Chapter 2

A Variety of Shooting Techniques/Playback

Direct Printing

Direct Print Function

The Direct Print standard enables direct printing from a camera to a printer, by connecting them via a USB cable. Photos can be printed quickly and easily from your digital camera without using a computer.

Caution

- You cannot print movies (.AVI) with this function. For still images with sounds (.JPG and .WAV), only the still images (.JPG) are printed.
- Some printer does not support images taken in Text mode (TIFF). Even when TIFF images are printed, their printed contents cannot be guaranteed.

Note

- This camera uses PictBridge, an industry standard for Direct Printing.
- Your printer must comply with the PictBridge to use the Direct Print function. For support information, see the documentation that came with the printer.
- For direct printing on a printer supporting both Direct Print and PictBridge, select [ORIGINL] for [USB CONNECTION].

Connecting the Camera to a Printer

Connect your camera to a printer using the USB cable provided.

1. Check that the printer is ready for printing.

2. Connect the camera to your computer via the provided USB cable.

Turn the printer power on if it is off.

Note

To disconnect the camera from the printer, be sure that the camera power is off before disconnecting the USB cable.

Printing Still Images

You can send still images from the camera to a PictBridge compatible printer to print them.
Still images are sent from the internal memory when no SD memory card is loaded or from an SD memory card when one is loaded.

⚠ Caution

Do not disconnect the USB cable during printing.

📝 Note

If a printer error message appears during transmission, check the condition of the printer, and take the appropriate action.

Printing One or All Still Images

1. **Check that the printer is ready for printing.**

The "Connecting" screen appears.

2. **Press the ADJ. button.**

The Direct Print playback mode screen appears.

3. **Press the ◀▶ buttons to select an image for printing.**

4. **Press the ADJ. button.**

5. **Press the ▲▼ button to select [1 FILE] or [ALL FILES].**

6. **Press the OK button.**

The Direct Print menu appears.

7. **Press the ▲▼ buttons to select an item, and then press the ▶ button to display the detailed options screen.**

When "Connecting" is displayed, the printer is still being connected. When printer connection is complete, "Connecting" disappears and "Direct Print" is displayed. Proceed with the operation after connection.

DIRECT PRINT	1/5
PAPER SIZE	▶
SELECT PRINT SIZE	
PAPER TYPE	
SELECT PRINT SIZE	
PRNT FL:1	ADJ.:SET DEFAULT
MENU CANCEL	PRINT OK

The following items can be selected. Each item is displayed only when supported by the printer.
The items marked * are displayed only when supported by Ricoh printers.

Item Name	Function
PAPER SIZE	Sets the paper size.
PAPER TYPE	Sets the paper type.
LAYOUT	Sets the number of images printed on a sheet of paper. The number of images that can be printed on a sheet of paper depends on the connected printer.
DATE PRINT	Selects whether to print the date (shooting date). The date format can be set using the date/time option in the **SETUP** Mode.
FILE NAME PRINT	Selects whether to print the file name.
OPTIMIZE IMAGE	Selects whether to optimize the image data (still image) prior to printing on the printer.
FIXED-SIZE PRINT	Setting the print image size.
PRINT QUALITY	Setting the print quality.
REPORT PRINT *	Printing on forms.
MEMO PRINT *	Printing Camera Memo content when printing an image with camera memo on forms.

8. **Press the ▲▼ buttons to select the detailed item, and then press the OK button.**

The display returns to the Direct Print menu.

9. **Repeat steps 7 and 8 to change the settings as required.**

To specify the set value as the default selected at the next connection, click the ADJ. button on the screen of Step 7. Upon appearance of the screen at right, select [Set] and press the OK button.
Select [Cancel] to return to the default setting.

10. **Press the OK button.**

The selected still images are sent to the printer and the "Connecting" screen appears.
Press the MENU button to cancel the operation.
At the end of transmission, the display returns to the Direct Print playback mode screen and printing starts.

Printing Several Still Images

1. **Check that the printer is ready for printing.**

The "Connecting" screen appears.

2. **Press the ADJ. button.**

The Direct Print playback mode screen appears.

3. **Press the 🔳 button.**

The screen is split into six sections, and each image is displayed at a reduced size.

4. **Press the ▲▼◀▶ buttons to select an image for printing.**

5. **Press the OK button.**

6. **Press the ▲▼ buttons to set the number of copies to print.**

Press the ▲ button to increase the number, or the ▼ button to decrease it.

7. **Press the ◀▶ buttons to select an image for printing.**

8. **Press the ▲▼ buttons to set the number of copies to print.**

9. **Repeat steps 7 and 8 to select all the still images to be printed and the number of copies for each.**

10. **Press the MENU button.**

   The Direct Print menu appears.

11. **Press the ▲▼ buttons to select an item, and then press the ▶ button to display the detailed options screen.**

   When "Connecting" is displayed, the printer is still being connected. When printer connection is complete, "Connecting" disappears and "Direct Print" is displayed. Proceed with the operation after connection. For settings available, see P.56.

12. **Press the ▲▼ buttons to select the detailed item, and then press the OK button.**

   The display returns to the Direct Print menu.

13. **Repeat steps 11 and 12 to change the settings as required.**

14. **Press the OK button.**

   The selected still images are sent to the printer and the "Connecting" screen appears.
   Press the MENU button to cancel the operation.
   When all the selected still images have been sent from the camera to the printer, the camera display returns to the Direct Print playback mode screen.
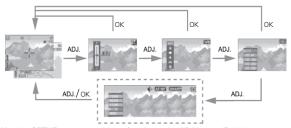

📄 **Note**

- Only images with a printer mark ( ) are printed. When you cancel printing and then try to print again, make sure that the printer mark is on the images you want to print.
- The same still image can also be printed several times on a single sheet.
- The items available vary depending on the functions of the printer.
- To print images using the printer's default settings, select Printer Setting on the detailed options screen.

A Variety of Shooting Techniques

Using the ADJ. (Adjust) Button

The ADJ button allows exposure correction, white balancing, and ISO sensitivity setting by fewer operations. You can also register a function other than these adjustment functions to the ADJ button. If a frequently used function is registered, they can be set easily by fewer button operations.

Use the SETUP menu to register a function to the ADJ button (P.114).

Adjustments Using the ADJ. Button

Adjustments that can be made with the ADJ. button differ between SCENE mode and Movie mode.

