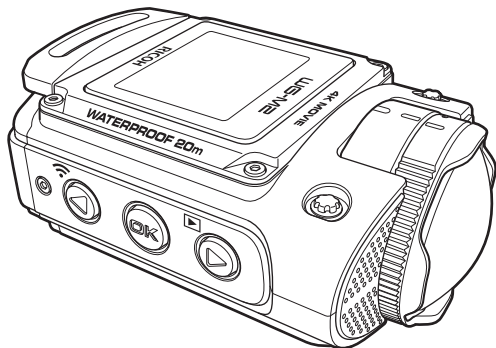


RICOH

Digital Camera

RICOH WG-M2

Operating Manual



Fundamentals **1**

Getting Started **2**

Shooting **3**

Playback **4**

Settings **5**

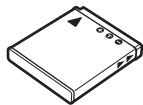
Sharing **6**

External connections **7**

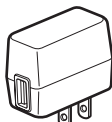
Appendix **8**

To ensure the best performance from your camera, please read the Operating Manual before using the camera.

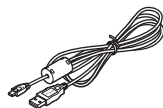
List of accessories



Rechargeable lithium-ion battery
D-LI68



Power adapter
D-PA164



USB cable
I-USB157



Lens protector
O-LP1631



Underwater lens protector
O-LP1632

Start Guide
Regarding Waterproof Design

- The lens protector O-LP1631 is attached at delivery.
- To maintain the waterproof and dustproof performance, be sure to keep the lens protector on.

WG-M2 Fundamentals	1
Getting started	2
Shooting	3
Playback/editing	4
Settings menu	5
Operating with a communication device	6
Connecting to external devices	7
Appendix	8

Table of contents

WG-M2 Fundamentals5

Names of parts	5
LCD screen display	7
Screen display of playback mode	8
About the button functions	9
In shooting mode	9
In playback mode	10

Getting started11

Attaching and removing the lens protector	11
How to remove the lens protector	11
How to attach the lens protector	12
Installing a memory card and battery	12
Charging the battery	14
Turning the camera on and off	15
To turn the camera on	15
To turn the camera off	15
Initial settings	15
Language settings	15
Date adjustment	16

Shooting17

Shooting mode	17
Shooting movies and still images	18
Shooting still images and underwater still images	18
Shooting still images with burst shooting	18
Shooting movies and underwater movies	19
Shooting time-lapse movies	19

Shooting Extended Movie Recording	20
Shooting high speed movies	20

Playback/editing21

Playing back movies and still images	21
Playing back still images	21
Playing back movies	21
Deleting movies and still images	22
Copying movies and still images	23
Editing movies that were shot	23
Saving a movie frame as a still image	23
Dividing movies	24

Settings menu26

Settings menu list	26
List of shooting modes	26
List of shooting settings	27
List of general settings	28
Shooting mode settings	29
Shooting settings	30
Displaying the [Shooting Settings] screen	30
Setting image enhancements	30
Compensating for exposure	31
Adjusting white balance	31
Setting AE metering	32
Setting the sensitivity	32
Setting the angle of view	33
Setting the LCD orientation	34
Setting the recorded pixels for still images	34

Setting the recorded pixels for movies	35	Connecting to external devices	54
Setting the quality level of the movie	35	Connecting to a computer	54
Setting shake reduction for movies	36	Connecting to AV devices	55
Suppressing wind noise while shooting movies	36	Appendix	56
General settings	37	Limitations of shooting mode functions	56
Displaying the [Setting] screen	37	Troubleshooting	57
Setting sound	37	List of messages	58
Changing the date and time	38	Main Specifications	60
Changing the display language	39	Index	64
Setting the USB connection mode	39	Using your camera safely	66
Setting up Wi-Fi	40	Care to be taken during handling	67
Adjusting the brightness of the LCD screen	41	Regarding waterproof, dustproof, and	
Setting up Power Saving mode	42	shockproof design	69
Setting the Auto Power Off function	42	Precautions before using the camera in the water	69
Resetting the settings	43	Precautions when using the camera in the water	70
Deleting all movies and still images	43	Precautions after using the camera in the water	70
Formatting	43	WARRANTY POLICY	73
Setting the vibration function	44		
Displaying certifications	44		
Operating with a communication			
device	45		
Connecting the camera and a communication			
device	45		
Preparing the camera	45		
Setting communication devices (for Android)	45		
Setting communication devices (for iOS)	46		
Screen display of Image Sync	47		
Shooting from a communication device	48		
Viewing images	49		
Changing Image Sync settings	52		

There is a possibility that the illustrations and the screen display in this manual are different from the actual ones.

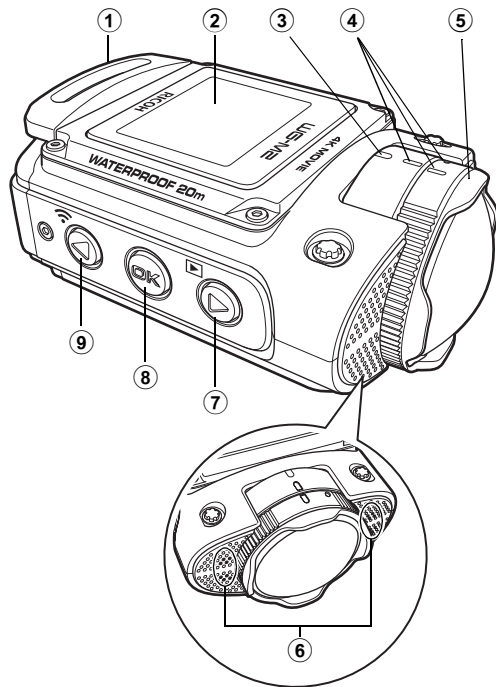
Regarding copyrights

Images taken with this camera 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 cases where limitations are placed on taking pictures even for personal enjoyment during demonstrations, performances or of items on 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.

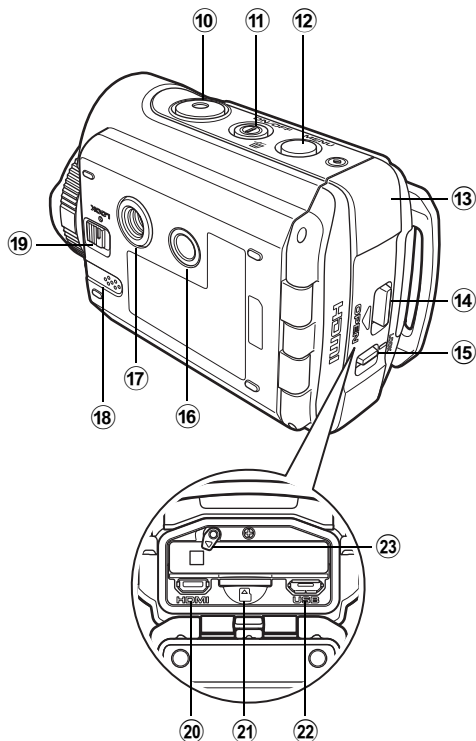
To users of this camera

- Do not use or store this camera in the vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Strong static charges or the magnetic fields produced by equipment such as radio transmitters could interfere with the display, damage the stored data, or affect the camera's internal circuitry and cause camera misoperation.
- The liquid crystal panel used for the 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.
- In this manual, the generic term "computer(s)" refers to either a Windows PC or a Macintosh.
- In this manual, the term "battery(ies)" refers to any type of batteries used for this camera and its accessories.

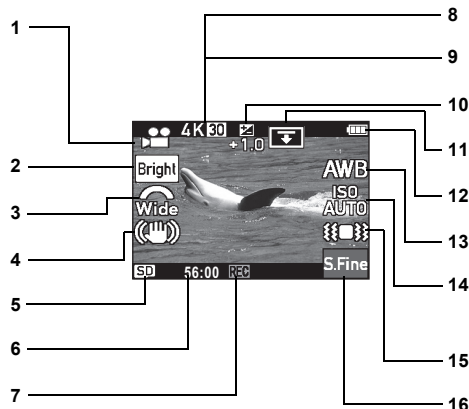
Names of parts



- ① Strap lug
- ② LCD screen
- ③ Power lamp
- ④ Alignment points
- ⑤ Lens protector
- ⑥ Microphone
- ⑦ Playback button/direction button (upper)
- ⑧ OK button
- ⑨ Wi-Fi button/direction button (lower)




- ⑩ Video recording button/shutter button
- ⑪ Power button/delete button
- ⑫ MENU button
- ⑬ Battery/card cover
- ⑭ Release latch
- ⑮ Lock lever
- ⑯ Positioning hole
- ⑰ Tripod socket
- ⑱ Speaker
- ⑲ Lens protector lock
- ⑳ HDMI terminal
- ㉑ MicroSD card slot
- ㉒ USB terminal
- ㉓ Battery lock lever



- | | |
|---|----------------------------|
| 1 Shooting mode | 9 Recorded Pixels |
| 2 Image Effect Modes | 10 EV Compensation |
| 3 Angle of View | 11 LCD Orientation |
| 4 Movie SR | 12 Battery level indicator |
| 5 Internal memory/memory card display | 13 White Balance |
| 6 Remaining recordable time/image storage capacity | 14 Sensitivity |
| 7 Icon while recording movies (blinks while recording movies) | 15 Vibration |
| 8 Recorded Pixels (Movie) | 16 Quality Level (Movie) |

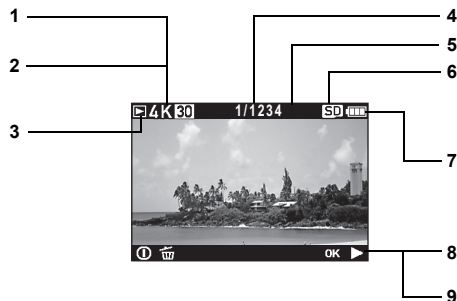
Memo

- Depending on the shooting mode, some information may not be displayed.
- Some icons will disappear if no button is pressed for four seconds. All icons will reappear if you press the  button.

Screen display of playback mode

1

Fundamentals



- | | |
|---------------------------------------|--|
| 1 Recorded Pixels (Movie) | 5 is displayed when playing back movies shot in [Extended Movie Recording]. |
| 2 Recorded Pixels | 6 Internal memory/memory card display |
| 3 Playback mode display | 7 Battery level indicator |
| 4 Image number/total number of images | 8 Guide display (movie) |
| | 9 Guide display (still image) |

Memo

- The [Power Saving] function (p.42) is not available in playback mode.







About the button functions

1


Fundamentals







In shooting mode

--: Button operations (short push) disabled

Buttons	Name	While in the settings menu display	While in the shooting screen display	While recording
	Power button/delete button	—	—	—
		Press and hold: turns the power off		
	OK button	Confirms a selection	Displays hidden icons	—
	Menu button	Cancels the setting	Displays the settings menu	—
	Playback button/direction button (upper)	Changes the menu	Displays the playback screen	—
	Wi-Fi button/direction button (lower)	Changes the menu	—	—
			Press and hold: enables/disables the Wi-Fi function	
	Video recording button/shutter button	Displays the shooting screen	Shoots movies/still images	Stops recording

Memo

- If [Power Saving] (p.42) is set, the LCD screen automatically turns off, to reduce battery consumption, if no camera operations are performed during a specified period of time. Pressing the  button turns it back on.

Buttons	Name	While in the playback screen display	When playing back a movie	
			During playback	While temporarily stopped
	Power button/delete button	Deletes the image	—	
		Press and hold: turns the power off		
	OK button	Starts movie playback (unavailable during still image display)	Temporarily stops playback	Restarts playback
	Menu button	Displays the [Edit Functions] screen	Stops playback	
	Playback button/direction button (upper)	Displays the previous image	—	Reverses frames
			Press and hold: fast-reverses	Press and hold: returns to the first frame
	Wi-Fi button/direction button (lower)	Displays the next image	—	Advances frames
			Press and hold: plays back in fast-forward	Press and hold: advances to the last frame
	Video recording button/shutter button	Displays the shooting screen		

Attaching and removing the lens protector

The camera comes with two types of lens protectors. To maintain the waterproof and dustproof performance, be sure to keep the lens protector on.

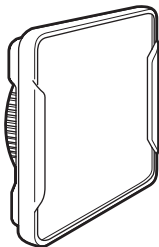
Lens protector O-LP1631

Use for regular shooting.



Underwater lens protector O-LP1632

Use for underwater shooting.

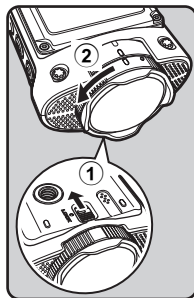


Memo

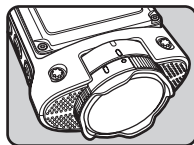
- Use the appropriate lens protector for each shooting.
- When shooting underwater, the angle of view is narrower than the regular shooting.

How to remove the lens protector

- 1** While pressing on the lens protector lock on the back of the camera in the direction of arrow ①, rotate the ring of the lens protector in the direction of arrow ②.

