using dedicated utility software.
<b>TIFF</b>	TIFF	Image is recorded as uncompressed data. Suited for processing on your PC. Image is saved with "TIFF" extension.
★★★	Best	Lowest compression rate, suited for printing large pictures on A4 paper. Image is saved with "JPEG" extension.
★★	Better	Standard compression rate, suited for viewing as standard photographs or on your computer screen. Image is saved with "JPEG" extension.
★	Good	Highest compression rate, suited for attaching to e-mail, or for creating websites. Image is saved with "JPEG" extension.

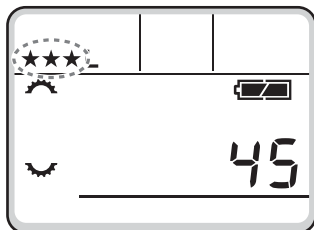
- 1** Select the mode dial to .



- 2** Select the quality level with the **TV** dial.



- 3** Confirm the quality level on the LCD panel.



- 4** Set the mode dial to your desired capture mode.

The camera is ready to take a picture.

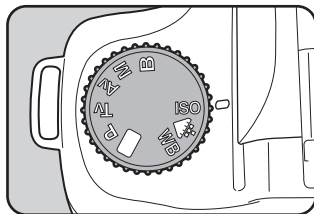


Pressing the green button while setting the quality level will make the quality level revert to the default value (★★★(Best)).

# Setting the Sensitivity

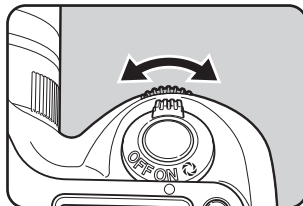
You can set the sensitivity to match the brightness of the surroundings. The sensitivity can be set within a range of sensitivity equivalent to ISO 200 to 1600.

## 1 Set the mode dial to **ISO**.

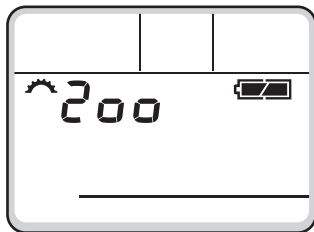


## 2 Select the sensitivity with the **Tv dial**.

The larger the sensitivity value, the more suitable for darker places, on the other hand, pictures tend to be affected by noise and appear rough.



## 3 Confirm the sensitivity level on the **LCD panel**.










## 4 Set the mode dial to your desired capture mode.



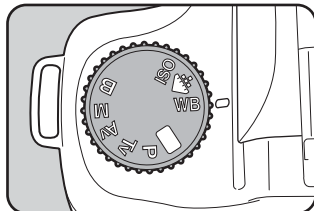
- Turn the Tv dial counterclockwise to decrease the number. Turn the Tv dial clockwise to increase the number.
- Pressing the green button while setting the sensitivity will make the quality level revert to the default value (Sensitivity 200).
- You can set sensitivity up to 3200 when you select "Wide" in "Sensitivity Range" settings in the Custom Function menu. (p.115)

The color of the subject changes with the light source. For example, the same white object will be a different shade of white in daylight than under a light bulb. In cameras using film, this is adjusted by changing the film or using filters. In digital cameras, the whiteness is adjusted using white balance.

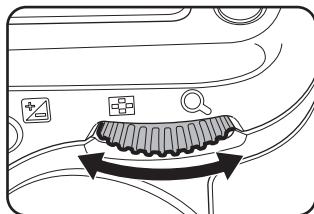
<b>AWB</b>	Automatic	The camera makes the adjustment automatically.
	Daylight	For taking pictures outside in sunlight.
	Shade	For taking pictures outside in the shade.
	Cloudy	For taking pictures on cloudy days.
	Fluorescent Light	For taking pictures under fluorescent light. Select the type of fluorescent light, from W white (4200°K)*, N neutral white (5000°K)*, and D daylight (6500°K)*.
	Tungsten Light	For taking pictures under tungsten light bulbs.
	Flash	For taking pictures using the electronic flash.
	Manual	For taking pictures by manually adjusting the white balance.

\* The color temperature (°K) is estimated. This does not indicate precise colors. See page 143 for color temperature.

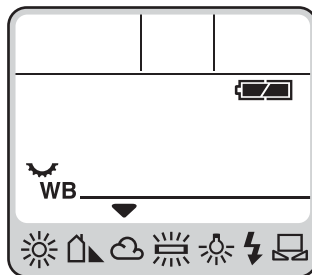
## 1 Set the mode dial to **WB**.