Still Image Mode	Exposure control, white balance, ISO sensitivity
Movie Mode	White Balance
Scene Mode (Text Mode)	Density
Scene Mode (other than Text Mode)	Exposure control, white balance

Reference

- Exposure Comp, see P.78.
- White Balance, see P.79.
- ISO Setting, see P.81.
- Text Density, see P.84.
- For how to set a function to the ADJ. button, see P.114.

Shooting Setting Menu

The Shooting Setting menu enables you to shoot pictures by setting the items listed in the table below.

*Among the choices listed in the table below, default values at purchase are enclosed in [ ].

Setting	Option	Refer to
PIC QUALITY/SIZE	NC3264, F3264, [N3264], N2592, N2048, N1280, N640	P.62
FOCUS	[AF], MF, SNAP, ∞	P.64
PHOTOMETRY	[MULTI], CENTRE, SPOT	P.67
SHARPNESS	SHARP, [NORMAL], SOFT	P.68
CONT. MODE	[OFF], CONT, SCONT, MCONT	P.90
AUTO BRACKET	ON, [OFF], WB-BKT	P.69
TIME EXPOSURE	[OFF], 1, 2, 4, 8 seconds	P.72
INTERVAL	[0 s], 5 seconds to 3 hours	P.74
IMAGE WITH SOUND	[OFF], ON	P.76
DATE IMPRINT	[OFF], DATE, TIME	P.77
EXPOSURE COMP.	-2.0 to +2.0	P.78
WHITE BALANCE	[AUTO], ☀(Daylight), ☁(Overcast), ☼(Tungsten light), ▦(Fluorescent light), Ⓜ(One Push)	P.79
ISO SETTING	[AUTO], ISO64, ISO100, ISO200, ISO400, ISO800, ISO1600	P.81
COLOR DEPTH	VIVID, [NORMAL], NUTRAL	P.82
APERTURE SETTING	MIN, HALF, [OPEN]	P.87
RESTORE DEFAULTS	————————————	P.83

Reference

For the list of Shooting Setting menu items in Movie and Scene Modes, see P.158.

Using the Shooting Setting Menu

1. **With the camera ready to shoot, press the** MENU **button.**

    The Shooting Setting menu appears.

2. **Press the** ▲▼◀▶ **buttons to select the desired item.**

    The setting items are provided on three screens.

PIC QUALITY/SIZE		N3264
FOCUS		AF
PHOTOMETRY		MULTI
SHARPNESS		NORMAL
CONT. MODE		OFF

MENU END

3. **After selecting a setting item, press the** OK **or** ▶ **button.**

    Choices for the setting item are displayed.

4. **Press the** ▲▼ **buttons to select a choice.**

5. **Press the** OK **or** ◀ **button.**

6. **If you pressed the** ◀ **button in step 5, press also the** MENU **button.**

    The Shooting Setting menu disappears and the camera becomes ready for shooting.

A Variety of Shooting Techniques/Playback

Choosing Picture Quality Mode/Image Size (PIC QUALITY/SIZE)

The size of a stored still image and movie file depends on picture quality and size settings.
Picture Quality Mode is provided in three types; N (Normal), F (Fine), and NC (Non compressed).

Types of Modes You Can Select		
Symbol	**Mode**	**Description**
N	Normal Mode	The compression ratio is high, resulting in a small file. Normally, shooting is done in this mode.
F	Fine Mode	The compression ratio is low, resulting in a large file, but the picture quality is better than in Normal Mode.
NC	NC Mode	Image data is saved in a non-compressed TIFF file (YUV-TIFF). This ensures clearer pictures than F3264 and N3264. However, the file size becomes larger and the recording time at shooting becomes longer.

Combining Picture Quality Mode and Image Size.

Mode	Size	On screen display	Uses
NC (Non compressed)	3264 X 2448	NC3264	Suitable for downloading images to your computer and correcting the images or printing them in large sizes.
F (Fine)	3264 X 2448	F3264	
N (Normal)	3264 X 2448	N3264	
	2592 X 1944	N2592	Suitable for printing images in large sizes.
	2048 X 1536	N2048	
	1280 X 960	N1280	Suitable for shooting many pictures.
	640 X 480	N640	Capable of recording the greatest number of pictures on a single SD memory card. Suitable for attaching images to e-mail messages or using them on Web pages.

In Movie Mode, 320 X 240 or 160 X 120 can be selected.

Note

- Multi-Shot shooting and Auto Bracket shooting is not available in NC Mode.
- Some software or print services on the market may not be able to display a non-compressed TIFF file shot in NC Mode (YUV-TIFF). If you are using Windows, convert the file into the TIFF format by using the DU-10 provided. If you are using Macintosh, process the image first by using iPhoto and then convert the file format.

1. **Turn the mode dial to ○ or A/M .**

   Alternatively, turn the Mode Dial to **SCENE** and select a mode to prepare the camera.

2. **Press the MENU button.**

   The Shooting Setting menu appears.

3. **Press the ▼button to select [PIC QUALITY/SIZE] and press the OK or ▶ button.**

4. **Press the ▲▼ buttons to select a picture quality/size.**

5. **Press the OK or ◀ button.**

   Picture Quality/Image Size settings are completed.

   Still Image Mode

6. **If you pressed the ◀ button in step 5, press also the MENU button.**

   The shooting setting menu disappears and the LCD monitor displays the set values.
   This setting will be used for shooting until you change it.

   Movie Mode

Manual Focus Shooting (FOCUS)

When Auto-Focus does not focus as desired, you can focus manually (Manual Focus).
Manual focusing allows shooting at a fixed distance. When using a fixed shooting distance, it can be set to either Snapshot or Infinity (∞).

📝 Note

- By default, your camera is set to AF (Auto-Focus).
- Manual focus cannot be used in Scene Mode.
- Manual focusing can focus the camera also on an object that requires macro shooting.

Setting Manual Focusing

1. **Turn the mode dial to ☐, A/M, or 🎥 .**

2. **Press the** MENU **button.**

The Shooting Setting menu appears.

3. **Press the ▼ button to select [FOCUS] and press the** OK **or ▶ button.**

4. **Press the ▲▼ buttons to select [MF].**

5. **Press the** OK **or ◀ button.**

Focus settings are complete.

6. **If you pressed the ◀ button in step 5, press also the** MENU **button.**

The Menu closes and "MF" is displayed on the screen.

Shooting with Manual Focusing

1. Press the OK button as required.

Pressing the OK button enlarges the display for easy focusing.