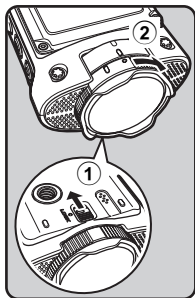


- 2** You can remove the lens protector when the alignment points for the lens protector form a straight line.



How to attach the lens protector

- 1 While pressing on the lens protector lock on the back of the camera in the direction of arrow ①, align the alignment points on the camera and the lens protector and slide it in.



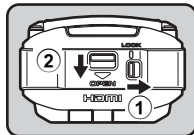
- 2 Rotate the lens protector in the direction of arrow ② until it clicks.

⚠ Caution

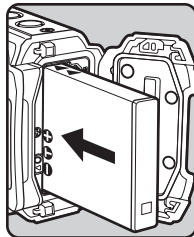
- Condensation may form inside the lens protector if the camera is subjected to rapid temperature changes, such as when moving from the cold outdoors (low temperature environment) into a warm room (high temperature environment). Remove the lens protector and wipe it all off with a dry, lint-free cloth, and then put the lens protector back on.
- To prevent the lens protector from being scratched by a hard object, be sure to put the camera in a case such as the optional camera case O-CC163 when carrying. If the lens protector becomes dirty, remove dust or dirt with a blower, and then gently wipe the lens protector with a soft cloth.

Installing a memory card and battery

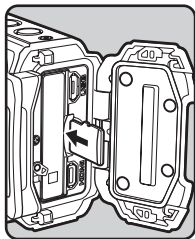
- 1 Slide the lock lever in the direction of ① and release the lock. Slide the release latch in the direction of ② and open the battery/card cover.



- 2 Confirm the positive and negative terminals of the battery. While pressing the battery lock lever outward using the side of the battery, insert the battery correctly.



- 3 While the camera is turned off, slowly insert the memory card into the microSD card slot in the direction of the arrow.**



- 4 Close the battery/card cover.**

Close the battery/card cover until it clicks.

Next, move the lock lever to the left side and lock the release latch.

⚠ Caution

- Do not apply excessive force when opening and closing the battery/card cover because the waterproof seal may peel off. If the seal is not in the correct position, the camera will not be waterproof.
- If the battery/card cover is not locked securely, water, sand, or dirt may get into the camera.
- This camera uses a specifically designed D-LI68 rechargeable lithium-ion battery. Use of any other type of battery may damage the camera and cause malfunctions.
- Insert the battery correctly. If the battery is not inserted correctly, it may cause malfunctions.
- When storing the battery for more than 6 months, charge the battery for 30 minutes using the power adapter and store the battery separately. Be sure to recharge the battery every 6 to 12 months. Storing the battery below room temperature is ideal. Avoid storing it in high temperatures.

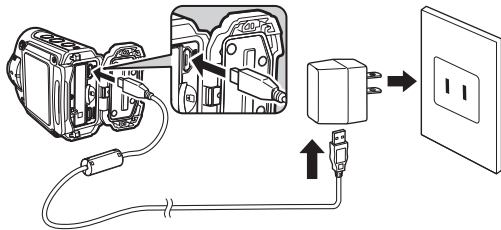
- The date and time may be reset to the default settings if the camera is left without the battery for a long time.
- Be careful as the camera or the battery may become hot when the camera is used continuously for a long period of time.
- Allow the camera to dry completely before changing the battery or memory card. Avoid changing the battery or memory card where the camera is likely to get wet or dirty, and make sure that your hands are dry.
- Be sure to use this camera to format (initialize) a memory card that is unused or has been previously used on other cameras or digital devices. Refer to "Formatting" (p.43) for instructions on formatting cards.
- Make sure that the camera is turned off before inserting or removing the battery or memory card.

📌 Memo

- The camera does not come with a memory card. You must purchase one separately. (Use a microSD card of Speed Class 10 or higher. For 4K movies set to S.Fine, use a microSDXC card of UHS-I Speed Class 3.)
- To remove the memory card, first open the battery/card cover. Press the card in lightly with your finger until the card pops out, then pull it straight out.

Charging the battery

Connect the supplied power adapter (D-PA164) to the camera and charge the battery before using the camera for the first time or if you have not used it for a long time.



- 1 While the camera is turned off, connect the USB cable to the camera's USB terminal and the power adapter.**

- 2 Plug the power adapter into the power outlet to start charging.**

The power lamp blinks while charging.

When charging is finished, the power lamp turns off.

⚠ Caution

- Do not use the supplied power adapter (D-PA164) for any other purpose than that of connecting to this camera and charging the designated battery. Doing otherwise may cause a connected device to be damaged or overheated.


- The battery has reached the end of its service life when it starts to run down soon after being charged. Replace it with a new battery.
- If the power lamp does not light even if the camera is connected to a power outlet, the battery is faulty. Replace it with a new battery.

📌 Memo

- Charging time is a maximum of about 130 minutes (this may vary depending on ambient temperature and charging conditions). Charge the battery in a range from 0°C to 40°C (32°F to 104°F).
- Battery performance may deteriorate as temperature decreases. When using the camera in cold regions, we recommend carrying a spare battery in your pocket to keep it warm. Battery performance will recover when the temperature returns to normal.
- Be sure to take a spare battery with you when traveling abroad or to a cold region, or if you intend to take a lot of pictures.

Turning the camera on and off

To turn the camera on

Press and hold the  button to turn the camera on. The first time you turn the camera on, the [Language/言語] screen appears. (p.15)

To turn the camera off

Press and hold the  button to turn the camera off.

Memo

- When [Auto Power Off] is on (p.42), the camera is turned off automatically if no button operations are done for three minutes.



Initial settings

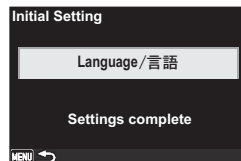
Do the initial settings to use your camera for the first time after purchasing it.




Language settings

- 1 Turn the camera on.**
The [Language/言語] screen appears.



- 2 Press the  button or the  button. Select the desired language and press the  button.**
[Initial Setting] screen appears after you have set the language.



- 3 Press the  button or the  button. Select [Settings complete] and press the  button.**
The [Date Adjustment] screen appears.
Next, set the date and time.

Date adjustment

- 1 Press the button or the button. Select the date display style and press the button.

Choose from [mm/dd/yy], [dd/mm/yy] or [yy/mm/dd].

- 2 Press the button or the button. Select [24 h] (24-hour clock) or [12h] (12-hour clock) and press the button.

- 3 Press the button or the button. Set "month" and press the button.

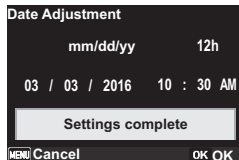
The set up procedure differs depending on the display style set in step 1.

- 4 Set the date, year and time in the same way as in step 3.

The frame moves to [Settings complete].

- 5 Press the button.

The initial settings are complete and the shooting screen appears.



Caution

- You can shoot pictures while doing the initial settings by pressing the button, but the settings you have made so far are canceled. In this case, the initial setting screen reappears the next time you turn the camera on.

Memo

- To change the language, date, or time you have setup, refer to "Changing the display language" (p.39) and "Changing the date and time" (p.38).

Shooting mode

The camera has the following shooting modes. From the settings menu, select the movie or still image shooting mode for the scene that you are shooting.

See "Shooting mode settings" (p.29) for how to set up the shooting mode.


Shooting mode		Explanation
Still Image	Still Image	You can shoot still images. (p.18)
	Underwater Still Image	You can shoot still images underwater while using the supplied underwater lens protector (O-LP1632). (p.18)
	Burst Shooting	You can shoot still images continuously while the shutter button is pressed. (p.18)

Shooting mode		Explanation
Movie	Movie	You can shoot movies. Sound can also be recorded simultaneously. (p.19)
	Underwater Movie	You can shoot underwater movies while using the supplied underwater lens protector (O-LP1632). Sound can also be recorded simultaneously. (p.19)
	Time-Lapse Movie	You can shoot movies at 30, 60, or 150 times the speed. (p.19)
	Extended Movie Recording	You can shoot movies continuously, while movie files are created for each set recording time, until stopped manually. (p.20)
	High Speed Movie	You can shoot movies of high frame rate (120 fps) and play them back in slow motion. Sound can also be recorded simultaneously. (p.20)

Shooting movies and still images

Select the shooting mode according to the subject or scene and shoot movies or still images.



Memo

- Pressing the  button in any shooting mode brings you back to the shooting screen if the camera enters [Power Saving] mode (p.42) and the LCD screen is turned off.

Shooting still images and underwater still images

Attach the supplied underwater lens protector (O-LP1632) when shooting underwater still images. (p.11)

- 1 Set the [Rec. Mode] to either [Still Image] or [Underwater Still Image]. (p.29)**

The shooting screen appears and either  or  is displayed.




When shooting still images

- 2 Press the  button to shoot still images.**


Shooting still images with burst shooting

Continuous still images are shot while the shutter button is pressed (ten images are shot consecutively).

- 1 Set the [Rec. Mode] to [Burst Shooting]. (p.29)**

The shooting screen appears and  is displayed.





- 2 Press the  button to start burst shooting.**
Burst shooting stops after ten consecutive images are shot.

Shooting movies and underwater movies

Attach the supplied underwater lens protector (O-LP1632) when shooting underwater movies. (p.11)

1 Set the [Rec. Mode] to either [Movie] or [Underwater Movie]. (p.29)

The shooting screen appears and either  or  is displayed.

2 Press the button to start recording.



When shooting movies

3 Press the button again to finish recording.




Memo

- You can record a movie continuously up to 4 GB or 25 minutes. When the memory card is full, recording stops.

Shooting time-lapse movies

You can shoot movies at 30, 60, or 150 times the speed.

1 Set the [Rec. Mode] to [Time-Lapse Movie] and select a speed. (p.29)

The shooting screen appears and , , or  is displayed.

2 Press the button to start recording.




3 Press the button again to finish recording.

Caution

- The [Auto Power Off] function (p.42) is disabled when shooting time-lapse movies.




Memo

- The maximum length of time for one recording is 12 hours for 30 times the speed, 24 hours for 60 times the speed, and 60 hours for 150 times the speed. The maximum playback time for the movie file is 24 minutes.
- The [Recorded Pixels (Movie)] (p.35) is set to .
- Sound cannot be recorded.

Shooting Extended Movie Recording

You can shoot movies continuously, while movie files are created for each set recording time (5, 10, or 25 minutes), until stopped manually. When the memory card runs out of space, movies are deleted in order from old files first.

1 Set the [Rec. Mode] to [Extended Movie Recording] and select a recording time. (p.29)

The shooting screen appears and , , or  is displayed.

2 Press the button to start recording.



3 Press the button again to manually finish recording.

Caution

- Movies shot in [Extended Movie Recording] cannot be saved to the internal memory.
- The remaining recordable time at the beginning of the recording should be twice as long as the set recording time.

Memo


- Movies shot in [Extended Movie Recording] are saved to "LOOP_REC" folder.

- The available recording time differs depending on the [Recorded Pixels (Movie)] (p.35). Refer to "Limitations of shooting mode functions" (p.56) for details.
- The shooting of Extended Movie Recording stops automatically when the battery becomes depleted.

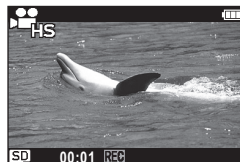
Shooting high speed movies

You can shoot movies of high frame rate (120 fps) and play them back in slow motion (1/4 the speed). Sound can also be recorded simultaneously.

1 Set the [Rec. Mode] to [High Speed Movie]. (p.29)


The shooting screen appears and  is displayed.

2 Press the button to start recording.



3 Press the button again to finish recording.

Memo

- The maximum length of time for one recording is 4 minutes.
- The [Recorded Pixels (Movie)] (p.35) is set to .


Playing back movies and still images

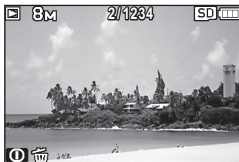
Playing back still images

1 Press the button on the shooting screen.

This changes the screen to playback mode and the last still image or movie shot is displayed.

2 Press the button or the button. Select a still image saved on either the memory card or the internal memory to display it.

Pressing the  button brings you back to the shooting screen.



⚠ Caution

- The [Power Saving] function (p.42) is not available in playback mode.

📝 Memo

- [No image] is displayed on the screen if there are no movies or still images saved on the internal memory or the memory card.


Playing back movies

You can play back movies. Sound is played back simultaneously during movie playback.

1 Press the button on the shooting screen.

This changes the screen to playback mode and the last still image or movie shot is displayed.

2 Press the button or the button. Select a movie saved on either the memory card or the internal memory to display it.

Pressing the  button brings you back to the shooting screen.

3 Press the button.

This starts the movie playback.





The operations guide is displayed on the screen during movie playback.

Operations guide



During movie playback






Operations that can be performed during playback

Pressing the  button:	Pauses playback
Press and hold the  button:	Fast-reverses
Press and hold the  button:	Fast-forwards playback
Pressing the  button:	Stops playback

Operations that can be performed while paused






While paused

Pressing the  button:	Restarts playback
Pressing the  button:	Reverses frames
Pressing the  button:	Advances frames
Press and hold the  button:	Returns to the first frame
Press and hold the  button:	Advances to the last frame

⚠ Caution




- The [Power Saving] function (p.42) is not available in playback mode.