## 2 Select the white balance with the Av dial.



### 3 Confirm the white balance on the LCD panel.



### 4 Set the mode dial to your desired capture mode.

4

Shooting Functions



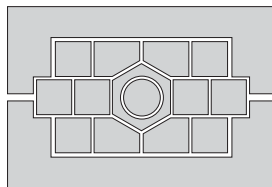
- See page 142 for manual adjustment method.
- Pressing the green button while setting the white balance will make the white balance revert to the default value (**AWB**).



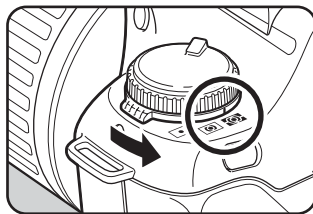
You can choose the part of the screen to use for measuring brightness and determining exposure. Multi (16)-segment metering, center-weighted metering or spot metering mode can be selected in this camera.

## Using the Multi(16)-Segment Metering

The scene in the viewfinder is metered in 16 different zones as shown in the illustration when using the multi-segment metering. This mode automatically determines what level of brightness is in which portion.



- 1 Rotate the metering mode select lever to set the white index to .**

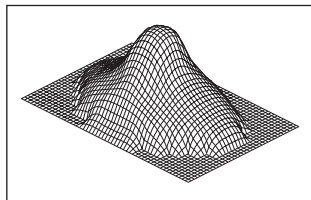



The center-weighted metering mode is automatically set even if you select the multi-segment metering mode when using a lens other than an FA J, FA, F or A lens. (the lens can only be used when a custom function is set to permit shutter release with a position other than aperture A.)

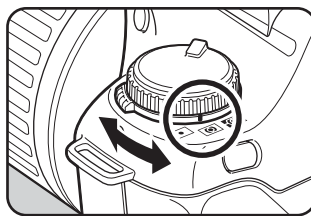
## Using the Center-Weighted Metering

Metering is weighted at the center of the screen. Use this metering when you want to compensate the exposure by experience, instead of leaving it to the camera.

The illustration shows that sensitivity increases as the pattern height increases (center). This mode does not automatically compensate for backlit scenes.

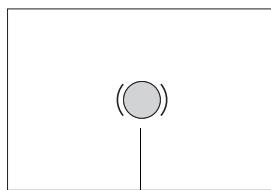


- 1 Rotate the metering mode select lever to set the white index to .




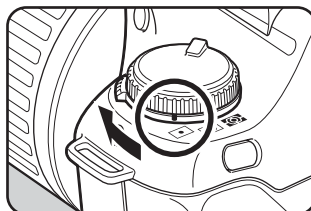
## Using the Spot Metering

With spot metering, brightness is measured only within a limited area at the center of the screen as shown in the illustration. You can use AE lock in combination when the subject is extremely small and proper exposure is difficult to obtain. (p.69)



Spot metering zone

- 1 Rotate the metering mode select lever to set the white index to .

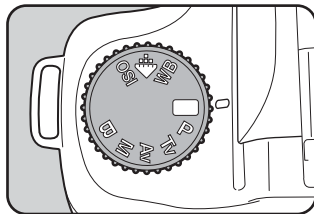


This camera has six capture modes available: green program AE mode, **P** (program) mode, **Tv** (shutter-priority) mode, **Av** (aperture-priority) mode, **M** (manual) mode and **B** (bulb) mode.

## Using the Green Program AE mode

Shutter speed and aperture are set automatically according to the program line, for taking pictures at the proper exposure.

- 1 Set the mode dial to .

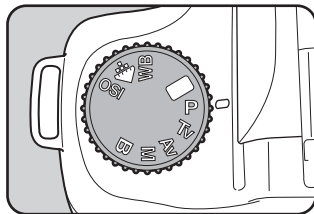


AE lock shooting (p.69), auto bracket shooting (p.82), multiple exposure shooting (p.84), and EV compensation (p.79) are not available in green program AE mode.

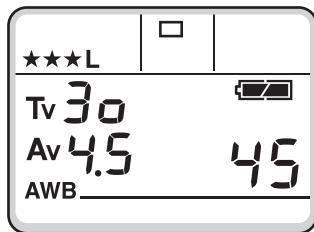
## Using the P (Hyper Program) mode

Shutter speed and aperture are automatically set according to the program line for taking pictures at the proper exposure. You can also use the Tv dial and Av dial to change the shutter speed and aperture while keeping the proper exposure (Hyper program).