2. Press the ▲ and ▼ buttons for focusing.

Pressing the ▲ button brings the focus closer to you.
Pressing ▼ button moves the focus away from you.
Until the setting is changed the next time, pictures are shot by manual focusing.

3. Press the shutter button for shooting.

📓 Note

• To change the shutter speed for shooting with manual focusing, turn the mode dial to Aperture Priority/Manual Exposure Mode (A/M), select [Manual exposure] from the Shooting menu, and set the shutter speed.
• The up/down dial cannot be used for focus adjustment.

Shooting at a Fixed Distance

The shooting distance can be set to short distance or infinity.
Infinity is useful to shoot a distant view.
To shoot with the shooting distance fixed, follow the steps below.

1. **Turn the mode dial to ▢, A/M, or 🎬 .**

2. **Press the MENU button.**

The Shooting Setting menu appears.

3. **Press the ▼ button to select [FOCUS] and press the OK or ▶ button.**

4. **Press the ▲▼ buttons to select [SNAP] or [∞] (Infinity).**

Selecting [SNAP] will fix the shooting distance to 2.5 meters.
Selecting [∞] will fix the shooting distance to infinity.

5. **Press the OK or ◀ button.**

Focus settings are complete.

6. **If you pressed the ◀ button in step 5, press also the MENU button.**

The Shooting Setting menu closes and the setting value appears on the screen.
This setting will be used for shooting until you change it.

Changing the Light Metering (PHOTOMETRY)

You can change the metering method (the range to use for metering) to determine the exposure value.
There are three Light Metering Methods available: MULTI, CENTER, and SPOT.

Types of Modes You Can Select

Symbol	Mode	Description
(No Symbol)	MULTI	The entire shooting range is divided into 256 partitions, and subjected to photometry for overall decision.
[icon]	CENTER	The light metering is determined by a measurement of the whole, with the central part emphasized. Use this when the brightness of the center and surroundings are different.
[icon]	SPOT	Light metering is determined by measuring only the central part. Use this setting when you want to use the brightness of the center. It is useful if there is marked difference in contrast or backlighting.

1. **Turn the mode dial to ▢ or A/M .**

2. **Press the MENU button.**

The Shooting Setting menu appears.

3. **Press the ▼ button to select [PHOTOMETRY] and press the OK or ▶ button.**

4. **Press the ▲▼ buttons to select the desired setting.**

5. **Press the OK or ◀ button.**

Light Metering Method setting is complete.

6. **If you pressed the ◀ button in step 5, press also the MENU button.**

The shooting setting menu disappears and the LCD monitor displays the set values.
This setting will be used for shooting until you change it.

Changing the Edge Quality of Still Images (SHARPNESS)

You can change the definition of your still images to either sharp or soft.

1. Turn the mode dial to ◻ or A/M .

2. Press the MENU button.

The Shooting Setting menu appears.

3. Press the ▼ button to select [SHARPNESS] and press the OK or ▶ button.

4. Press the ▲▼ buttons to select the desired setting.

5. Press the OK or ◀ button.

Sharpness settings are complete.

6. If you pressed the ◀ button in step 5, press also the MENU button.

The shooting setting menu disappears and the LCD monitor displays the set values. This setting will be used for shooting until you change it.

Shooting Consecutively with Different Exposures (AUTO BRACKET)

The Auto Bracketing function automatically shoots three consecutive shots, with the specified exposure value as standard, at three exposure levels, at -0.5EV, ±0, and +0.5EV.

Note

This function is not available when shooting with sound.

1. **Turn the mode dial to ◻ or A/M .**

2. **Press the MENU button.**

   The Shooting Setting menu appears.

3. **Press the ◀▶ buttons to switch between displays as required.**

4. **Press the ▼ button to select [AUTO BRACKET] and press the OK or ▶ button.**

5. **Select [ON] and then press the OK or ◀ button.**

6. **If you pressed the ◀ button in step 5, press also the MENU button.**

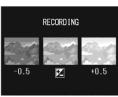   The shooting setting menu disappears and the LCD monitor displays [AB].

7. **Press the shutter release button.**

   Three consecutive shots are taken, with the specified Exposure Compensation value as the standard, at -0.5EV, ±0, and +0.5EV.
   After shooting, three still images are displayed on the LCD Monitor. They are, from the left, at -0.5EV (darker), standard compensation, and +0.5EV (brighter).
   This setting will be used for shooting until you change it or you turn the power off.

Reference

- For how to change the Exposure Compensation, see P.78.
- For how to change the White Balance, see P.79.

Shooting Consecutively with Different White Balance (WHITE BALANCE BRACKET)

Three images are automatically recorded - a reddish image, a bluish image, and an image of the current white balance.
This is useful if the appropriate white balance cannot be judged.

1. **Turn the mode dial to ▢ or A/M .**

2. **Press the MENU button.**

The Shooting Setting menu appears.

3. **Press the ◀▶ buttons to switch between displays as required.**

4. **Press the ▼ button to select [AUTO BRACKET] and press the OK or ▶ button.**

5. **Press the ▲▼ buttons to select [WB-BKT].**

6. **Press the OK or ◀ button.**

White Balance Bracket settings are complete.

7. **If you pressed the ◀ button in step 6, press also the MENU button.**
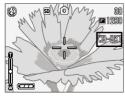
The Shooting Setting menu disappears and the screen displays [WB-BKT].

8. **Press the shutter release button.**

Three images (reddish, bluish, and equal to the current white balance) are automatically recorded.
This setting will be used for shooting until you change it or you turn the power off.

Note

- This function is not available for Multi-Shot shooting (P.90) and Auto Bracket shooting (P.69).
- The flash cannot be used.
- Time Exposure (P.72) is set to OFF.

Reference

For how to change the White Balance, see P.79.

A Variety of Shooting Techniques/Playback

Using Long Time Exposure (TIME EXPOSURE)

You can select an exposure time of 1, 2, 4 or 8 seconds.
By using long time exposure, you can capture the track of moving subjects such as fireworks and car lights, when you shoot a night scene.

1. **Turn the mode dial to ▲.**

2. **Press the MENU button.**

The Shooting Setting menu appears.

3. **Press the ◀▶ buttons to switch between displays as required.**

4. **Press the ▼ button to select [TIME EXPOSURE] and press the OK or ▶ button.**

5. **Press the ▲▼buttons to select the exposure time.**

6. **Press the OK or ◀ button.**

This completes the setting of time exposure.

7. **If you pressed the ◀ button in step 6, press also the MENU button.**

The shooting setting menu disappears and the LCD monitor displays the set values. This setting will be used for shooting until you change it.