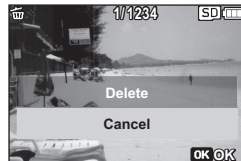
📌 Memo

- When reversing frames, the first frame of every 30 frames appears with each press of the  button. For example, when you reverse frames between the second frame and the 31st frame, the first frame appears, and when you reverse frames between the 32nd and 61st, the 31st frame appears.
- Sound is not played back during fast-reverse or fast-forward playback.
- The movie is played back at normal speed when you release the  button or  button during fast-reverse or fast-forward playback.

- [No image] is displayed on the screen if there are no movies or still images saved on the internal memory or the memory card.



Deleting movies and still images

- 1 Change to playback mode. (p.21)
- 2 Press the  button or the  button. This displays the movie or still image to be deleted.
- 3 Press the  button.
The delete screen appears.



- 4 Press the  button or the  button. Select [Delete] and press the  button.

After [Deleting] appears blinking on the screen, the movie or still image is deleted.

To cancel the deletion of a movie or still image, select [Cancel] and press the  button. You can also cancel deletion by pressing the  button.

⚠ Caution

- Deleted movies and still images cannot be restored.

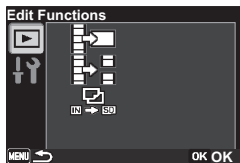
Copying movies and still images

You can copy all the movies and still images saved on the internal memory to a memory card. Before copying movies or still images, confirm that there is enough space on the memory card.

1 Change to playback mode. (p.21)

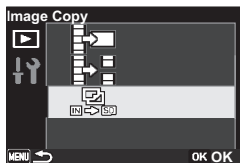
2 Press the button. The [Edit Functions] screen appears.

3 Press the button or the button. Select and press the button.



4 Press the button or the button. Select and press the button.

All movies and still images are copied to the memory card.



⚠ Caution

- The [Image Copy] function cannot be selected if there is no memory card inserted in the camera.

📝 Memo

- [No image] is displayed on the screen if there are no movies or still images saved on the internal memory.

Editing movies that were shot

You can cut a frame from a movie that was shot and save it as a still image. You can also divide movies.

📝 Memo

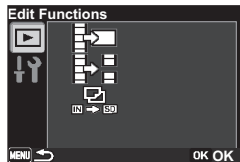
- Edited movies which were shot in [Extended Movie Recording] are saved to "LOOP_REC" folder.

Saving a movie frame as a still image

1 Change to playback mode. (p.21)

2 Press the button or the button. This displays the movie to be edited.

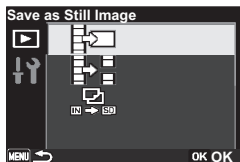
3 Press the button. The [Edit Functions] screen appears.



4 Press the button or the button. Select and press the button.

- 5** Press the button or the button. Select and press the button.

Playback of the movie begins.



- 6** Press the button at the position of the still image you want to save. Playback is temporarily stopped.

The screen to select the frame you want to save as a still image appears.

- 7** Press the button or the button and select the frame you want to save as a still image.



Pressing the button:	Reverses frames
Pressing the button:	Advances frames
Press and hold the button:	Returns to the first frame
Press and hold the button:	Advances to the last frame

- 8** Press the button.

The selected frame is saved as a still image.

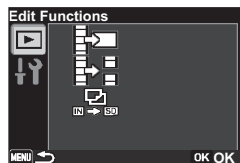
Memo

- When reversing frames, the first frame of every 30 frames appears with each press of the button. For example, when you reverse frames between the second frame and the 31st frame, the first frame appears, and when you reverse frames between the 32nd and 61st, the 31st frame appears.

Dividing movies

- 1** Change to playback mode. (p.21)
- 2** Press the button or the button. This displays the movie to be edited.

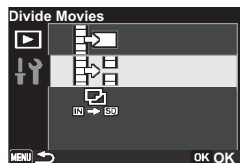
- 3** Press the button.
The [Edit Functions] screen appears.



- 4** Press the button or the button. Select and press the button.

- 5** Press the button or the button. Select and press the button.

Playback of the movie begins.







6 Press the button at the divide position. Playback is temporarily stopped.

The screen for choosing a dividing position appears.

7 Press the button or the button and select the frame at which you want to divide.




Pressing the  button:	Reverses frames
Pressing the  button:	Advances frames
Press and hold the  button:	Returns to the first frame
Press and hold the  button:	Advances to the last frame

8 Press the button.

The resulting movies that were divided at specified positions are each saved with a new file name. The original movie is deleted.

Memo

- Movies that are two seconds or longer can be divided.
- The divided positions can be selected in 30-frame increments (31, 61, 91...).
- When reversing frames, the first frame of every 30 frames appears with each press of the  button. For example, when you reverse frames between the second frame and the 31st frame, the first frame appears, and when you reverse frames between the 32nd and 61st, the 31st frame appears.

Settings menu list

This list shows the items that can be set on the settings menu screen and their details.



List of shooting modes

You can set the shooting mode for movies and still images.

Item	Details	Page
Still Image	You can shoot still images.	p.18
Underwater Still Image	You can shoot still images underwater to capture the blueness of the sea.	p.18
Burst Shooting	You can shoot still images continuously while the shutter button is pressed.	p.18
Movie	You can shoot movies.	p.19
Underwater Movie	You can shoot movies underwater to capture the blueness of the sea.	p.19
Time-Lapse Movie	You can shoot movies at 30, 60, or 150 times the speed.	p.19
Extended Movie Recording	You can shoot movies continuously, while movie files are created for each set recording time, until stopped manually.	p.20
High Speed Movie	You can shoot movies of high frame rate (120 fps) and play them back in slow motion.	p.20

List of shooting settings

You can set the functions for shooting movies and still images. Some functions may not be available or may not function fully depending on the selected [Rec. Mode]. For details, refer to "Limitations of shooting mode functions" (p.56).

Item	Details	Page
Image Effect Modes	You can change image enhancements, such as tone, and shoot.	p.30
EV Compensation	You can adjust the brightness of the whole image being shot.	p.31
White Balance	You can match the lighting conditions during shooting and adjust the color.	p.31
AE Metering	You can set the area of the screen where the brightness is metered to determine the exposure.	p.32
Sensitivity	You can set the ISO sensitivity.	p.32
Angle of View	You can set the angle of view for shooting.	p.33
LCD Orientation	You can set the orientation of the camera depending on its alignment when it is mounted.	p.34
Recorded Pixels	You can set the recorded pixels for still images.	p.34
Recorded Pixels (Movie)	You can set the recorded pixels (combination of number of pixels and frame rate) for movies.	p.35
Quality Level (Movie)	You can set the quality level of the movie.	p.35
Movie SR	You can set whether or not to use shake reduction for movies.	p.36
Wind Suppression	You can set whether or not to reduce the sound of wind while shooting movies.	p.36

List of general settings





You can set the general settings for the camera.

Item	Details	Page
Sound	You can set the volume of operation sounds and playback sounds, as well as the sounds for the shutter and operations.	p.37
Date Adjustment	You can set the date and time.	p.38
Language/言語	You can set the language displayed in messages and on menus.	p.39
USB Connection	You can set the way to connect the camera to a computer using the USB cable.	p.39
Wi-Fi	You can set whether to enable or disable the Wi-Fi function. You can also display or reset communication information in Wi-Fi mode.	p.40
Brightness Level	You can set the brightness of the LCD screen.	p.41
Power Saving	You can set the time it takes until the camera enters Power Saving mode.	p.42
Auto Power Off	You can set whether or not to automatically turn off the camera when there are no operations for a fixed time.	p.42
Reset	You can return the camera's settings to the factory settings.	p.43
Delete All	You can delete all saved movies and still images.	p.43
Format	You can format the internal memory or memory card.	p.43
Vibration	You can set whether or not to use the vibration function.	p.44
Certifications	You can display the certifications for the wireless LAN.	p.44

Shooting mode settings

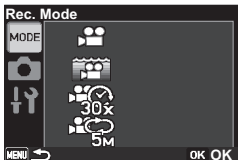
You can set the shooting mode for movies and still images.




- 1** Press the  button on the shooting screen.
The settings menu is displayed.

- 2** Press the  button or the  button. Select  [Rec. Mode] and press the  button.

The [Rec. Mode] screen appears.

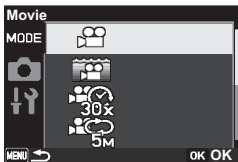
See "List of shooting modes" (p.26) for the shooting modes that can be selected.










- 3** Press the  button or the  button. Select the shooting mode and press the  button.

This brings you back to the shooting screen.


If you selected [Time-Lapse Movie] or [Extended Movie Recording], proceed to step 4.



- 4** For [Time-Lapse Movie], select the speed. For [Extended Movie Recording], select the recording time. Press the  button.

Shooting mode	Icon	Details
Time-Lapse Movie		You can shoot movies at 30 times the speed.
		You can shoot movies at 60 times the speed.
		You can shoot movies at 150 times the speed.
Extended Movie Recording		Set the recording time to 5 minutes.
		Set the recording time to 10 minutes.
		Set the recording time to 25 minutes.

Memo

- The current settings for the [Rec. Mode] are saved even when the camera is turned off.
- By pressing the  button while doing settings, you return to the previous screen with the existing settings.
- The available recording time for [Extended Movie Recording] differs depending on the [Recorded Pixels (Movie)] (p.35). Refer to "Limitations of shooting mode functions" (p.56) for details.





Shooting settings

You can set the functions for shooting movies and still images.

Displaying the [Shooting Settings] screen

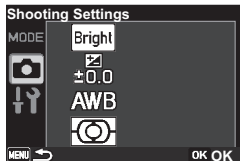
- 1 Press the  button on the shooting screen.

The settings menu is displayed.

- 2 Press the  button or the  button. Select  [Shooting Settings] and press the  button.

The [Shooting Settings] screen appears.

See "List of shooting settings" (p.27) for the setting items that can be selected.




- 3 Set each item.

Refer to the setting method for each shooting setting.

- 4 Press the  button.

This brings you back to the shooting screen.

Memo




- Some functions may not be available or may not function fully depending on the selected [Rec. Mode]. For details, refer to "Limitations of shooting mode functions" (p.56).
- By pressing the  button while doing settings, you return to the previous screen with the existing settings.




- The current settings for the [Shooting Settings] are saved even when the camera is turned off. However, the settings may not be saved, depending on the [Rec. Mode] (p.26) selected.

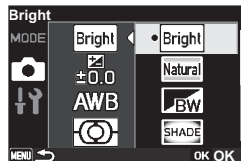
Setting image enhancements








You can change image enhancements, such as tone, and shoot.

- 1 Display the [Shooting Settings] screen. (p.30)

- 2 Press the  button or the  button. Select [Image Effect Modes] and press the  button.

- 3 Press the  button or the  button. Select the image effect to set and press the  button.



	Bright
	Natural
	Monochrome
	Shading
	Bleach Bypass
	Bold Monochrome
	High Contrast

Memo

- You can only select [Bright] (Bright), [Natural] (Natural), or [Monochrome] (Monochrome) when the [Rec. Mode] (p.26) is set to [Still Image], [Underwater Still Image], or [Burst Shooting].

Compensating for exposure

You can adjust the brightness of the whole image being shot. Use this function to deliberately over expose (brighten) or under expose (darken) when shooting.

1 Display the [Shooting Settings] screen. (p.30)

2 Press the button or the button. Select [EV Compensation] and press the button.

3 Press the button or the button. Select the compensation amount and press the button.

Set on the + side when brightening, and on the - side when darkening.

The EV Compensation values can be selected in 1/2 EV increments, ranging from -2.0 EV to +2.0 EV.



Memo

- You may not be able to do EV Compensation, depending on the [Rec. Mode] (p.26).

Adjusting white balance




You can adjust the color temperature under various light sources to accurately reproduce tones.

1 Display the [Shooting Settings] screen. (p.30)


2 Press the button or the button. Select [White Balance] and press the button.

3 Press the button or the button. Select the white balance to set.



	Auto	The camera adjusts the white balance automatically.
	Auto outdoor	Set when shooting outdoors in the daytime.
	Manual	Set when manually adjusting the white balance.

The selected tone appears on the LCD screen each time the settings are changed.

If you selected  (Manual), proceed to step 4. If you selected anything other than manual, proceed to step 6.

- 4** Face the lens toward the subject for which to use white balance adjustment (such as a blank sheet of white paper) and place it inside the frame in the middle of the screen.



- 5** Press the button.
The white balance is adjusted automatically.

- 6** Press the button.

Memo

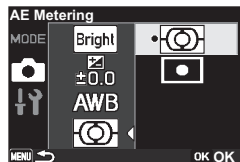
- **AWB** (Auto) is fixed and cannot be changed when the [Rec. Mode] (p.26) is set to [Underwater Still Image] or [Underwater Movie].