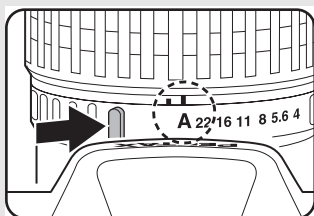
### 1 Set the mode dial to **P**.



### 2 Confirm the shutter speed and aperture value in the viewfinder or on the LCD panel.



- Set the aperture to the **A** position while holding down the auto-lock button when using a lens with an aperture ring.
- You can set a custom function to change the program line used. See page 115 for setting Custom Functions.
- You can set a custom function to compensate the sensitivity automatically to obtain the proper exposure when the conditions set are not providing proper exposure. See page 115 for setting Custom Functions.



## Hyper Program

### • To change shutter speed

The camera switches to shutter speed-priority AE when you turn the **Tv** dial in the **P** (Hyper Program) mode.

- Shutter speed can be set to a value within the range appropriate for the aperture value.
- The aperture values on the LCD panel and in the viewfinder will flash when the brightness changes and the aperture value falls outside the appropriate range.
- The camera returns to Hyper Program mode when you press the green button.

### • To change aperture value

The camera switches to Aperture-priority AE when you turn the **Av** dial in the **P** (Hyper Program) mode.

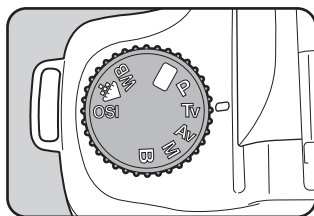
- Aperture can be set only to a value within the range appropriate for the shutter speed value.
- The shutter speeds on the LCD panel and in the viewfinder will flash when the brightness changes and the shutter speed value falls outside the appropriate range.
- The camera returns to Hyper Program mode when you press the green button.

## Using the Tv (Shutter-priority) mode

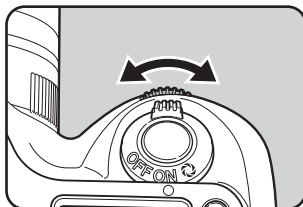
The appropriate aperture value is automatically set by the camera for a proper exposure to match the brightness of the subject when the shutter speed is selected.

This mode is suitable for freezing the action with a faster shutter speed or capturing a flowing dynamic image with a slower shutter speed. See page 136 for the effect of shutter speed.

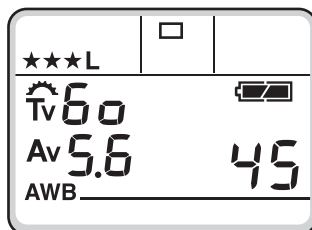
### 1 Set the mode dial to Tv.



### 2 Select the shutter speed with the Tv dial.

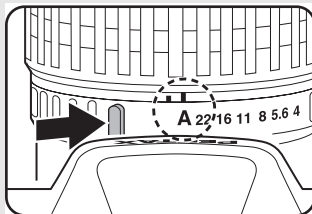


### 3 Confirm the shutter speed and aperture value in the viewfinder or on the LCD panel.





- Set the aperture to the **A** position while holding down the auto-lock button when using a lens with an aperture ring.
- The shutter speed is displayed on the LCD panel whenever the camera is on.
- You can set a function to enable noise reduction processing when taking pictures at a slow shutter speed. See page 115 for setting Custom Functions.
- You can set a custom function to automatically compensate the sensitivity to obtain the proper exposure, when the conditions set are not providing proper exposure. See page 115 for setting Custom Functions.

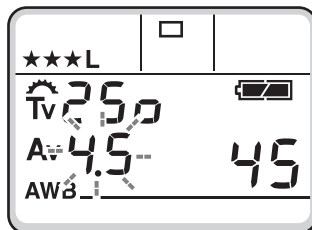


## Exposure Warning

If the subject is too bright or too dark, the aperture value will blink in the viewfinder and on the LCD panel. When the subject is too bright, choose a faster shutter speed. If it is too dark, choose a slower shutter speed. When the shutter speed indication stops blinking, you can take the picture with proper exposure.

If both the shutter speed and aperture value are blinking, this indicates being out of metering range, unable to obtain the proper exposure even if the shutter speed is adjusted.

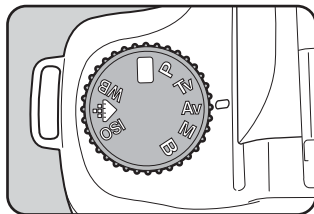
Use an ND (Neutral Density) filter if the subject is too bright. Use a flash or faster sensitivity if it is too dark.