📝 Note

- When using long time exposure, the shutter speed may go down and images may be blurred. Hold the camera securely by both hands or use a tripod for shooting.
- While shooting with long time exposure, the LCD Monitor display turns off.

⚠ Caution

If the shutter speed is set to one second or more, it takes time to complete recording because the picture noise elimination function is activated.

Shooting Pictures Automatically at Set Intervals (INTERVAL)

You can set the camera to automatically take pictures at fixed intervals.
You can set the shooting interval at any length from 5 seconds to 3 hours, in increments of 5 seconds.

1. **Turn the mode dial to ◻ or A/M.**

2. **Press the MENU button.**

The Shooting Setting menu appears.

3. **Press the ◄► buttons to switch between displays as required.**

4. **Press the ▼ button to select [INTERVAL] and press the OK or ► button.**

5. **Press the ▲▼ buttons to specify the length of time.**

6. **Press the ► button to move to the minutes setting, then use the ▲▼ buttons to set the minutes.**

7. **Press the ► button to move to the seconds setting, then use the ▲▼ buttons to set the seconds.**

8. **Press the OK button.**

Interval shooting is set and the LCD monitor displays "Interval".

9. **Press the shutter release button.**

A picture is taken every time the fixed interval elapses.

10. To stop shooting, press the OK button.

Interval Shooting settings are cleared when the power is turned off.

Caution

If the time until the next shooting is set longer on the shooting menu than the time for interval shooting, the shooting interval becomes longer than that for interval shooting.

Note

• In step 5, press and hold either the ▲ or ▼ button to quickly raise or lower the setting value for minute.
• If you use batteries for power, you may exhaust the batteries. Using the AC Adapter (sold separately) is recommended.
• Even during Interval Shooting, if you press the shutter button, the camera will shoot as usual. However, Interval Shooting Mode is unaffected. After shooting, once the time specified in Interval Shooting elapses, the next shot is taken.
• When Interval Shooting is on, even when Multi-Shot is set to [CONT] or [MCONT], consecutive shooting is automatically switched off.

🎤 Shooting a Still Image with Sound (IMAGE WITH SOUND)

You can shoot a still image with a voice memo. Voice recording can continue for up to eight seconds.

1. **Turn the mode dial to 🔲 or A/M.**

2. **Press the MENU button.**

   The Shooting Setting menu appears.

3. **Press the ◀▶ buttons to switch between displays as required.**

4. **Press the ▼ button to select [IMAGE WITH SOUND] and then press the OK or ▶ button.**

5. **Press the ▲▼ buttons to select [ON].**

6. **Press the OK or ◀ button.**

7. **If you pressed the ◀ button in step 6, press also the MENU button.**

   The Shooting Setting menu disappears.

8. **Press the shutter release button for shooting.**

   After shooting, the voice mark appears on the screen to indicate the recording status.

9. **Press the shutter release button to stop recording.**

📝 Note

When playing back a still image with sound, display the image in the same way as an ordinary image without voice. Pressing the shutter release button plays back the sound.
Press the ▲▼ buttons to display the volume adjustment bar, where you can adjust the volume with the ▲▼ buttons.

📁 Reference

For how to display still images, see P.46.

Inserting the Date into a Still Image (DATE IMPRINT)

You can insert the date (YY/MM/DD) or the date and time (YY/MM/DD hh:mm) at the lower right of a still image.

1. **Turn the mode dial to ◻ or A/M.**

2. **Press the MENU button.**

The Shooting Setting menu appears.

3. **Press the ◀▶ buttons to switch between displays as required.**

4. **Press the ▼ button to select [DATE IMPRINT] and then press the OK or ▶ button.**

5. **Press the ▲▼ buttons to select the desired setting.**

6. **Press the OK or ◀ button.**

The Date Imprint settings are completed.

7. **If you pressed the ◀ button in step 6, press also the MENU button.**

The shooting setting menu disappears and the LCD monitor displays DATE . This setting will be used for shooting until you change it.

Note

- If the date and time have not been set, DATE IMPRINT cannot be used. First make the date and time settings (P.120).
- DATE IMPRINT cannot be used with movies.
- A thumbnail image is not displayed with a date.

Changing the Exposure (EXPOSURE COMP.)

The exposure setting allows you to select brightness levels for your shots. Normally, if your subject is centered, backlight compensation is automatically activated, and you can shoot with correct exposure.

However, in the following cases, or when you intentionally want to change the exposure, you can change the exposure setting. Exposure can be specified in the range from -2.0 to +2.0. Setting the level higher (+) makes pictures brighter and lower (-) makes pictures darker.

For Backlighting

When the background is particularly bright, the subject will be dark (underexposure). In this case, set the exposure level higher (+).

When your subject is whitish

It will turn out entirely dark (underexposure). Set the exposure level higher (+).

When your subject is darkish

It will turn out entirely bright (overexposure). Set the exposure level lower (-). The same happens when you take photos of people in a spotlight.

To change the setting, use either the Shooting Setting menu or the ADJ. button.
This section explains easy ways with the ADJ. button.
When using the Shooting Setting menu, see "Using the Shooting Setting Menu" (P.61).

1. **Turn the mode dial to ▲.**

   If you have set the shutter speed with Manual Exposure Mode (A/M), exposure compensation does not work.

2. **Press the ADJ. button.**

   The Exposure Compensation bar appears.

3. **Press the ▲▼ buttons and specify a value.**

4. **Press the OK button.**

   The setting of exposure compensation is completed and the LCD monitor displays the set values.

📝 **Note**

When shooting in particularly bright places, you may fail in preventing overexposure. In that case, the [!AE] symbol will be displayed.

Using Natural and Artificial Lighting (WHITE BALANCE)

Adjust the white balance so that a white subject may be reproduced as white. At purchase, the White Balance is set to "AUTO"; normally you do not need to change the setting, but if the camera is having difficulty determining the white balance when shooting an object of a single color or under several light sources, you can change the setting.

Types of Modes You Can Select		
Symbol	Mode	Description
AUTO	Auto	Make adjustments automatically.
☀	Daylight	Select when shooting outdoors (Sunny) and White Balance fails to adjust properly.
☁	Overcast	Select when shooting in cloudy weather or shade and the White Balance fails to adjust properly.
☀	Tungsten light	Select when shooting under tungsten light and White Balance fails to adjust properly.
〓	Fluorescent light	Select when shooting under fluorescent light and White Balance fails to adjust properly.
Ⓜ	One-push	Manually set White Balance.