Setting AE metering

You can set the area of the screen where the brightness is metered to determine the exposure.

- 1** Display the [Shooting Settings] screen. (p.30)
- 2** Press the button or the button. Select [AE Metering] and press the button.

- 3** Press the button or the button. Select the type of AE metering and press the button.



	Multi-segment metering	The camera divides the screen, meters the brightness and determines the exposure.
	Spot AE metering	The camera determines the exposure by metering the brightness only at the center of the screen.

Memo

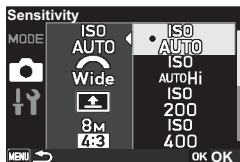
- Exposure is fixed when recording starts if Spot AE metering is selected in [Movie], [Underwater Movie], [Extended Movie Recording], or [High Speed Movie] of the [Rec. Mode] (p.26).

Setting the sensitivity

You can set the ISO sensitivity according to the brightness of the shooting location.

- 1** Display the [Shooting Settings] screen. (p.30)
- 2** Press the button or the button. Select [Sensitivity] and press the button.

- 3** Press the button or the button. Select the sensitivity and press the button.



	Auto	Sets the most appropriate sensitivity automatically. (ISO sensitivity 200 to 1600)
	Auto high sensitivity	Automatically sets the sensitivity so that you can shoot brighter image in low light conditions. (ISO sensitivity 200 to 6400)
		Sets a fixed value from between ISO sensitivity 200 to 6400. There is less noise in the image the lower the sensitivity (smaller numbers) is, but the shutter speed becomes slower in dark locations. The shutter speed can be fast in dark locations the higher the sensitivity (larger numbers) is, but the noise in the image increases.

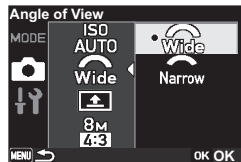
Memo

- The available ISO sensitivity differs depending on the selected shooting mode (p.26). Refer to "Limitations of shooting mode functions" (p.56) for details.

Setting the angle of view

You can set the angle of view for shooting.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [Angle of View] and press the button.
- 3 Press the button or the button. Select the angle of view and press the button.



	Wide (wide angle)	The angle of view is wide and the range that can be shot is broader.
	Narrow (narrow angle)	The angle of view is narrow and the range that can be shot is restricted.

Memo

- (Wide) is fixed and cannot be changed when the [Recorded Pixels (Movie)] (p.35) is set to or when the [Rec. Mode] (p.26) is set to [Still Image], [Burst Shooting], or [High Speed Movie].
- (Narrow) is fixed and cannot be changed when [Movie SR] (p.36) is on or when the [Rec. Mode] (p.26) is set to [Underwater Still Image] or [Underwater Movie].

Setting the LCD orientation

You can set the orientation of the camera depending on its alignment when it is mounted.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [LCD Orientation] and press the button.
- 3 Press the button or the button. Select the LCD orientation and press the button.



	Select when shooting with the camera in the normal orientation.
	Select when shooting with the camera rotated 180°.
	Select when shooting with the camera rotated to the right 90°.
	Select when shooting with the camera rotated to the left 90°.

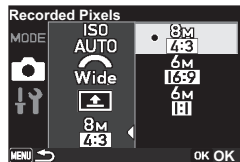
Memo

- The available LCD orientation differs depending on the settings in the [Rec. Mode] (p.26), [Recorded Pixels (Movie)] (p.35), or [Movie SR] (p.36). Refer to "Limitations of shooting mode functions" (p.56) for details.

Setting the recorded pixels for still images

You can set the recorded pixels for still images.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [Recorded Pixels] and press the button.
- 3 Press the button or the button. Select the recorded pixels and press the button.



Recorded pixels	Number of pixels
	3264 x 2448
	3264 x 1840
	2448 x 2448
	2592 x 1944
	2592 x 1464

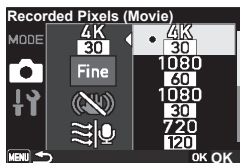
Memo

- You can only select or when the [Rec. Mode] (p.26) is set to [Underwater Still Image] or [Burst Shooting].

Setting the recorded pixels for movies

You can set the recorded pixels (combination of number of pixels and frame rate) for movies.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [Recorded Pixels (Movie)] and press the button.
- 3 Press the button or the button. Select the recorded pixels and press the button.



Recorded pixels	Number of pixels	Frame rate
	3840 x 2160	30 fps
	1920 x 1080	60 fps
	1920 x 1080	30 fps
	1280 x 720	120 fps
	1280 x 720	60 fps
	1280 x 720	30 fps

Memo

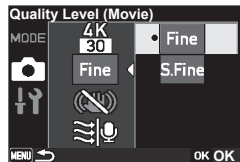
- is fixed and cannot be changed when the [Rec. Mode] (p.26) is set to [Time-Lapse Movie]. is fixed and cannot be changed in [High Speed Movie].

- For movies set to , use a microSDXC card of UHS-I Speed Class 3.

Setting the quality level of the movie

You can set the quality level of the movie.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [Quality Level (Movie)] and press the button.
- 3 Press the button or the button. Select the quality level and press the button.



	Fine	You can shoot longer movies with a standard quality level.
	Super fine	You can shoot higher-quality movies although the recordable time is shorter than Fine movies.

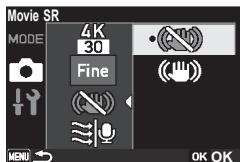
Memo

- You can select the quality level only when the [Rec. Mode] (p.26) is set to [Movie]. The quality level is fixed to when the shooting mode is anything other than [Movie].

Setting shake reduction for movies

You can set the shake reduction (Movie SR) when shooting movies.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [Movie SR] and press the button.
- 3 Press the button or the button. Select on or off and press the button.



	Movie SR: Off	Shake reduction is not done.
	Movie SR: On	Shake reduction is done automatically.

Memo

- (Off) is fixed and cannot be changed when [Rec. Mode] (p.26) is set to [Underwater Movie] or [High Speed Movie], or [Angle of View] (p.33) is set to (Wide) or when the [Recorded Pixels (Movie)] is set to .

Suppressing wind noise while shooting movies

You can suppress wind noise while shooting movies.

- 1 Display the [Shooting Settings] screen. (p.30)
- 2 Press the button or the button. Select [Wind Suppression] and press the button.
- 3 Press the button or the button. Select on or off and press the button.




	Wind Suppression: On	Wind noise is suppressed.
	Wind Suppression: Off	Wind noise is not suppressed.

General settings

You can set the general settings for the camera.

Displaying the [Setting] screen

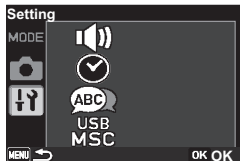
- 1 Press the  button on the shooting screen.

The settings menu is displayed.

- 2 Press the  button or the  button. Select  [Setting] and press the  button.

The [Setting] screen appears.

See "List of general settings" (p.28) for the setting items that can be selected.




- 3 Set each item.

Refer to the setting method for each general setting.

- 4 Press the  button.

This brings you back to the shooting screen.

Memo

- By pressing the  button while doing settings, you return to the previous screen with the existing settings.
- The current settings for the [Setting] are saved even when the camera is turned off. However, the [Action Mode] setting of




the [Wi-Fi] (p.40) will be disabled when the camera is turned back on, even if it had been set to enabled.




Setting sound

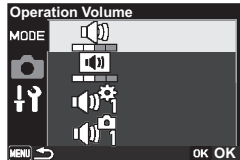
You can set the volume of operation sounds and playback sounds, as well as the sounds for the shutter and operations.

Adjusting the playback volume and operation volume



- 1 Display the [Setting] screen. (p.37)

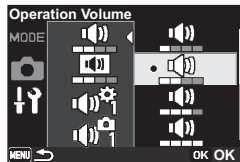
- 2 Press the  button or the  button. Select [Sound] and press the  button.

- 3 Press the  button or the  button. Select [Operation Volume] or [Playback Volume] and press the  button.



- 4 Press the  button or the  button. Select the volume and press the  button.

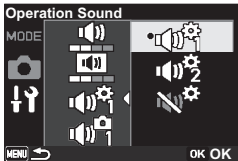
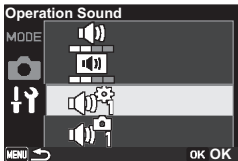
Operation sounds and playback sounds are silent when the volume is set to  or .



For operation volume

Setting the type of operation sound and shutter sound

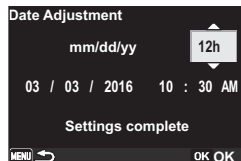
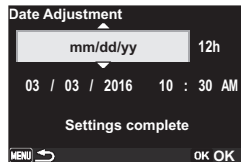
- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Sound] and press the button.
- 3 Press the button or the button. Select [Operation Sound] or [Shutter Sound] and press the button.
- 4 Press the button or the button. Select the type of sound and press the button. Select from [1], [2], or [Off].



Changing the date and time

You can change the date and time set in the initial settings (p.15). Also, you can set the display format of the date to be displayed on the screen.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Date Adjustment] and press the button.
- 3 Press the button or the button. Select the date display style and press the button. Choose from [mm/dd/yy], [dd/mm/yy] or [yy/mm/dd].
- 4 Press the button or the button. Select [24h] (24-hour clock) or [12h] (12-hour clock) and press the button.

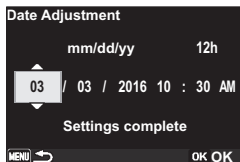


The frame moves to the following items according to the display style set in step 3.

For [yy/mm/dd]: Western calendar year
 For [mm/dd/yy]: Month
 For [dd/mm/yy]: Date

The following operational steps are for when [mm/dd/yy] is set. The instructions are the same even when other display styles are set.

- 5** Press the button or the button. Set the month and press the button.



- 6** Set the date, year and time in the same way as in step 5.
The frame moves to [Settings complete].

- 7** Press the button.

Changing the display language

You can change the language displayed in messages and settings menus set in the initial settings (p.15).

- 1** Display the [Setting] screen. (p.37)
- 2** Press the button or the button. Select [Language/言語] and press the button.
- 3** Press the button or the button. Select the desired language and press the button.

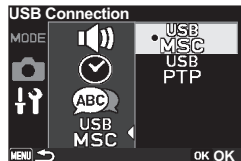
Setting the USB connection mode

You can set the way to connect (MSC or PTP) the camera to a computer using the USB cable.

⚠ Caution

- Be sure to do the settings prior to connecting to a computer. Settings cannot be done while the camera is connected to a computer via USB cable.

- 1** Display the [Setting] screen. (p.37)
- 2** Press the button or the button. Select [USB Connection] and press the button.
- 3** Press the button or the button. Select the connection method and press the button.



	MSC	Connects the camera to the computer as a storage device. Image files from the computer can be read and copied.
	PTP	Images can be transferred between connected devices.

Setting up Wi-Fi

You can set the Wi-Fi function for action mode (enabled and disabled). You can also display or reset communication information (SSID and password).

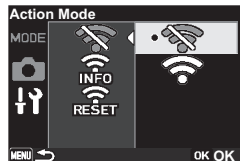
Enabling and disabling the Wi-Fi function

This camera has a built-in Wi-Fi function. By directly connecting to a communication device such as a smartphone or tablet via wireless LAN, the camera can be operated from the communication device and images can be shared with others. The Wi-Fi function is disabled at the time of turning the camera on. Enable the function using the following method.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Wi-Fi] and press the button.
- 3 Press the button or the button. Select [Action Mode] and press the button.



- 4 Press the button or the button. Select enable or disable for the Wi-Fi function and press the button.



	Disables the Wi-Fi function.
	Enables the Wi-Fi function.

The waiting for connection screen appears if the Wi-Fi function is enabled.

See "Connecting the camera and a communication device" (p.45) for how to connect to a communication device.

The shooting mode automatically changes to [Movie] when a Wi-Fi connection is established.

⚠ Caution

- Do not attempt to use the Wi-Fi function in a location where the use of wireless LAN devices is restricted or prohibited, such as on airplanes.
- When using the Wi-Fi function, please observe local laws and regulations governing radio communication.
- The [Auto Power Off] function (p.42) is not available while a Wi-Fi connection is established or images are being transferred.
- The Wi-Fi function is disabled during the USB connection.

📌 Memo

- You can also enable and disable the Wi-Fi function by pressing and holding in shooting mode.
- The Wi-Fi function will be disabled when the camera is turned back on, even if it had been set to enabled.

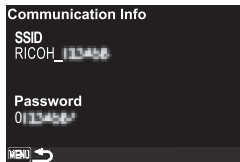
Displaying communication information

You can display communication information (SSID and password) for the Wi-Fi function.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Wi-Fi] and press the button.
- 3 Press the button or the button. Select [Communication Info] and press the button.



The communication information appears.

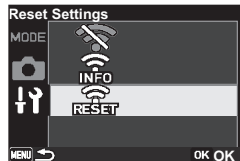


Resetting communication information

You can reset communication information (SSID and password) for the Wi-Fi function.