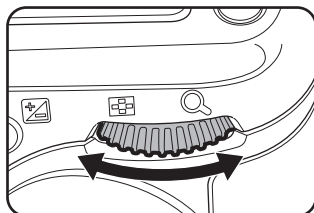
## Using the Av (Aperture-priority) mode

The shutter speed is automatically set by the camera for a proper exposure to match the brightness of the subject when the aperture value is selected. This mode is ideal for shooting landscapes with increased depth of field, or a portrait against a blurred background. See page 136 for the effect of aperture.

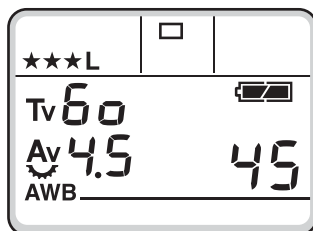
- 1 Set the mode dial to Av.



- 2 Select the aperture value with the Av dial.



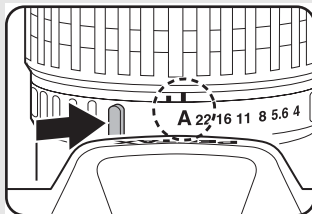
- 3 Confirm the shutter speed and aperture value in the viewfinder or on the LCD panel.







- Set the aperture to the **A** position while holding down the auto-lock button when using a lens with an aperture ring.
- The aperture is displayed on the LCD panel whenever the camera is on.
- You can set a custom function to compensate the sensitivity automatically to obtain the proper exposure, when the conditions set are not providing proper exposure. See page 115 for setting Custom Functions.



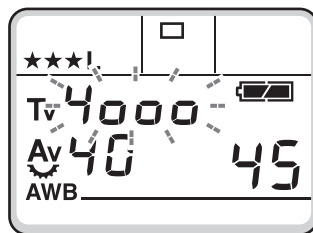
## Exposure Warning

If the subject is too bright or too dark, the shutter speed will blink in the viewfinder and on the LCD panel. When too bright, set the aperture smaller (larger number), and when too dark, open the aperture further (smaller number). Once blinking stops, you can take the picture.

If both the shutter speed and aperture value are blinking, this indicates being out of metering range, unable to obtain the proper exposure even if the aperture is adjusted.

Use an ND (Neutral Density) filter if the subject is too bright.

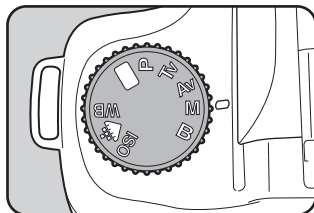
Use a flash or faster sensitivity if it is too dark.



## Using the M (Hyper manual exposure) mode

This mode is a convenient for taking pictures using the same shutter speed and aperture setting combination or taking intentionally under-exposed (darker) or over-exposed (brighter) photographs.

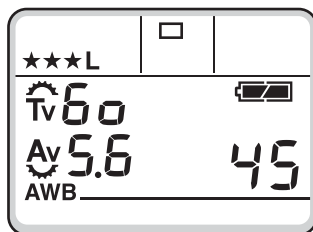
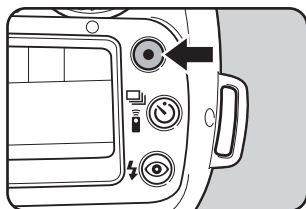
### 1 Set the mode dial to M



### 2 Press the green button

Shutter speed and aperture are changed automatically to achieve the proper exposure setting.

From this point, you can use the Tv dial or Av dial to change exposure values manually and then take a picture.

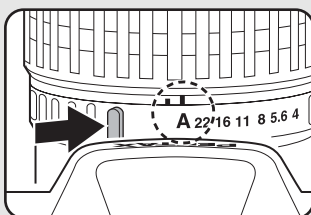


- Hold down the auto-lock button while setting the aperture to the A position when using a lens with an aperture ring.
- When pressing the green button to get the proper exposure setting, how shutter speed and aperture values are determined will change depending on the "Green Button in Manual" in the custom function menu.

**P** : The proper exposure setting is determined based on the program mode selected in the custom settings menu.

**Tv** : The aperture value is fixed to the point when the green button is pressed and then the shutter speed that will produce the proper exposure is determined.

**Av** : The shutter speed is fixed to the point when the green button is pressed and then the aperture value that will produce the proper exposure is determined.