To change the setting, use either the Shooting Setting menu or the ADJ. button.
This section explains easy ways with the ADJ. button.
When using the Shooting Setting menu, see "Using the Shooting Setting Menu" (P.61).

1. **Turn the mode dial to ◻ or A/M.**

2. **Press the ADJ. Button twice.**

   The White Balance menu appears.

3. **Press the ▲▼ buttons to select a mode other than Ⓜ.**

   You can also press the shutter button in this state.

4. **Press the OK button.**

   White Balance settings are completed and the symbol appears on the screen. This setting will be used for shooting until you change it.

Setting the White Balance Manually (One Push)

1. **Turn the mode dial to 🔲 or A/M.**

2. **Press the ADJ. Button twice.**

   The White Balance menu appears.

3. **Press the ▲▼ buttons to select Ⓜ.**

4. **Point the camera at a piece of paper or something white under the lighting conditions for your picture.**

5. **Press the ▶ button.**

   White Balance is set.

6. **Press the OK button.**

   The setting of white balance is completed and the LCD monitor displays a marking. This setting will be used for shooting until you change it.
   If you press the ▶ button in step 5, the screen refreshes to show the White Balance settings made. If the result is not as expected, repeat steps 4 and 5 to change the settings as many times as required.

📋 Note

In Auto Mode, white balance may not be adjusted correctly for a subject that is mostly dark. In this case, add something white as the subject.

⚠️ Caution

When shooting with flash, white balance may not be adjusted correctly. In this case, switch to Auto Mode for shooting with flash.

Changing Sensitivities (ISO SETTING)

The ISO sensitivity indicates how sensitive to light the film is. A greater value means higher sensitivity. High sensitivity is suitable for shooting an object in a dark place or moving fast and suppresses blurring. However, the images become rough.

For higher or lower sensitivity, you can select from the following six levels:

AUTO, ISO64, ISO100, ISO200, ISO400, ISO800, ISO1600

A digital camera can automatically vary the sensitivity according to the distance, brightness, zoom, and macro (AUTO). Usually use your camera in the AUTO mode.

To change the setting, use either the Shooting Setting menu or the ADJ. button.
This section explains easy ways with the ADJ. button.
When using the Shooting Setting menu, see "Using the Shooting Setting Menu" (P.61).

1. **Turn the mode dial to 🔲 or A/M.**

2. **Press the ADJ. Button three times.**

   The ISO Sensitivity menu appears.

3. **Press the ▲▼ buttons to select an ISO setting.**

   You can also press the shutter button in this state.

4. **Press the OK button.**

   The setting of ISO sensitivity is completed and the LCD monitor displays the set values.
   This setting will be used for shooting until you change it.

📖 **Note**

In Wide-angle Zoom mode, when the ISO Sensitivity is set to Auto, the sensitivity is equivalent to ISO160 with flash or ISO100 without flash.

Setting Color Depth (COLOR DEPTH)

Color depth of the shot still image can be selected from Vivid, Normal and Nutral (Neutral).

1. **Turn the mode dial to** 🄰 **or A/M.**

2. **Press the** MENU **button.**

The Shooting menu appears.

3. **Press the** ◄► **buttons to switch between displays as required.**

4. **Press the** ▼ **button to select [COLOR DEPTH]. Then press the** OK **or** ► **button.**

5. **Press the** ▲▼ **buttons to select the color depth.**

6. **Press the** OK **or** ◄ **button.**

This completes the color depth setting.

7. **If the** ◄ **button was pressed in Step 6, press the** MENU **button.**

The shooting setting menu disappears. If other than [Normal] is set, the LCD monitor displays the set values.
The set values are used for shooting until they are changed the next time. The LCD monitor also reflects the values.

Returning the Shooting Setting Menu Settings to their Defaults (RESTORE DEFAULTS)

To return the Shooting Setting menu settings to their defaults, follow the steps below.

1. **Turn the mode dial to ▣.**

2. **Press the** MENU **button.**

3. **Press the ◂▸ buttons to switch between displays as required.**

4. **Press the ▲▼ buttons to select [RESTORE DEFAULTS] and press the** OK **or ▸ button.**

5. **Make sure that [YES] is selected, and then press the** OK **button.**

The display indicates the camera is restoring the initial settings; once it is finished, the display returns to the Mode screen.

2

A Variety of Shooting Techniques/Playback

🖐 **Reference**

For a list of functions whose settings are not cleared by power-off, see P.159.

Changing Shading for Shooting Text (DENSITY)

You can change the shading of text for shooting in Text Mode of Scene Mode.
You can select from DEEP, NORMAL and LIGHT.

To change the setting, use either the Shooting Setting menu or the ADJ. button.
This section explains easy ways with the ADJ. button.
When using the Shooting Setting menu, see "Using the Shooting Setting Menu" (P.61).

1. **Turn the Mode Dial to SCENE.**

   The Scene selection screen appears.

2. **Press the ▲▼ buttons to select the text mode and then press the OK button.**

3. **Press the ADJ. button.**

   The Text Density menu appears.

4. **Press the ▲▼ buttons to select the desired density setting.**

   You can also press the shutter button in this state.

5. **Press the OK button.**

   Text Density settings are completed.
   The Text Density setting value does not appear on the screen. This setting will be used for shooting until you change it.
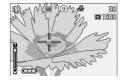

Reference

For how to shoot text, see P.43.

Using the AF Target Shift Function

At macro shooting, the AF target shift function allows you to lock the focus (P.36) by using the ▲▼◀▶ buttons on the camera without moving the camera.
This is useful for macro shooting on a tripod with locked focus.
The AF target shift function allows you to shift the cross at the center of the LCD monitor to the subject with the ▲▼◀▶ buttons for focusing.
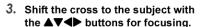
Press the ◀ button to shift the cross (focus) to the left

1. **With the camera ready to shoot, press the ♥ button.**

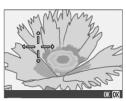   The Macro symbol is displayed at the top of the screen.

2. **Press the ADJ. Button four times.**

   In ◻ (Shooting Mode), press the ADJ. button four times (five times if the ADJ. button has the fourth function). In A/M (Aperture Priority/Manual Exposure Mode), press the ADJ. button three times (four times if the ADJ. button has the third function).

3. **Shift the cross to the subject with the ▲▼◀▶ buttons for focusing.**

4. **Press the OK button.**

5. **Half-press the shutter button.**

   The camera focuses on the cross.