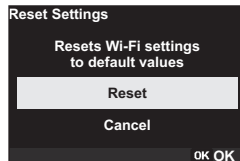
- 1 Display the [Setting] screen. (p.37)

- 2 Press the button or the button. Select [Wi-Fi] and press the button.
- 3 Press the button or the button. Select [Reset Settings] and press the button.



- 4 Press the button or the button. Select [Reset] and press the button.




The communication information is reset.



Adjusting the brightness of the LCD screen

You can set the brightness of the LCD screen in five levels.







- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Brightness Level] and press the button.

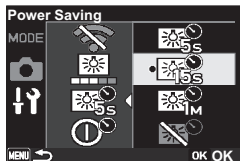
- 3 Press the  button or the  button. Select the brightness level of the screen and press the  button.







Setting up Power Saving mode

You can reduce battery consumption by setting the brightness of the LCD screen to automatically darken when there are no operations for a fixed time.



- 1 Display the [Setting] screen. (p.37)
- 2 Press the  button or the  button. Select [Power Saving] and press the  button.
- 3 Press the  button or the  button. Select the amount of time until the camera changes to Power Saving mode and press the  button.



	Camera enters Power Saving mode after 5 seconds of inactivity.
	Camera enters Power Saving mode after 15 seconds of inactivity.







	Camera enters Power Saving mode after 1 minute of inactivity.
	Turns off Power Saving mode.

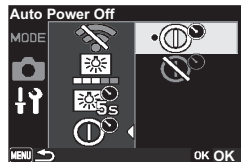
Memo



- Pressing the  button will return the LCD screen to its original brightness if it has turned dark.
- When  (5 seconds) is set, the camera enters Power Saving mode after 15 seconds of inactivity, only directly after turning on the camera.

Setting the Auto Power Off function

You can set the camera to automatically turn off when there are no operations for a fixed time (3 minutes).

- 1 Display the [Setting] screen. (p.37)
- 2 Press the  button or the  button. Select [Auto Power Off] and press the  button.
- 3 Press the  button or the  button. Select on or off and press the  button.



	The camera is turned off automatically after 3 minutes of inactivity.
	Turns off the Auto Power Off function.

⚠ Caution

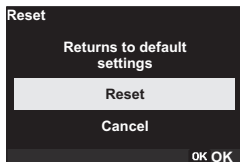
- The [Auto Power Off] function is disabled when the USB is connected, during movie playback, and during movie shooting.

Resetting the settings

You can return the camera's settings to the factory settings. However, [Date Adjustment] and [Language/言語] are not initialized.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Reset] and press the button.
- 3 Press the button or the button. Select [Reset] and press the button.

The settings are reset.



Deleting all movies and still images

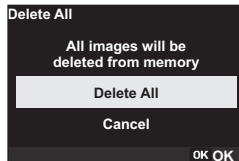
You can delete all movies and still images saved on the camera's internal memory. When a memory card is inserted in the camera, all movies and still images saved on the memory card are deleted.

- 1 Display the [Setting] screen. (p.37)

- 2 Press the button or the button. Select [Delete All] and press the button.

- 3 Press the button or the button. Select [Delete All] and press the button.

All movies and still images will be deleted after [Deleting] appears on the screen.



Formatting

You can delete all data saved on the internal memory and the memory card.

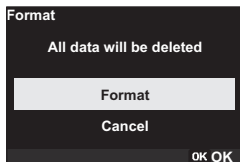
⚠ Caution

- Do not remove the memory card when formatting it. This may damage the memory card and render it unusable.
- Be aware that, when formatting, stored images and data shot from devices other than the camera are also deleted.
- Memory cards that have been formatted by devices other than the camera, such as computers, cannot be used as is. Be sure to format them with the camera.
- Inserting a memory card causes it to be formatted. Be sure to remove the memory card before doing operations when formatting only the internal memory.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Format] and press the button.

- 3 Press the button or the button. Select [Format] and press the button.

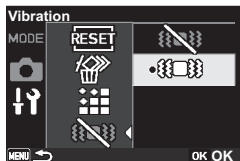
All data will be deleted after [Data being processed] appears on the screen.



Setting the vibration function

You can set whether or not to use the vibration function when turning the Wi-Fi function on and off and at the beginning and end of movie shooting.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Vibration] and press the button.
- 3 Press the button or the button. Select on or off and press the button.



	Turns off the vibration function.
	Turns on the vibration function.

Memo

- (Off) is fixed and cannot be changed when the [Rec. Mode] (p.26) is set to [Still Image], [Underwater Still Image], or [Burst Shooting].

Displaying certifications

You can display the certification marks of conformance to wireless technical standards under the Radio Law and Telecommunications Business Law.

- 1 Display the [Setting] screen. (p.37)
- 2 Press the button or the button. Select [Certifications] and press the button.
- 3 Press the button or the button. The page changes.

Connecting the camera and a communication device

The following functions can be used by directly connecting the camera to a communication device via Wi-Fi and using the dedicated application "Image Sync".

Remote shooting	You can display the live view image of the camera on the communication device and control the shooting and exposure settings by operating the communication device.
Image view	You can display the images saved on the memory card inserted into the camera on the communication device, allowing images to be imported to the communication device.


Image Sync is compatible with iOS and Android. It can be downloaded from the App Store or Google Play. For compatible OS and other details, refer to the download site.

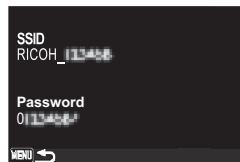
Memo

- The Image Sync screenshots used in this manual may differ from the actual display. The screen layout and elements may be also changed due to causes such as the version upgrade of the application.
- For details on how to operate the communication device, refer to the operating manual of the device.

Preparing the camera

1 Enable the Wi-Fi function. (p.40)

After the waiting for connection screen appears, the Wi-Fi function is enabled. You can also enable the Wi-Fi function by pressing and holding  in shooting mode.



Setting communication devices (for Android)

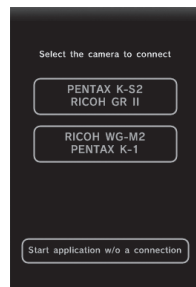
1 Enable the wireless LAN (Wi-Fi) function on the communication device.

2 Start Image Sync on the communication device.

The camera selection screen appears on the communication device.

3 Tap [RICOH WG-M2].

The [Choose a Network] screen appears on the communication device.



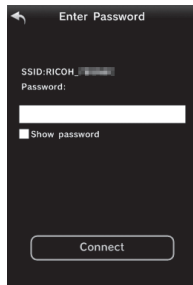
4 Tap [RICOH_XXXXX] on the [Network List].

The [Enter Password] screen appears.



5 Enter the password, and tap [Connect].

The camera is connected to the communication device and the list of images appears on the Image Sync screen.



Memo

- Refer to [Communication Info] in [Wi-Fi] of the [Setting], for the default password. (p.41)

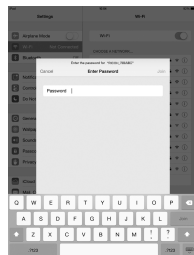
Setting communication devices (for iOS)

1 Enable the wireless LAN (Wi-Fi) function on the communication device.

2 Tap [RICOH_XXXXX] from the list of detected networks.

3 Enter the password, and tap [Join].

The camera and communication device are connected via Wi-Fi.



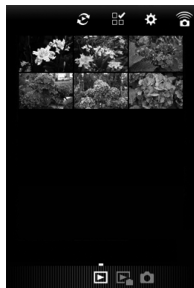
4 Start Image Sync on the communication device.

The list of images appears.

Screen display of Image Sync

Click left or right on the screen to change operation modes.

List of images on the application





List of images on the camera



Camera mode

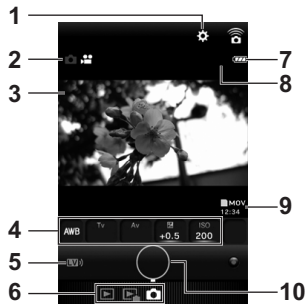


Memo

- You can change operation modes also by tapping the buttons displayed at the bottom of each screen.
- By tapping  or  on the top left of the camera mode screen, you can change between still image mode and movie mode.

Shooting from a communication device

The live view image of the camera and buttons for shooting are displayed on the shooting screen of Image Sync.



- 1 Settings (p.52)
- 2 Shooting mode
- 3 Live view
- 4 White Balance, EV Compensation, and ISO sensitivity
- 5 Live view on/off
- 6 Operation modes
- 6 Battery level
- 8 Thumbnail of the last shot image (only (still image mode))
Tapping the thumbnail displays the list of images on the camera.
- 9 File format and remaining recordable time*
- 10 Shutter button

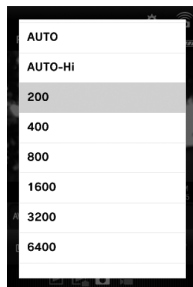
* The image storage capacity is displayed if you are in still image mode.

How to shoot images

- 1 Configure the basic settings on the camera. (p.30)
- 2 Check the live view image on the shooting screen of Image Sync.
- 3 Change the settings using Image Sync as necessary.



Tap an item and select a value from the list.



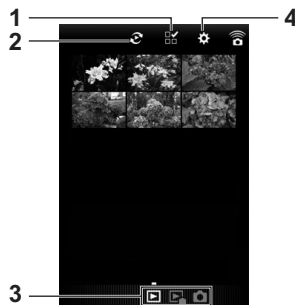
4 Tap the shutter button.

⚠ Caution

- The images that were shot are saved to the camera's memory card. You cannot shoot movies or still images if there is not enough space on the memory card.

Viewing images

You can view the images saved either in the camera or in the communication device.

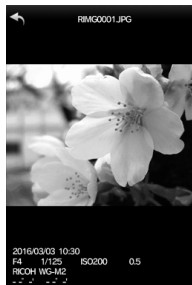


- 1 Select multiple images
- 2 Change albums (only for the list of images on the application)
- 3 Change operation modes
- 4 Settings (p.52)

⚠ Caution

- To play back movies, transfer them to the communication device.
- If you want to play back the movies on Android devices, make sure to select a movie application that corresponds to the sound source of PCM format. Otherwise, the sound cannot be played back.

Tapping the image displays the image and shooting information.



Touch operations

Flick left/right

You can change the image to the one before or the one after.

Pinch out/in

You can magnify or reduce the image.

Changing albums

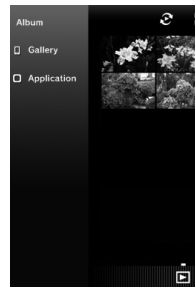
When viewing images in the list of images on the application, you can select the image storage location (album) from [Application] or [Gallery] (or [Camera Roll]).

1 Tap .



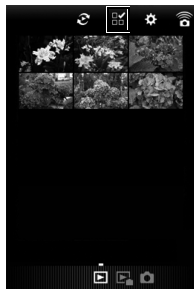
2 Select an album.

The images in the selected album are displayed.



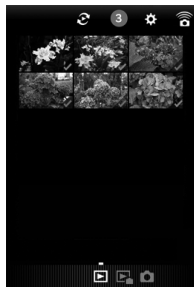
Selecting multiple images

1 Tap .



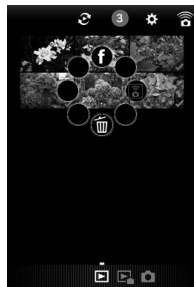
2 Tap the images you want to select.

Blue check marks appear.



3 Touch and hold any of the images.

4 Select an operation.



Memo

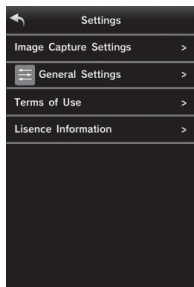
- When you touch and hold the desired image shown in the list of images or shooting information display, the same screen as Step 4 appears and you can select the action to apply.

Changing Image Sync settings

1 Tap .



The [Settings] screen appears.



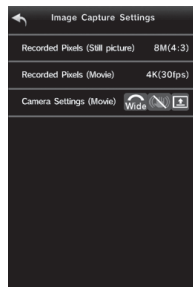
The following settings are available.

Image Capture Settings	You can change the camera settings during movie mode* and the number of recorded pixels.
General Settings	You can change the communication settings and the language settings.

*The items that can be selected change depending on the set values for the number of recorded pixels for movies.

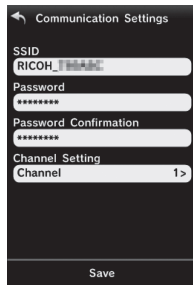
2 Tap [General Settings] to change the language display or communication settings.

3 Tap the item that you want to set.

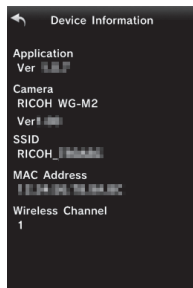


Communication Settings

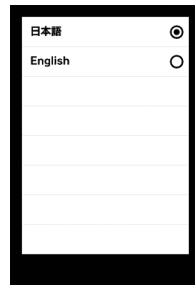
The password and wireless channel can be changed.