## How to read the viewfinder bar graph

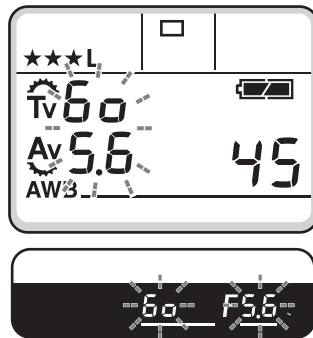
In **M** (Hyper manual exposure) mode, a bar graph appears in the viewfinder. If the ● are at the center of the bar, it indicates correct exposure. If the ● are on the negative end of the bar graph, it indicates under exposure. If they are on the positive end, it indicates over exposure. If the exposure setting exceeds the bar graph display limit, the ⊕ or ⊖ will blink.



- The shutter speed and aperture value are displayed on the LCD panel whenever the camera is on.

## Exposure Warning

If the subject is too bright or too dark, both the shutter speed and aperture value will blink in the viewfinder and on the LCD panel to indicate being out of metering range. Adjusting the shutter speed and aperture will not attain proper exposure. Use an ND (Neutral Density) filter or select a darker subject if the subject is too bright. Select a brighter subject or use a flash if it is too dark.



## Combining with AE-L

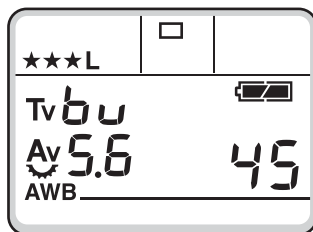
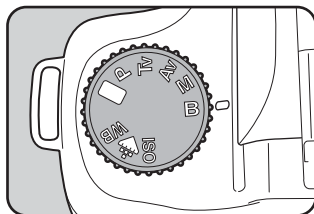
You can use the AE-L button (p.69) to memorize the exposure value in Hyper Manual mode. In this state, the shutter speed and aperture value combination is changed, with the exposure value said as is, when you change either the shutter speed or the aperture value.

Ex) If you press AE-L with the shutter speed set to 1/125 seconds and the aperture set to f/5.6, using the Tv dial to change the shutter speed to 1/30 seconds will result in the aperture value automatically changing to f11.

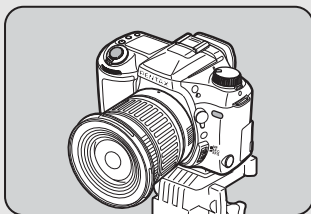
## Using the B (Bulb) mode

This mode is useful for the long exposures required for shooting night scenes and fireworks.

### 1 Set the mode dial to **B**.



- Use a steady tripod to prevent camera shake and use the optional Cable Switch CS-205 when using this mode.
- With the remote control shooting mode, the shutter remains open as long as the optional remote control's shutter release button is held down.
- You can set whether or not to perform noise reduction in the Custom Function settings.



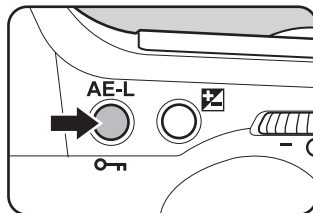
## About the AE-L (AE Lock)

AE Lock is a function that memorizes the exposure prior to taking the picture. Use this when the subject is too small or backlit and a proper exposure setting cannot be obtained.

### 1 Press the AE lock button.

The camera memorizes the exposure (brightness) at that instant.

Press it again to disengage.



- ✱ is displayed in the viewfinder while the AE lock is engaged.
- The exposure remains in memory for twice as much time as the metering timer after releasing the AE lock button. The exposure remains locked as long as the AE lock button is kept pressed or the shutter release button is kept pressed halfway.
- You will hear a beep when the AE lock button is pressed. The beep can be turned off. (p.119)
- AE lock is not available when the exposure mode is set to **B** (Bulb) mode.
- When the exposure mode is set to **P** (program) mode, you can use a Hyper program while the AE lock is engaged.
- The combination of shutter speed and aperture value changes depending on the zooming position even while the AE lock is engaged when using a zoom lens for which maximum aperture varies depending on the focal length. However, the exposure value does not vary, and therefore the picture is taken at the brightness level set by the AE lock.
- The exposure value set when you press the AE lock button is saved when the exposure mode is set to **M** (Hyper manual exposure) mode. In this state, the shutter speed and aperture value combination is changed, with the exposure value said as is, when you change either the shutter speed or the aperture value.

## Autofocus

The camera adjusts the focus automatically. There are two autofocus modes. When you press the shutter release button halfway, **AF.S** (Single mode) locks the focus and **AF.C** (Continuous mode) adjusts the focus continuously. (p.70, 71)

## Manual focus

You can adjust the focus manually. (p.72)

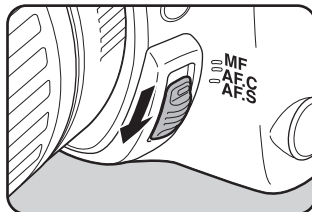
## Selecting the focus point

You can set the camera to automatically select the focus point, select a specified position or the center position within the viewfinder. (p.74)

The following three methods are provided for adjusting focus.