6. **Gently press the shutter button all the way.**

   Until you get out of the Macro mode, the AF target shift function automatically focuses the camera on the set position.

○ Using the Self-Timer

You can set the Self-timer to shoot after either two or ten seconds.
A setting of two seconds is useful for preventing camera shake.

1. **Turn the Mode Dial to ▢, A/M, or SCENE.**

2. **Press the ○ (Self-timer) button.**

The Self Timer mark appears momentarily
in a large size at the center of the LCD
monitor and then is displayed at the upper
left.
The "10" to the right of the symbol
indicates the number of seconds. In this
case, if you press the shutter button, the
camera will shoot after 10 seconds.

3. **Press the shutter release button.**

The focus is locked, the flash goes on, and
the self-timer starts.
Once the picture is taken, the self-timer
mode is cleared.

Note

- Each press of the ○ (Self-timer) button, it selects a function in the following sequence: 10 sec, 2 sec, Self-timer Off, 10 sec, 2 sec.
- Self-timer settings are released when the power is turned off.
- When the self-timer is set to 2 seconds, the flash indicator for self-timer does not fire.

Shooting in Aperture Priority/Manual Exposure Mode

When the mode dial is set to Aperture Priority Mode, you can set the aperture and shutter speed manually for shooting.
In A/M Mode, both Aperture Priority Mode and Manual Exposure Mode are available.
If only the aperture is set, the shutter speed is automatically set according to the aperture (Aperture Priority Mode). If the shutter speed is also set, you can take pictures with the shutter speed and the aperture set at the time of shutter speed setting (Manual Exposure Mode).
The aperture can be selected from Open, Half, and Minimum.
The shutter speed can be selected from 1/2000, 1/1600, 1/1250, 1/1000, 1/800, 1/640, 1/500, 1/400, 1/320, 1/250, 1/200, 1/160, 1/125, 1/100, 1/80, 1/60, 1/50, 1/40, 1/30, 1/25, 1/20, 1/15, 1/13, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2.5, 1/2, 1/1.6, 1/1.3, 1, 2, 4, 8, 15 and 30 seconds.
Lowering the aperture value (f-number) blurs the background and highlights the object.
Increasing the aperture value makes the focus clear for both near and far objects.
Increasing the shutter speed allows you to take a picture as if a quick-moving object were stopped momentarily. Lowering the shutter speed allows you to shoot the track of a moving object because any motion can be expressed as a flow.
The up/down dial is useful for setting in Aperture Priority Mode.

Note

- The actual aperture value depends on the zoom position.
- The diaphragm is driven when the shutter release button is fully depressed.

Shooting with Set Aperture (Aperture Priority Mode)
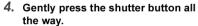
To shoot with a set aperture, follow the steps below.

1. Turn the Mode Dial to A/M.

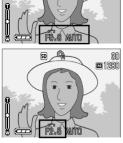The current f-number and shutter speed (AUTO) appear in the bottom part on the screen.

2. Turn the up/down dial to change the f-number.

3. Half-press the shutter release button.

The shutter speed is determined and displayed in the bottom part on the screen.

4. Gently press the shutter button all the way.

You can also take a photo without half pressing.

Shooting at Set Shutter Speed (Manual Exposure Mode)
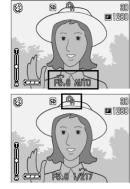
To shoot at a set shutter speed, follow the steps below.

1. Turn the Mode Dial to A/M.

The current f-number and shutter speed (AUTO) appear in the bottom part on the screen.

2. Turn the up/down dial to change the f-number as required.

3. While pressing the ▲ button, turn the up/ down dial to change the shutter speed.

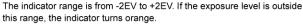The mark at the upper part on the screen

changes from 🔲 (Aperture Priority

Mode) to 🔲 (Manual Exposure Mode).

4. Release the ▲ button.

5. Half-press the shutter release button.

The LCD monitor displays an exposure level indicator.
The indicator range is from -2EV to +2EV. If the exposure level is outside this range, the indicator turns orange.
As long as the exposure level variation you set is within the indicator range, the LCD monitor display changes.

6. Gently press the shutter button all the way.

You can also take a photo without half pressing.

Shooting with Multi-Shot

If you switch to Multi-Shot, you can shoot consecutive images. Multi-shot can be classified into the following types:
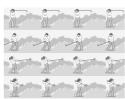
CONT (Multi-Shot)

As long as you hold the shutter button down, pictures continue to be taken. The still images are recorded one file each, just as in normal shooting.

S (Stream) Multi-Shot

With just one full-press of the shutter, you can take 16 consecutive shots at intervals of 1/7.5 second (in about two seconds). The 16 still images are grouped together as a set and are recorded as one image file.

M (Memory-reversal) Multi-Shot

The camera memorizes the scene while you hold the shutter release button down, and once you release it the previous two seconds of shots are recorded.
The 16 still images are grouped together as a set and are recorded as one image file.

2. The camera records for about two seconds ahead

1. If you release the shutter release button here...

📝 **Note**

- When shooting with S Multi- or M Multi-Shot, the ISO sensitivity is fixed to AUTO even if it is set to 64,100.
- The maximum number of images that can be shot in the Multi-Shot mode depends on the image size setting as follows:

F3264	N3264	N2592	N2048	N1280	N640
3	3	3	3	13	13

- The Picture Quality Mode and the Image Size Mode of SCONT and MCONT are F3264 or N3264.

1. **Turn the mode dial to ▢ or A/M.**

2. **Press the** MENU **button.**

The Shooting Setting menu appears.

3. **Press the ▼ button to select [CONT] and press the** OK **or ▶ button.**

4. **Press the ▲▼ buttons to select [CONT], [SCONT], or [MCONT].**

5. **Press the** OK **or ◀ button.**

6. **If you pressed the ◀ button in step 5, press also the** MENU **button.**

The Shooting Setting menu closes and the symbol is displayed at the top of the screen.

□ CONT

7. Compose your picture, then press and hold the shutter button.

As long as you hold the shutter button down, pictures continue to be taken.

8. Release your finger from the shutter release button to stop recording.

To playback consecutive images shot in Multi-Shot mode, turn the camera to playback mode (see P.46) and select the still image with the ◄► buttons for playback.

Ⓢ SCONT (S Multi-Shot)

7. Compose your picture, then press the shutter button.

16 pictures are taken automatically.

Ⓜ MCONT (M Multi-Shot)

7. Compose your picture, then press and hold the shutter button.

The camera memorizes the scene while you hold the shutter release button down.