Device Information



Language

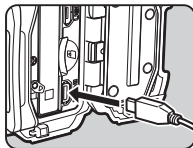


4 Change the settings and tap .

Connecting to a computer

You can connect the camera to a computer via the supplied USB cable to transfer images you have shot to the computer.

- 1 Turn the computer on.
- 2 Turn the camera off.
- 3 Connect the USB cable to the camera's USB terminal.



- 4 Connect the USB cable to the computer's USB port.
- 5 Turn the camera on.
The power lamp lights and the computer recognizes the camera as a removable disk.
If the [WG-M2] dialog appears on the computer screen, select [Open folder to view files] and click the OK button in the dialog box.
- 6 Save the images stored in the camera to the computer.
- 7 Disconnect the camera from the computer.

⚠ Caution

- Image data may be corrupted if the battery is depleted during the image transfer. We recommend using the AC adapter kit (K-AC115; sold separately) when connecting the camera to a computer.

📝 Memo

- You can set the transfer mode in [USB Connection] (p.39) of [Setting] when the camera is connected to a computer. As long as there are no particular stipulations, connect to the computer while [MSC] is selected.

Supported OS

Windows:

Windows 10, Windows 8.1 (32-bit, 64-bit), Windows 8 (32-bit, 64-bit), Windows 7 (32-bit, 64-bit), Windows Vista (32-bit, 64-bit)

Macintosh:

OS X 10.10, 10.9, 10.8, 10.7, 10.6

⚠ Caution

- Supported OS should be pre-installed in a computer and updated to the latest version.
- Working status is not guaranteed for all computers.

📝 Memo

- QuickTime is required to play back movies transferred to a computer with an OS other than Windows 10, Windows 8.1, and Windows 8. (A computer with any one of the above versions can play back movies with a pre-installed player software.)

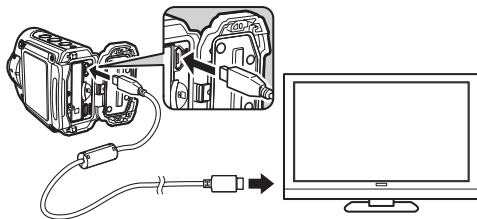
You can download it from the following site:

<http://www.apple.com/quicktime/download/>

Connecting to AV devices

You can connect the camera to devices equipped with an HDMI terminal using a commercially available HDMI cable.

- 1 Turn the AV device and the camera off.
- 2 Connect an HDMI cable to the camera's HDMI terminal.
- 3 Connect the HDMI cable's other connector to the AV device's HDMI terminal.



- 4 Turn the AV device and the camera on.
The power lamp lights and the camera's information is displayed on the AV device.

⚠ Caution

- Nothing is displayed on the camera's LCD screen while it is connected to an AV device.
- When connected to an AV device, information is displayed on the camera's LCD screen during recording when shooting a

movie with . The information is not displayed on the AV device.

- You cannot adjust the volume on the camera when connected to an AV device. Adjust the volume on the AV device.

📌 Memo

- The camera's HDMI terminal is type D (Micro). Use a commercially available HDMI cable that matches your AV device.
- Check the operating manual of the AV device and select a suitable input terminal for connecting the camera.
- We recommend using the AC adapter kit (K-AC115; sold separately) when using the camera for a long time.

Limitations of shooting mode functions

√: Setting possible #: setting possible with limitations ×: setting not possible

Shooting mode Function	Still Image	Underwater Still Image	Burst Shooting	Movie	Underwater Movie	Time-Lapse Movie	Extended Movie Recording	High Speed Movie
Image Effect Modes	#*1	#*1	#*1	√	#*1	#*1	√	#*1
EV Compensation	√	√	√	√	√	√	√	√
White Balance	√	×*2	√	√	×*2	√	√	√
AE Metering	√	√	√	√	√	√	√	√
Sensitivity	√	√	√	#*3	#*3	#*3	#*3	#*3
Angle of View	×*4	×*5	×*4	#*6*7	×*5	#*7	#*6*7	×*4
LCD Orientation	×*8	×*8	×*8	#*9	#*10	#*11	#*11*12	#*13
Recorded Pixels	√	#*14	#*14	—	—	—	—	—
Recorded Pixels (Movie)	—	—	—	√*15	#*16	×*17	#*18	×*19
Quality Level (Movie)	—	—	—	√	×*20	×*20	×*20	×*20
Movie SR	—	—	—	#*21	×*22	#*21	#*21	×*22
Wind Suppression	—	—	—	√	√	√	√	√

*1 Setting possible only for [Bright], [Natural], and [Monochrome]

*2 (Auto) is fixed

*3 Setting possible only for (Auto) and (Auto high)

*4 (Wide) is fixed

*5 (Narrow) is fixed

*6 (Wide) is fixed when [Recorded Pixels (Movie)] is

*7 (Narrow) is fixed when [Movie SR] is on

*8 is fixed

*9 Setting possible only for and when [Recorded Pixels (Movie)] is or or when [Movie SR] is on

*10 Setting possible only for and when [Recorded Pixels (Movie)] is

*11 Setting possible only for and when [Movie SR] is on

*12 Setting possible only for and when [Recorded Pixels (Movie)] is or

*13 Setting possible only for and

*14 Setting possible only for and

*15 Shooting a movie with not possible when using the internal memory.

*16 Setting not possible for or

*17 is fixed

*18 (5 minutes) is fixed when [Recorded Pixels (Movie)] is

(10 minutes) is fixed when [Recorded Pixels (Movie)] is

•Setting possible only for and when [Recorded Pixels (Movie)] is , , or






*19 is fixed

*20 is fixed

*21 (Off) is fixed when [Angle of View] is (Wide) or when [Recorded Pixels (Movie)] is or

*22 (Off) is fixed

Troubleshooting

Problem	Cause	Countermeasures
Camera does not turn on	Battery is not inserted properly	Check how the battery is inserted.
	Battery is depleted	Charge the battery.
Nothing displays on the LCD screen	Camera is connected to a computer	The LCD screen ordinarily turns off when the camera is connected to a computer.
	Camera is connected to a TV	The LCD screen turns off when the camera is connected to a TV. When shooting a movie with  , shooting screen is displayed not on the TV but on the LCD screen.
	The [Auto Power Off] function is set	Press and hold the  button to turn the camera on. The LCD screen is displayed.
	[Power Saving] (power saving function) is set	When you are using the power saving function, the LCD screen automatically turns off if there are no operations for a fixed time. Pressing the  button turns it back on. You can also disable the power saving function by setting  (Off) on [Power Saving] in the [Setting]. (p.42)
LCD screen is difficult to see	The brightness of the LCD screen is dark	Adjust the brightness on [Brightness Level] in the [Setting]. (p.41)
Shutter does not work	No space on the memory card or internal memory	Insert a memory card that has space or delete unneeded images. (p.12, p.22)
	Data is being written	Wait until writing is complete.
Camera is not recognized when connected to a computer	Transfer mode set to [PTP]	Set the [USB Connection] in the [Setting] to  (MSC). (p.39)

Memo

- In rare cases, the camera may not operate correctly due to the influence of static electricity. When this occurs, try reinserting the battery. If the camera operates normally, it is not broken.

List of messages

In shooting mode

Message	Details
Memory card error	There is an abnormality with the memory card and shooting cannot be done. You may be able to copy or display images on a computer.
The built-in memory is not formatted	The data on the internal memory is corrupt. Format the internal memory. (p.43)
Card is not formatted	The inserted memory card has either not been formatted or has been formatted on a computer or other device. (p.43)
Built-in memory full	This is displayed when there is no space on the internal memory to save a file.
Memory card full	The memory card is full of images. No more images can be saved. Insert a new memory card or delete unneeded images. (p.12, p.22)
Image folder cannot be created	Images cannot be saved because the maximum file number (9999) and the maximum folder number (999) is being used. Insert a new memory card or format the memory card or internal memory. (p.43)
Data being recorded Data being processed	This is displayed when changing the menu screen or playback mode while saving images.
Compression error	Image compression failed. Change the quality level or number of recorded pixels and shoot again.
Movie recording stopped	This is displayed when the internal temperature of the camera becomes too high when shooting movies.
The camera will turn off to prevent damage from overheating	This is displayed when the internal temperature of the camera becomes too high.
No card in the camera	This is displayed when performing Extended Movie Recording with no memory card inserted.

In playback mode

Message	Details
No image	No images that can be played back are saved on the internal memory or memory card.
Unable to play back this image	You are trying to play back images that cannot be played back on the camera. It may be possible to display the images on a computer or another company's camera.
Data being recorded Data being processed	This is displayed while new images are being saved.
Deleting	This is displayed while images are being deleted.
Compression error	Image compression failed. Change the quality level or number of recorded pixels and save again.
Built-in memory full	This is displayed when there is no space on the internal memory to save a file.
Memory card full	The memory card is full of images. No more images can be saved. Insert a new memory card or delete unneeded images. (p.12, p.22)
Image folder cannot be created	This is displayed when you are saving a file that cannot be recorded because of the DCF folder specifications.
No image to be processed	This is displayed when there is no image file.
This image cannot be processed	This is displayed when the file cannot be processed.
No card in the camera	This is displayed when copying images with no memory card inserted.
Available memory on card is insufficient to copy the images	The memory card is full of images. No more images can be copied. Insert a new memory card or delete unneeded images. (p.12, p.22)
Memory card error	There is an abnormality with the memory card and playback cannot be done. You may be able to copy or display images on a computer.
The built-in memory is not formatted	The data on the internal memory is corrupt. Format the internal memory. (p.43)
Card is not formatted	The inserted memory card has either not been formatted or has been formatted on a computer or other device. (p.43)
The camera will turn off to prevent damage from overheating	This is displayed when the internal temperature of the camera becomes too high.
Protected	This is displayed when the image you are trying to delete is protected on a computer or other device.

Main Specifications






Type	Compact digital camera	
Number of Effective Pixels	Approx. 8 megapixels	
Image Sensor	1/2.3 inch CMOS	
Number of Recorded Pixels	Still	(3264 x 2448), (3264 x 1840), (2448 x 2448), (2592 x 1944), (2592 x 1464)
	Movie	(3840 x 2160•30 fps), (1920 x 1080•60 fps), (1920 x 1080•30 fps), (1280 x 720•120 fps), (1280 x 720•60 fps), (1280 x 720•30 fps)
Sensitivity (Standard Output)	AUTO (200 to 1600), Auto high (200 to 6400), Manual (200, 400, 800, 1600, 3200, 6400)	
File Formats	Still	JPEG (Exif 2.3), DCF 2.0, PRINT Image Matching III
	Movie	MPEG-4 AVC/H.264 (MOV), PCM system, stereo sound
Quality Level	Still	Fixed at (Fine), unchangeable
	Movie	(Fine), (Super fine) *Fixed to when shooting mode is anything other than [Movie].
Storage Media	Built-in memory (approx. 68 MB), microSD/microSDHC/microSDXC memory card	

White Balance	Auto, Auto outdoor, Manual	
Lens	Focal Length	1.6 mm (equivalent to approx. 14 mm in 35 mm format)
	Focus Range	20 cm to ∞
	Brightness	F2.0
	Lens Construction	8 elements in 8 groups (6 aspherical elements) *when lens protector O-LP1631 is attached
	Maximum Angle of View (Diagonal)	<div>Still Wide: approx. 202°</div> <div>Narrow: approx. 150°</div> <div>Movie Wide: approx. 204°</div> <div>Narrow: approx. 151°</div> <div>*when lens protector O-LP1631 is attached</div>
Movie SR (Shake Reduction)	Movie	Electronic Movie Shake Reduction (Movie SR) *Available only when Angle of View is set to (Narrow) in movie recording. *When Movie SR is on, the angle of view is reduced.
Display	1.5 inch LCD, approx. 115,000 dots	
Playback Modes	Playback still images, Image Copy, Playback movies, Edit movies (Save as Still Image, Divide Movies)	
Exposure Control	AE Metering	Multi-segment metering, Spot AE metering
	EV Compensation	± 2 EV (can be set in 1/2 EV steps)
Shooting Mode	Still Image, Underwater Still Image, Burst Shooting, Movie, Underwater Movie, Time-Lapse Movie, Extended Movie Recording, High Speed Movie	
Shutter Speed	1/24000 sec. - 1/4 sec.	
Power Source	Rechargeable lithium-ion battery D-LI68	

Battery Life	Image Storage Capacity Approx. 450 pictures	Recording capacity shows the approximate number of shots recorded during CIPA-compliant testing (at 23°C (73.4°F) with display on). Actual performance may vary according to operating conditions.
	Playback Time Approx. 160 min. (for 4K with 10-bit movies)	According to the results of in-house testing.
	Movie Recording Time Approx. 80 min. (for 4K with 10-bit movies)	According to the results of in-house testing.
Interfaces	USB 2.0 (Micro-B), HDMI output terminal (Type D)	
Wireless Interface	Standard : 802.11 b/g/n, Frequency : 2.4 GHz band , Security : WPA2	
Waterproof and Dustproof Rating	JIS waterproof grade 8 and JIS dustproof grade 6 (IP68) Continuous underwater shooting possible for 2 hours at depth of 20 m.	
Impact Resistance Rating	<p>Our drop test (2 m height onto a 5 cm thick plywood surface) complying with MIL-Standard 810F Method 516.5-Shock testing.</p> <ul style="list-style-type: none"> Waterproof performance is not guaranteed if the camera is exposed to impact such as being dropped or hit. The camera is not guaranteed to be free of trouble or damages under every condition. 	
Dimensions	Approx. 57.4 (W) x 34.1 (H) x 77.8 (D) mm (approx. 2.3 (W) x 1.3 (H) x 3.1 (D) inches) (excluding operating or protruding parts) *when lens protector O-LP1631 is attached	
Weight	<p>Approx. 136 g / 4.8 oz. (including battery, microSD memory card, and Lens protector O-LP1631)</p> <p>Approx. 114 g / 4.0 oz. (excluding battery, microSD memory card, and Lens protector O-LP1631)</p>	
Accessories	Rechargeable lithium-ion battery D-LI68, Power adapter D-PA164, USB cable I-USB157, Lens protector O-LP1631, Underwater lens protector O-LP1632, Start Guide, Regarding Waterproof Design	











Image storage capacity and recordable time


Still image

Recorded pixels	Internal memory	Memory card (8 GB)
 (3264 x 2448)	38	4199
 (3264 x 1840)	46	5092
 (2448 x 2448)	46	5092
 (2592 x 1944)	53	5838
 (2592 x 1464)	69	7479

- The image storage capacity is for reference only. The actual image storage capacity may vary depending on the memory card and the subject.