## Using the AF.S Autofocus (Single mode)

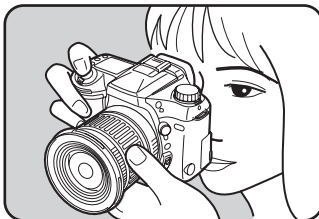
- 1 Set the focus mode lever to **AF.S**.



## 2 Look through the viewfinder and press the shutter release button halfway down to focus on the subject.

The focus indicator [●] lights up in the viewfinder when the subject is in focus.

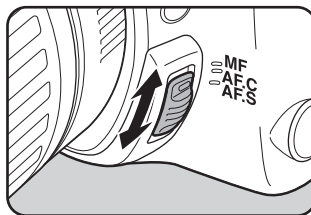
(The subject is out of focus when it is blinking.)



- The focus is locked while [●] is lit (focus lock). To focus on another subject, take your finger off of the shutter release button first.
- The shutter cannot be released until the subject is in focus in **A.F.S** (single mode). If the subject is too close to the camera, move back and take the picture. Set the focus manually when the subject is difficult to focus. (see page 78)

## Using the AF.C Autofocus (Continuous mode)

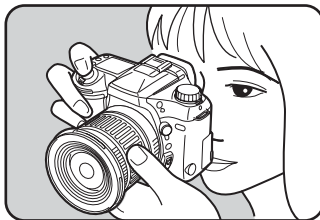
### 1 Set the focus mode lever to **A.F.C.**



## 2 Look through the viewfinder and press the shutter release button halfway down to focus on the subject.

The focus indicator [●] lights up in the viewfinder when the subject is in focus.

(The subject is out of focus when it is blinking.)



- The camera switches to predictive AF mode automatically when a moving subject is detected in **AFC** (continuous mode).
- The shutter can be released even when the subject is out of focus in **AFC** (continuous mode).

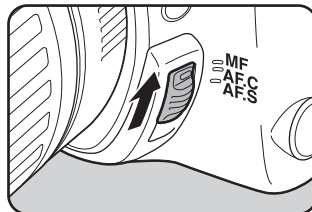
## Manual Focus

When you adjust the focus manually, you can either check with the focus indicator in the viewfinder or use the viewfinder matte field to adjust focus.

### Using the focus indicator

You can manually adjust the focus using the focus indicator.

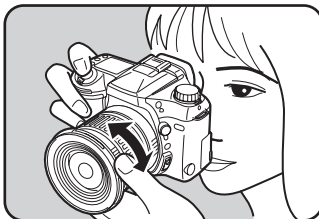
## 1 Set the focus mode lever to MF.





- 2** Look through the viewfinder and press the shutter release button halfway and turn the focusing ring to adjust focus on the subject.

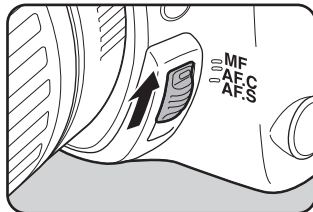
The focus indicator [●] lights up and you will hear a double beep when the subject comes into focus.



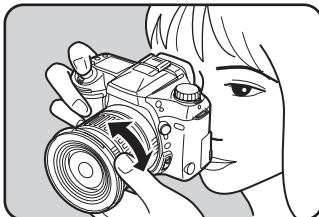
- Use the viewfinder's matte field as described below when the subject is difficult to focus (see p.78) and the focus indicator will not stay lit.
- The beep can be turned off. (p.119)

### Using the viewfinder matte field

- 1** Set the focus mode lever to **MF**.



- 2** Look through the viewfinder and turn the focusing ring until the subject looks sharp on the screen



## Selecting the focus points

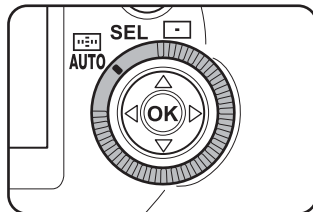
There are 11 focus points in the autofocus frames. You can select the focus points to use depending on the scene you are shooting.

### Setting the focus point mode to AUTO

The camera selects the optimum focus point position even if the subject is not centered.

#### 1 Set the focus point select dial to .

The area in the autofocus frame is the range available for autofocus.