8. Release your finger from the shutter release button.

The camera stops memorizing and the previous 16 still images (in about two seconds) are recorded as one still image.

⬇ Note

- When you want to return to normal single-shot shooting, follow step 1 through 3, select [OFF] in step 4, and press the ○K button.
- In MCONT mode, if you release the shutter button within two seconds from the time you first pressed it, the shots from the time you pressed the shutter until you released it will be recorded (the number of consecutive shots will be less than 16).
- The internal flash is switched to OFF.

Viewing an S Multi-Shot or M Multi-Shot Still Image in Enlarged Display Mode

While still images (16 frames in a file) taken by SCONT or MCONT are displayed, one of the 16 frames can be displayed in an enlarged view. While viewing an enlarged frame image, you can switch between frames.
To view a shot from S Multi-Shot or M Multi-Shot still images in Enlarged Display Mode, follow the steps below.

1. **Turn the mode dial to ▶.**

   The last shot taken is displayed.

2. **Press the ◀▶ buttons to display an S Multi-Shot or M Multi-Shot still image.**

3. **Press the 🔍 button.**

   The first frame of consecutive images is displayed in Enlarged Display Mode.
   The shot position bar appears at the lower part of the LCD monitor.
   Press the ◀▶ buttons to feed the shot.
   To return to the 16-shot display, press the OK button.

📝 Note

Press the DISP. button to turn on or off the bar display at the lower part of the LCD monitor.

📁 Reference

For how to shoot images in S Multi-Shot or M Multi-Shot mode, see P.90.

Shooting/Playing Back Movies

⊞ Shooting Movies

You can shoot movies with sound.
You can select the image size, either 320 x 240 or 160 x 120 pixels.
Each movie you shoot is recorded as one AVI file.

1. **Turn the Mode Dial to ⊞.**

2. **Press the shutter release button.**

The camera starts recording.
Recording continues until you press the
shutter button again.

3. **Pressing the shutter button again
stops recording.**

Caution

- While shooting movies, operation sounds may be recorded.
- The maximum recording time per shooting depends on your card. Even within the
  maximum recording time, some cards may end shooting.

Note

- The flash cannot be used.
- While shooting movies, only Digital Zoom can be used.
- At the time you press the shutter button in Step 2, the shot comes into focus and the white
  balance is automatically fixed.
- The remaining recording time may not change uniformly because it is recalculated from the
  remaining memory capacity during movie recording.

Reference

- For how to change the image size for movies, see P.62.
- For how to use the Digital Zoom, see P.38.
- For the list of shooting setup menu items available in Movie mode, see P.158.

Playing Back Movies

To playback movies, follow the steps below.

1. **Turn the mode dial to ▶ (Playback Mode).**

The last shot taken is displayed.
For movies, the first frame is displayed as a still image.

2. **Move to the movie you want to view using the ◀▶ buttons.**

Press the ▶ button to display the next file.
Press the ◀ button to display the previous file.

3. **Press the shutter button.**

Playback begins.
The elapsed playback indicator or the elapsed time is displayed on the LCD Monitor.

Fast Forward	Press the [▲] button during playback.
Rewind	Press the [▼] button during playback.
Pause/Playback	Press the shutter button.
Slow Playback	Keep pressing the [▲] button during pause.
Slow Rewind	Keep pressing the [▼] button during pause.
Next Frame	Press the [▲] button during pause.
Previous Frame	Press the [▼] button during pause.
Volume Adjustment	Press the ▲▼ buttons during playback.

Term

Movie Frames

A movie frame is also called a frame. Movies consist of many frames whose images appear to be moving when displayed at high speed.

Recording/Playing Back Sound

♥ Recording Sound (Voice Memo)

You can record sound.
Recorded data is stored as a WAV file.

1. Turn the Mode Dial to ♥.

2. Press the shutter release button.

Sound recording starts.

3. Release your finger from the shutter release button to stop recording.

Note

The voice recording time depends on the capacity of the SD memory card.
The table below shows the available recording time.

Internal Memory	32MB	64MB	128MB	256MB	512MB	1GB
57 min 26 s	64 min 36 s	132 min 11 s	267 min 15 s	532 min 36 s	1073 min 00 s	2063 min 25 s

---

Caution

For long recording, use of the AC Adapter is recommended.

Playing Back Sound
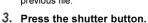
To playback sounds, follow the steps below.
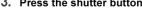
1. **Turn the mode dial to ▶.**

The last shot taken is displayed.

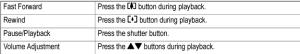*2.* **Press the ◀▶ buttons to select a sound file for playback (speaker icon).**

Press the ▶ button to display the next file.
Press the ◀ button to display the previous file.

3. **Press the shutter button.**

Playback begins.

Fast Forward	Press the [▲] button during playback.
Rewind	Press the [▼] button during playback.
Pause/Playback	Press the shutter button.
Volume Adjustment	Press the ▲▼ buttons during playback.

Other Functions Available in Playback Mode

Playback Setting Menu

The Playback menu provides the functions shown in the table below:

Setting	Option	Refer to
SLIDE SHOW	———————	P.99
PROTECT	Select/Deselect 1 FILE, Select/Deselect ALL FILES, Select Multi-files	P.100
DPOF	Select/Deselect 1 FILE, Select/Deselect ALL FILES, Select Multi-files	P.103
RESIZE	1280, 640	P.106
COPY TO CARD	———————	P.107

Using the Playback Menu

1. **Turn the mode dial to ▶.**

2. **Press the MENU button.**
   The Playback menu appears.

3. **Press the ▲▼ buttons to select the desired setting.**

4. **After selecting a setting item, press the OK button.**
   Each function screen appears.

Showing Photos in Order Automatically (SLIDE SHOW)

You can show the recorded still images, movies, and sound files sequentially on the LCD Monitor. This function is called a slide show. To view a slide show, follow the steps below.

1. **Turn the mode dial to ▶.**

The last shot taken is displayed.

2. **Press the MENU button.**

The Playback menu appears.

3. **Make sure that [SLIDE SHOW] is selected, and then press the OK button.**

The slide show starts and files are played back in order.
If you want to stop the slide show in progress, press any button on the camera.
Until stopped, the slide show will repeat itself.

```
                    1
SLIDE SHOW
PROTECT
DPOF
RESIZE
COPY TO CARD
MENU END              OK OK
```

Note

• Still images are displayed for 3 seconds each.
• For movies, not just one frame, but the entire movie you shot is displayed.
• Sound files are also played back.