Movie

Recorded pixels	Internal memory		Memory card (8 GB)	
	 (Super fine)	 (Fine)	 (Super fine)	 (Fine)
 (3840 x 2160•30 fps)	-	-	10 min. 19 sec.	17 min. 6 sec.
 (1920 x 1080•60 fps)	12 sec.	18 sec.	24 min. 9 sec.	35 min. 55 sec.
 (1920 x 1080•30 fps)	22 sec.	33 sec.	44 min. 18 sec.	1 hr. 4 min. 18 sec.
 (1280 x 720•120 fps)	14 sec.	21 sec.	28 min. 4 sec.	41 min. 31 sec.
 (1280 x 720•60 fps)	22 sec.	33 sec.	44 min. 18 sec.	1 hr. 4 min. 18 sec.
 (1280 x 720•30 fps)	36 sec.	52 sec.	1 hr. 11 min. 11 sec.	1 hr. 42 min. 14 sec.

- The above figures are based on our standard shooting conditions and may vary depending on the subject, shooting conditions, and type of the memory card used.
- The consecutive recordable time or recordable size per shooting is up to 25 minutes or 4 GB.
- The recordable time for  (1280 x 720•120 fps) per shooting is up to 4 minutes.

- A**
- AE Metering 32
 - Angle of View 33
 - Auto Power Off 42
- B**
- Burst Shooting 18
 - Button functions 9
- C**
- Certifications 44, 71
 - Charging the battery 14
 - Communication information display 41
 - Communication information reset 41
 - Connecting to a computer 54
 - Connecting to AV devices 55
 - Copy 23
- D**
- Date Adjustment 16, 38
 - Delete 22, 43
 - Delete all 43
 - Divide Movies 24
- E**
- Error messages 58
 - Exposure 31
- Extended Movie Recording** 20
- F**
- Format 43
- G**
- General settings menu 28
- H**
- High Speed Movie 20
- I**
- Image Copy 23
 - Image Effect Modes 30
 - Image storage capacity ... 63
 - Image Sync 45
 - Image Sync settings 52
 - Initial settings 15
 - Initialize 43
 - Inserting the memory card 12
 - Installing the battery 12
 - Internal memory 43
- L**
- Language settings 15, 39
 - LCD Orientation 34
 - LCD screen brightness 41
 - Lens protector 11
- Extended Movie Recording** 20
- M**
- Macintosh 54
 - Main Specifications 60
 - Manual (White Balance) 31
 - Memory card 43
 - MENU button 6
 - Movie editing 23
 - Movie playback 21
 - Movie SR (Shake reduction) 36
 - MSC 39
 - Multi-segment metering ... 32
- O**
- OK button 5
- P**
- Play back mode 8, 21
 - Playback (movies) 21
 - Playback (still images) 21
 - Playback button 5
 - Power button 6, 15
 - Power Saving 42
 - Power saving function 42
 - PTP 39
- Q**
- Quality Level (Movie) 35
 - QuickTime 54
- R**
- Recordable time 63
 - Recorded pixels 34
 - Recorded Pixels (Movie) 35
 - Reset 43
- S**
- Saving as still images (movies) 23
 - Selection for deletion 22
 - Sensitivity 32
 - Setting 37
 - Settings menu 26
 - Settings reset 43
 - Shake reduction 36
 - Shooting 18
 - Shooting (from a communication device) 48
 - Shooting mode 7, 17
 - Shooting mode menu 26
 - Shooting mode settings ... 29
 - Shooting movies 19
 - Shooting settings 30
 - Shooting settings menu ... 27
 - Shooting still images 18
 - Shutter button 6
 - Sound settings 37, 38
 - Spot AE metering 32
 - Still image playback 21

T

Time-Lapse Movie 19

U

Underwater lens protector
..... 11

Underwater Movie 19

Underwater Still Image 18

USB connection settings
..... 39

V

Vibration 44

Video recording button 6

Viewing (from a
communication device).... 49

Volume adjustment..... 37

W

WARRANTY POLICY 73

White Balance 31

Wi-Fi 40, 45

Wi-Fi button 5

Wind Suppression 36

Windows 54

Wireless LAN..... 40, 45

Using your camera safely

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



Warning

This symbol indicates that ignoring this item could cause serious personal injuries.



Caution

This symbol indicates that ignoring this item could cause minor or medium personal injuries, or loss of property.

About the camera



Warning

- Do not attempt to take the camera apart or modify the camera. High voltages are present within the camera, and there is a danger of electric shock if the camera is taken apart.
- If the inside of the camera should become exposed as a result of, for example, the camera being dropped, please do not under any circumstances touch such exposed portions, as there is a danger of receiving an electric shock.
- Wrapping the strap around a neck is dangerous. Take care that small children do not hang the strap around their necks.
- If any irregularities occur during use, such as smoke or a strange odor, stop use immediately, remove the battery or the AC adapter, and contact your nearest service center. Continued use can cause a fire or electric shock.



Caution

- Some portions of the camera heat up during use, so please take care, as there is a risk of low temperature burns if such portions are held for long periods of time.
- Should the LCD screen be damaged, be careful of glass fragments. Also, be careful not to allow the liquid crystal to get on your skin, in your eyes, or in your mouth.

- Depending on your individual factors or physical condition, the use of the camera may cause itching, rashes or blisters. In case of any abnormality, stop using the camera and get medical attention immediately.

About the power adapter and the AC adapter



Warning

- Always use the power adapter or AC adapter exclusively developed for this camera, with the specified power and voltage. Using a power adapter or AC adapter not exclusive to this camera, or using the exclusive power adapter or AC adapter with an unspecified power or voltage can cause a fire, electric shock, or camera breakdown. The specified voltage is 100-240V AC.
- Do not disassemble or modify the product. This can cause a fire or electric shock.
- If the generation of smoke or strange odor from the product or other abnormality occurs, immediately discontinue its use and consult your nearest service center. Continued use can cause a fire or electric shock.
- If water should happen to get inside the product, consult your nearest service center. Continued use can cause a fire or electric shock.
- If you see a lightning flash or hear thunder during use of the power adapter or AC adapter, unplug the AC plug and discontinue use. Continued use can cause damage to the product, fire, or electric shock.
- Wipe off the AC plug if it becomes covered with dust. Accumulated dust may cause a fire.



Caution

- Do not place or drop heavy objects on or forcefully bend the USB cable or AC plug cord. Doing so may damage the cable/cord. Should the cable/cord be damaged, consult your nearest service center.
- Do not touch or short-circuit the terminal area of the power adapter or AC adapter while the adapter is plugged in.
- Do not handle the AC plug with wet hands. This can cause an electric shock.
- Do not subject the product to strong impacts or allow it to drop onto a hard surface. This can cause a malfunction.
- Do not use the power adapter to charge a battery other than a rechargeable lithium-ion battery D-Li68. This can cause overheating, explosion, or connected device failure.
- To reduce the risk of hazards, use only a CSA/UL certified power supply cord set, cord is Type SPT-2 or heavier, minimum NO.18 AWG copper,

one end with a molded-on male attachment plug cap (with a specified NEMA configuration), and the other is provided with a molded-on female connector body (with a specified IEC nonindustrial type configuration) or the equivalent.

About the battery

Warning

- Be sure to store the battery out of the reach of small children. Placing it in their mouths may cause an electric shock.
- If any leakage from the battery should come in contact with your eyes, it may cause a loss of sight. Flush your eyes with clean water and get medical attention immediately. Do not rub them.

Caution

- Only use the specified battery with this camera. Use of other batteries may cause an explosion or fire.
- Do not disassemble the battery. Disassembling the battery may cause an explosion or leakage.
- Remove the battery from the camera immediately if it becomes hot or begins to smoke. Be careful not to burn yourself during removal.
- Keep wires, hairpins, and other metal objects away from the + and - contacts of the battery.
- Do not short the battery or dispose of the battery in fire. This can cause an explosion or fire.
- If any leakage from the battery should come in contact with skin or clothes, it may cause irritation to the skin. Wash the affected areas thoroughly with water.
- Precautions for D-Li68 Battery Usage:
 - USE SPECIFIED CHARGER ONLY.
 - DO NOT INCINERATE.
 - DO NOT DISASSEMBLE.
 - DO NOT SHORT CIRCUIT.
 - DO NOT EXPOSE TO HIGH TEMP.(140°F / 60°C)

Keep the camera and its accessories out of the reach of small children

Warning

Be sure to keep the camera and its accessories out of the reach of small children.

1. Injuries may result from the product falling or from unexpected movement.
2. Suffocation may result from wrapping the strap around the neck.
3. Small accessories such as the battery or a microSD card may be swallowed. Seek medical attention immediately if an accessory is accidentally swallowed.

Care to be taken during handling

Before using your camera

- When the camera has not been used for a long time, confirm that it is still working properly, particularly prior to taking important pictures (such as at a wedding or when traveling). Contents of the recording cannot be guaranteed if recording, playback or transferring your data to a computer, etc. is not possible due to a malfunction of your camera or recording media (microSD card), etc.
- The lens on this camera is not interchangeable. The lens is not removable.

About the battery and power adapter

- To keep the battery in optimum condition, avoid storing it in a fully charged state or in high temperatures.
- If the battery is left inserted and the camera is not used for a long time, the battery will over-discharge and shorten the battery's life.
- Charging the battery a day before use or on the day of use is recommended.
- The power adapter supplied with the camera is designed for exclusive use with this camera. Do not use it with other devices.

Precautions on carrying and using your camera

- Hot and humid places should be avoided. Particular care should be taken regarding vehicles, which can become very hot inside.
- Ensure that the camera is not subjected to substantial vibrations, shocks, or pressure as this may cause damage, malfunction, or a loss in waterproof performance. Place the camera on a cushion for protection when the camera is subjected to the vibrations of a motorbike, car, ship, etc. If the camera is subjected to substantial vibrations, shocks, or pressure, take your camera to your nearest service center and have it checked.
- The temperature range in which the camera can be used is -10°C to 40°C (14°F to 104°F).
- The LCD screen will become black at high temperatures, but will return to normal at normal temperatures.
- The response speed of the LCD screen becomes slow at low temperatures. This is due to the properties of the liquid crystal and is not a malfunction.
- Sudden temperature changes will cause condensation on the inside and outside of the camera. Place the camera in your bag or a plastic bag, and remove it after the temperature of the camera and surroundings are equalized.
- Avoid contact with garbage, mud, sand, dust, water, toxic gases, or salt. These could cause the camera to breakdown. Wipe the camera to dry off any rain or water drops.
- Do not press the LCD screen with excessive force. This could cause it to break or malfunction.
- Be careful not to sit down with the camera in your back pocket as this may damage the exterior of the camera or the LCD screen.
- When using a tripod with the camera, be careful not to overtighten the screw in the tripod socket on the camera.

Cleaning your camera

- Do not clean the camera with organic solvents such as thinner, alcohol or benzene.
- Use a lens brush to remove dust accumulated on the lens. Never use a spray blower for cleaning as it may damage the lens.

Storing your camera

- Avoid storing the camera where pesticides and chemicals are handled. Remove the camera from its case and store it in a well-ventilated place to prevent the camera from becoming moldy during storage.
- Avoid using or storing the camera where it may be exposed to static electricity or electrical interference.
- Avoid using or storing the camera in direct sunlight or in locations where it may be exposed to rapid changes in temperature or to condensation.
- Periodic inspections are recommended every one to two years to maintain high performance.