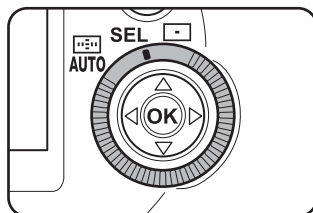


- The focused point is superimposed in red in the viewfinder when the shutter release button is pressed halfway down. The superimpose function can be canceled using a custom function. See page 115 for setting Custom Functions.
- The focus point is fixed to the center position regardless of this setting with lenses other than FA J, FA, F lenses.

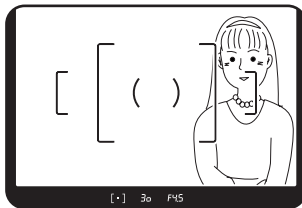
### Selecting the Focus Point

There are 11 focus points in the autofocus frames. If the camera does not select the desired focus point in Auto mode, you can select the desired focus point manually.

#### 1 Set the focus point select dial to **SEL**.



- 2** Look through the viewfinder and check where you want to focus.




- 3** Use the four-way controller [▲ ▼ ◀ ▶] to select the desired focus point.



The selected focus point is superimposed in red in the viewfinder.

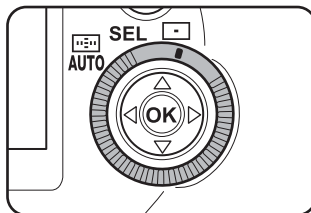
Check the set focus point with the focus points indicator at the bottom of the viewfinder when you have trouble seeing the superimposed focus point because of the backlit or other conditions.



- Set the focus point select dial to  to cancel the selected focus point and return to automatic setting.
- The focus point is fixed to the center position regardless of this setting with lenses other than FA J, FA, F lenses.

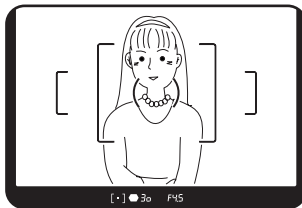
## Fixing the Focus Point on the Center


- 1** Set the focus point select dial to .



## 2 Press the shutter release button halfway.

Only the center is focused where the focus point is superimposed.



Set the focus point select dial to  to cancel the selected focus point and return to automatic setting.

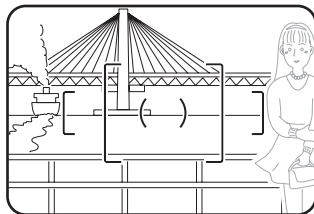
## Focus lock

4

If the subject is beyond the range of the focus points area, the camera cannot automatically focus on the subject. In this situation, you can aim the focus point on the subject, use focus lock, then recompose the picture. You can take pictures in Focus lock mode when the focus mode is set to **A.F.S** (Single Mode).

### 1 Frame the desired composition for your picture in the viewfinder.


You can use focus lock when the subject you wish to focus on is not within the focus point area.

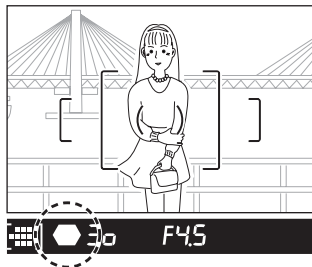


(Example)

The person is out of focus and the background is focused instead.

### 2 Aim the center of the viewfinder over the subject, then press the shutter release button halfway down.

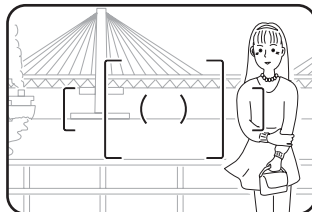
The focus indicator [] lights up and you will hear a beep when the subject comes into focus. (If it is blinking, the subject is out of focus.)



### 3 Lock the focus.

Keep the shutter release button pressed halfway. The focus will remain locked.

### 4 Re-compose the picture while keeping the shutter release button pressed halfway down and press the shutter release button fully to take the picture.



- The focus is locked while the focus indicator [●] is lit.
- Turning the zooming ring in focus lock mode may cause the subject to be out of focus.
- The beep can be turned off. (p.119)

## Autofocus illuminator

When the flash is up in **A.F.S** (single mode) where the subject in dark area, pressing the shutter release button halfway will automatically fire the built-in flash several times, enabling the autofocus to focus on the subject.

## Hard-to-Autofocus Subjects

The autofocus mechanism is not all-powerful. Subjects which may not focus are listed below. These also apply to manual focusing using the focus indicator [●] in the viewfinder.

For any of these, set the focus mode switch to **MF** and use the manual focus mode to focus on the subject with the aid of the matte field in the viewfinder.