Write-protecting Your Images (PROTECT)

You can protect files from being accidentally deleted.

Caution

Protected files cannot be deleted normally. However, they will be deleted completely if you format the memory where the files are stored.

Protecting Files

1. Turn the mode dial to ▶.

The last shot taken is displayed.

2. Press the ◀▶ buttons to display the file you want to protect.

3. Press the MENU button.

The Playback Setting menu appears.

4. Press the ▼ button to select [PROTECT] and press the OK button.

5. Make sure that [1 FILE] is selected, and then press the OK button.

Protection is applied and the Protect symbol appears in the upper-left corner of the screen.

Protecting All Files

To protect all your files, follow the steps below.

1. Turn the mode dial to ▶.

2. Press the MENU button.

The Playback menu appears.

3. Press the ▼ button to select [PROTECT] and press the OK button.

4. Press the ◀▶ button to select [ALL FILES].

5. Make sure that [SELECT] is selected, and then press the OK button.

Protection is applied and the Protect symbol appears in the upper-left corner of the screen.
To remove protection from all your files, select [CANCEL] in step 5.

Note

You can remove protection from all or multiple files at once.

Protecting Multiple Files at Once

To protect selected files all at once, follow the steps below.

1. **Turn the mode dial to ▶.**

2. **Press the ⊞ button.**

   The screen is split into six sections and thumbnail images are displayed in a reduced size.

3. **Press the ▲▼◀▶ buttons to select the first file of the selection.**

4. **Press the MENU button.**

   The Playback menu appears.

5. **Press the ▼ button to select [PROTECT] and press the OK button.**

6. **Press the ▲▼◀▶ buttons to select the next file of the selection, and then press the OK button.**

   The Protect symbol appears in the upper-right corner of the file.

7. **Repeat Step 6 to select all the files you wish to protect.**

   If you selected a file by mistake, you can deselect by selecting the file and pressing the OK button again.

8. **Press the MENU button.**

   The display indicates that the selected images are being processed; once finished, the display returns to the Thumbnail Display screen.

📄 Note

To remove protection from multiple files, follow the same steps described above to select them and remove protection.

📂 Reference

Using a Printing Service (DPOF)

The still images recorded on an SD Memory Card can be printed out if you take them to a shop that offers a digital camera print service. To use a print service, it is necessary to make settings required for printing. These settings are called DPOF (Dee-Pof) settings.
The DPOF setting specifies one print per still image.
However, if multiple images are selected for batch setting, you can specify the number of copies to print.

Setting DPOF for the Still Image Displayed

1. **Turn the mode dial to ▶.**

2. **Display the still image you want to specify.**

3. **Press the MENU button.**

The Playback Setting menu appears.

4. **Press the ▼ button to select [DPOF] and press the OK button.**

5. **Make sure that [1 FILE] is selected, and then press the OK button.**

Once the DPOF setting is made, the DPOF symbol appears in the upper-left portion of the screen.

📝 **Note**

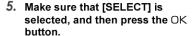Removing the DPOF setting for one photo at a time is done in the same way as setting it.

Setting DPOF for All Still Images

To apply DPOF settings to all your still images, follow the steps below.

1. **Turn the mode dial to ▶.**

2. **Press the MENU button.**

   The Playback menu appears.

3. **Press the ▼ button to select [DPOF] and press the OK button.**

4. **Press the ◀▶ buttons to select [ALL FILES].**

5. **Make sure that [SELECT] is selected, and then press the OK button.**

   Once the DPOF setting is made, the DPOF symbol appears in the upper-left portion of the screen.

Note

- To remove the DPOF setting from all your still images, select [CANCEL] in step 5.
- You can remove all or multiple still image DPOF settings at once.

Setting DPOF for Multiple Still Images

To make the DPOF setting for selected still images all at once, follow the steps below.

1. **Turn the mode dial to ▶.**
2. **Press the 🔳 button.**

   The screen is split into six sections and thumbnail images are displayed in a reduced size.

3. **Press the ▲▼◀▶ buttons to select the first still image for which you wish to make the DPOF setting.**
4. **Press the MENU button.**

   The Playback menu appears.

5. **Press the ▼ button to select [DPOF] and press the OK button.**

6. **Press the ▲▼ buttons to set the number of copies to print.**

   Press the ▲ button to increase the number, or the ▼ button to decrease it.

7. **Press the ◀▶ buttons to select the next still image for which you wish to make the DPOF setting.**
8. **Press the ▲▼ buttons to set the number of copies to print.**

   Press the ▲ button to increase the number, or the ▼ button to decrease it.

9. **Repeat Steps 7 and 8 to select all the still images for which you wish to make the DPOF setting.**
10. **Press the MENU button.**

   The display indicates that the selected images are being processed; once finished, the display returns to the Thumbnail Display screen.

Changing the Image Size (RESIZE)

You can reduce the image size of a shot still image to additionally create a file of a different image size.

Caution

The image size of a movie or image shot in the Non-compressed (NC) Mode cannot be changed.

Note

The following types of resizing are possible:

Original	Resized	
F3264/N3264/N2592/N2048	N1280	N640
N1280		N640

To change the image size, follow the steps below.

1. **Turn the mode dial to** ▶.

2. **Press the MENU button.**

   The Playback Setting menu appears.

3. **Press the ▼ button to select [RESIZE] and press the OK button.**

4. **Press the ▶ buttons to select [1280] or [640].**

5. **Press the OK button.**

   The image size is changed and the resized still image is displayed.

Reference

For how to change the image size at shooting, see P.62.

Copying the Contents of Internal Memory to a Memory Card (COPY TO CARD)

You can copy all movies, still images, and sound data stored in internal memory onto an SD Memory Card at once.

1. **Turn the Camera Off.**

2. **Insert an SD Memory Card.**

3. **Turn the camera on.**

4. **Turn the mode dial to ▶.**

5. **Press the MENU button.**

The Playback Setting menu appears.

6. **Press the ▼ button to select [COPY TO CARD] and press the OK button.**

The display indicates copying is in progress; once finished, the display returns to the playback screen.

ℹ️ **Note**

- If the capacity of the SD Memory Card you are copying to is insufficient, a message will be displayed indicating there is not enough capacity. To copy only the number of shots that will fit into the available capacity, select [YES] and then press the OK button. To cancel copying, select [NO] and then press the OK button.
- It is not possible to copy from SD Memory Card to internal memory.