- a) Extremely low-contrast subject such as a white wall in the focus points range.
- b) Subjects which don't reflect much light within the focus points range.
- c) Subjects that are moving extremely fast.
- d) Powerfully reflected light or strong backlight (subjects with extremely bright backgrounds).
- e) If vertical or horizontal line patterns appear within the focus points range.
- f) Multiple subjects in the foreground and background within the focus points range.

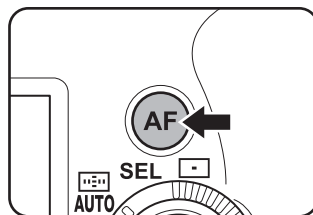
It may not be in focus even if the focus indicator [●] is lit.

## AF Button

You can activate autofocus by pressing the AF button and press the shutter button to take a picture.

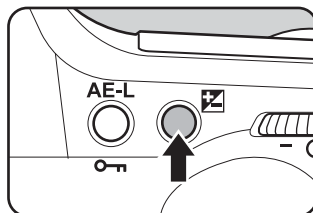
This functions the same as when you press the shutter button halfway down. Once you press the AF button during **A.F.S** (Single Mode) to adjust the focus, focus lock will operate while you hold down the button.

The camera will continue to adjust the focus while you hold down the button in **A.F.C** (Continuous Mode).



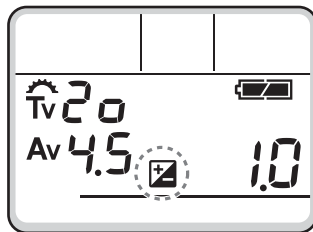
This allows you to deliberately over-expose (brighten) or under-expose (darken) your picture. The exposure compensation range is -3 EV to +3 EV in 0.5 EV or 0.3 EV steps.

- 1 Turn the Tv dial to set the desired compensation value while holding down the Exposure compensation button.**




- 2 Confirm the compensation value in the viewfinder or on the LCD panel.**

The set value and  are displayed during compensation.



## How to read the viewfinder bar graph

If the  are on the negative side of the bar graph, it indicates under-exposure. If they are on the positive side, it indicates over-exposure. One dot on the bar graph indicates 0.5 step (0.5 EV).



- The exposure compensation cannot be canceled by turning the camera off, or by setting any other exposure mode.
- Press the green button to reset the exposure compensation value to 0 while pressing the exposure compensation button.
- You can set a custom function to allow setting exposure compensation by 0.3 steps (EV). See page 115 for setting Custom Functions.

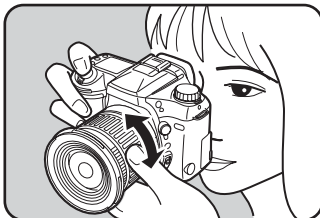


Exposure compensation is not available when the exposure mode is set to green program AE mode, **M** (metered manual exposure) mode or **B** (bulb) mode.



You can use the zoom lens to freely change the size of your chosen subject. Adjust it to the desired size and take the picture.

- 1 Turn the zoom ring clockwise for telephoto and counterclockwise for wide angle.**



- The smaller the number shown on the zoom scale ring, the wider the angle. The larger the number, the more magnified the image appears.
- Power Zoom, Image Size Tracking, Zoom Clip, and Auto Zoom Effect are not compatible with this camera.

# Auto Bracketing

You can capture three consecutive images at different exposures. The first frame is exposed with no compensation. The second frame is under-exposed and the third frame is over-exposed.

You can set the negative or positive exposure compensation step to be 1/2EV ( $\pm 0.5$ ,  $\pm 1.0$ ,  $\pm 1.5$ ) or 1/3EV ( $\pm 0.3$ ,  $\pm 0.7$ ,  $\pm 1.0$ ), using “Exposure setting steps” in custom functions.





Normal exposure

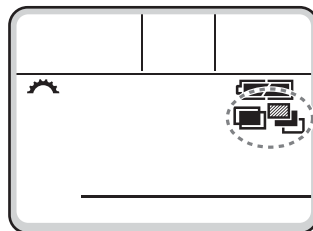
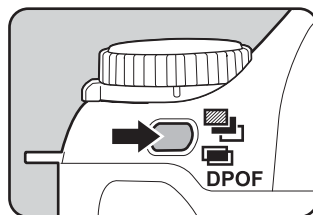


Under-exposure



Over-exposure

- 1 Press the multiple exposure / auto bracket button until   appears on the LCD panel.



- 2 Turn the Tv dial to select  while holding down the multiple exposure / auto bracket button.