Other precautions

- Care should be taken when removing the microSD card immediately after using the camera, as the card may be hot.
- Keep the battery/card cover closed and do not remove the microSD card or turn the camera off while the data is being played back or saved to the card, or the camera is connected to a computer with the USB cable, as this may cause the data to be lost or the card to be damaged.
- Do not bend the microSD card or subject it to violent impact. Keep it away from water and store away from high temperature.
- Do not remove the microSD card during formatting as this may damage the card and render it unusable.
- The data on the microSD card may be lost in the following circumstances. We do not accept any liability for data that is deleted
 - (1) when the microSD card is mishandled by the user.
 - (2) when the microSD card is exposed to static electricity or electrical interference.
 - (3) when the microSD card has not been used for a long time.
 - (4) when the microSD card is ejected or the battery is removed while the card is being accessed.
- If it is not used for a long time, the data on the card may become unreadable. Be sure to regularly make a backup of important data on a computer.
- When using a microSD card with a slow recording speed, recording may stop while recording a movie even if there is adequate space in the memory, or image capture or playback may take a long time.
- Be sure to format microSD cards that are unused or have been used on another camera.

- Please note that deleting data, or formatting the microSD cards or the built-in memory does not completely erase the original data. Deleted files can sometimes be recovered using commercially available software. It is user's responsibility to ensure the privacy of such data.
- The data on your microSD card should be managed at your own risk.

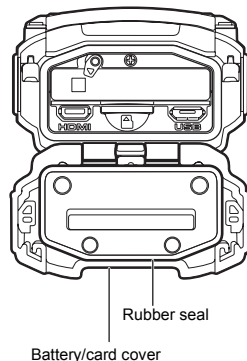
Regarding waterproof, dustproof, and shockproof design

- This camera is provided with a waterproof/dustproof design complying with JIS waterproof grade 8 and JIS dustproof grade 6 (equivalent to IP68).
- The camera satisfies our drop test (2 m height onto a 5 cm thick plywood surface) complying with MIL-Standard 810F Method 516.5-Shock testing.
- The camera satisfies our test for the waterproof, dustproof, and shockproof performance, but this does not guarantee it will remain free of trouble or damages.
- Waterproof performance is not guaranteed if the camera is exposed to impact such as being dropped or hit.
- To maintain the waterproof and dustproof performance, be sure to keep the lens protector on.

Precautions before using the camera in the water

Check the following before going near the water

- Make sure that there are no cracks or scratches on the rubber seal of the battery/card cover.



- Make sure that there are no foreign objects (dust, sand, hair, lint or liquid) on the rubber seal or the contact surface before closing the battery/card cover. Wipe off any foreign objects with a clean lint-free cloth.
- Close the battery/card cover properly until it clicks. Otherwise water may get in and damage the camera.

Be careful near the water

- Avoid opening the battery/card cover when near the waterside or with wet hands. When changing the battery or the microSD card, avoid places where the camera is likely to get wet or dirty, and make sure that the camera and your hands are completely dry.
- The camera will sink if dropped in water, so be sure to attach the strap to the camera and wrap it around your wrist when using the camera in or near water.
- To enhance the waterproof performance of the camera, the front of the lens is protected by glass. The glass should be kept clean at all times, as any dirt or water on the glass will affect the quality of pictures taken.

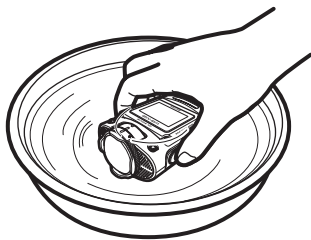
Precautions when using the camera in the water

- Do not use the camera deeper than 20 meters underwater. Do not use the camera underwater for more than 120 minutes consecutively.
- Do not open the battery/card cover underwater.
- Do not use the camera in hot water or in a hot spring.
- Do not apply excessive force to the camera, for example diving into water with it. Doing so may compromise the waterproof performance of the camera or cause the cover to open.
- Do not leave the camera on the sand at the beach, as this may cause the camera to exceed the upper limit of its operational temperature range, or cause the speaker or microphone to become blocked with sand.
- Avoid subjecting the camera to substantial vibrations, shocks, or pressure as this may cause a loss in waterproof performance. If the camera is subjected to substantial vibrations, shocks or pressure, take your camera to your nearest service center and have it checked.
- Avoid getting sunscreen or sun oil on the camera as it may cause discoloration of the surface. If any oil gets on the camera, wash it off immediately with warm water.
- Sudden and extreme changes in temperature may cause condensation to form in and on the camera. Keep the camera in a bag or case to reduce the difference in temperature.

Precautions after using the camera in the water

- Do not open the battery/card cover if the camera is wet. Wipe off any water with a clean lint-free cloth.
- The inside surface of the cover may get wet when it is opened. Wipe off any water that is on the cover.
- Wiping off the camera while there is sand or dust on it may scratch the surface of the camera. Make sure that the battery/card cover is firmly closed before washing the camera in tap water. After washing the camera, dry it with a soft cloth.
- Wipe off any dirt or sand on the waterproof seal or the contact surface. The camera's waterproof performance may be compromised by a loose seal, or cracks or dents on the seal or the contact surface. If there is any such damage, contact your nearest service center.

- If the camera becomes very dirty or after it has been used in the sea, make sure that it is turned off and the battery/card cover is firmly closed before rinsing it under running tap water or leaving it in a bowl of clean water for a short time (2 or 3 minutes).



- Avoid cleaning with agents such as soapy water, mild detergents, or alcohol as this may compromise the waterproof performance of the camera.
- To maintain the waterproof performance of the camera, you are recommended to change the waterproof seal once a year. Contact your nearest service center regarding changing the seal. (A charge will be made.)
- The camera's accessories are not waterproof (except for the underwater lens protector O-LP1632).

About the wireless LAN function

- Do not use the camera in a place where electrical products, AV/OA devices, and so on generate magnetic fields and electromagnetic waves.
- If the camera is affected by magnetic fields and electromagnetic waves, it may not be able to communicate.
- If the camera is used near a TV or a radio, poor reception or TV screen glitch may occur.
- If there are multiple wireless LAN access points near the camera and the same channel is used, search operation may not be executed correctly.
- The security of your data stored, sent or received is your own responsibility.

In the frequency band used by the camera, along with industrial, scientific, and medical devices such as a microwave oven, premises radio stations (wireless stations requiring license) and specified low power radio stations (wireless stations not requiring license) for mobile object identification used in factory production lines, etc., and amateur radio stations (wireless stations requiring license) are operated.

1. Before using the camera, confirm that premises radio stations and specified low power radio stations for mobile object identification and amateur radio stations are not operated in the vicinity.
2. In the event that the camera causes harmful radio wave interference to premises radio stations for mobile object identification, immediately change the frequency being used to avoid interference.
3. If you have other troubles such that the camera causes harmful radio wave interference to specified low power radio stations for mobile object identification or to amateur radio stations, contact your nearest service center.

This camera conforms to the technical standards under the Radio Law and Telecommunications Business Law and the certification of conformance to technical standards can be displayed on the monitor.

How to display certifications

The certification marks of conformance to wireless technical standards can be displayed from [Certifications] of the [Setting] menu. (p.44)

Trademarks

- microSDXC logo is a trademark of SD-3C, LLC.
- Microsoft, Windows, Windows Vista, and Photosynth are registered trademarks of Microsoft Corporation in the United States of America and other countries.
- Macintosh, OS X, QuickTime, iPhone, and App Store are trademarks of Apple Inc., registered in the U.S. and other countries.
- Intel and Intel Core are trademarks of Intel Corporation in the U.S. and/or other countries.
- Wi-Fi is a registered trademark of Wi-Fi Alliance.
- IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.
- Facebook is a registered trademark of Facebook, Inc.
- Twitter is a registered trademark of Twitter, Inc.
- Tumblr is a registered trademark of Tumblr, Inc.
- Google, Google Play, and Android are trademarks or registered trademarks of Google Inc.
- HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and/or other countries.
- This product is licensed under the AVC Patent Portfolio License for the personal use of a consumer or other uses in which it does not receive remuneration to
 - (i) encode video in compliance with the AVC standard ("AVC video") and/or
 - (ii) decode AVC video that was encoded by a consumer engaged in a personal activity and/or was obtained from a video provider licensed to provide AVC video. No license is granted or shall be implied for any other use.Additional information may be obtained from MPEG LA, LLC. See <http://www.mpegla.com>.
- All other trademarks are the property of their respective owners.



WARRANTY POLICY

All our cameras purchased through authorized bona fide photographic distribution channels are guaranteed against defects of material or workmanship for a period of twelve months from the date of your purchase. Service will be rendered, and defective parts will be replaced without cost to you within that period, provided the camera does not show evidence of impact, sand or liquid damage, mishandling, tampering, battery or chemical corrosion, operation contrary to operating instructions, or modification by an unauthorized repair shop. The manufacturer or its authorized representatives shall not be liable for any repair or alterations except those made with its written consent and shall not be liable for damages from delay or loss of use or from other indirect or consequential damages of any kind, whether caused by defective material or workmanship or otherwise; and it is expressly agreed that the liability of the manufacturer or its representatives under all guarantees or warranties, whether expressed or implied, is strictly limited to the replacement of parts as hereinbefore provided. No refunds will be made on repairs by non-authorized service facilities.

Procedure During 12-month Warranty Period

Any camera which proves defective during the 12-month warranty period should be returned to the dealer from whom you purchased the camera or to the manufacturer. If there are no representatives of the manufacturer in your country, send the camera to the manufacturer, with postage prepaid. In this case, it will take a considerable length of time before the camera can be returned to you owing to the complicated customs procedures required. If the camera is covered by warranty, repairs will be made and parts replaced free of charge, and the

camera will be returned to you upon completion of servicing. If the camera is not covered by warranty, regular charges of the manufacturer or of its representatives will apply. Shipping charges are to be borne by the owner. If your camera was purchased outside of the country where you wish to have it serviced during the warranty period, regular handling and servicing fees may be charged by the manufacturer's representatives in that country. Notwithstanding this, your camera returned to the manufacturer will be serviced free of charge according to this procedure and warranty policy. In any case, however, shipping charges and customs clearance fees to be borne by the sender. To prove the date of your purchase when required, please keep the receipt or bills covering the purchase of your camera for at least a year. Before sending your camera for servicing, please make sure that you are sending it to the manufacturer's authorized representatives or their approved repair shops, unless you are sending it directly to the manufacturer. Always obtain a quotation for the service charge, and only after you accept the quoted service charge, instruct the service station to proceed with the servicing.

- **This warranty policy does not affect the customer's statutory rights.**
- **The local warranty policies available from our distributors in some countries can supersede this warranty policy. Therefore, we recommend that you review the warranty card supplied with your product at the time of purchase, or contact our distributor in your country for more information and to receive a copy of the warranty policy.**

For customers in USA

STATEMENT OF FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- * Consult the dealer or an experienced radio/TV technician for help.

FOR CALIFORNIA, U.S.A. ONLY

Perchlorate Material-special handling may apply. The lithium battery used in this camera contains perchlorate material, which may require special handling.

See www.dtsc.ca.gov/hazardouswaste/perchlorate

Declaration of Conformity According to 47CFR, Parts 2 and 15 for Class B Personal Computers and Peripherals

We: RICOH IMAGING AMERICAS CORPORATION

Located at: 633 17th Street, Suite 2600,
Denver, Colorado 80202, U.S.A.
Phone: 800-877-0155
Fax: 303-790-1131

Declare under sole responsibility that the product identified herein complies with 47CFR Parts 2 and 15 of the FCC rules as a Class B digital device. Each product marketed is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on the statistical basis as required by 47CFR §2.909. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. The above named party is responsible for ensuring that the equipment complies with the standards of 47CFR §15.101 to §15.109.

Product Name: Digital Camera
Model Number: RICOH WG-M2
Contact person: Customer Service Manager
Date and Place: January, 2016, Colorado

For customers in Canada

This Class B digital apparatus complies with Canadian ICES-003 (B).

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. RICOH WG-M2 has been tested and found to comply with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules.

Pour les utilisateurs au Canada

Cet appareil numérique de la classe B est conforme à la norme NMB-003 (B) du Canada.

Les connaissances scientifiques dont nous disposons n'ont mis en évidence aucun problème de santé associé à l'usage des appareils sans fil à faible puissance. Nous ne sommes cependant pas en mesure de prouver que ces appareils sans fil à faible puissance sont entièrement sans danger. Les appareils sans fil à faible puissance émettent une énergie fréquence radioélectrique (RF) très faible dans le spectre des micro-ondes lorsqu'ils sont utilisés. Alors qu'une dose élevée de RF peut

avoir des effets sur la santé (en chauffant les tissus), l'exposition à de faibles RF qui ne produisent pas de chaleur n'a pas de mauvais effets connus sur la santé. De nombreuses études ont été menées sur les expositions aux RF faibles et n'ont découvert aucun effet biologique. Certaines études ont suggéré qu'il pouvait y avoir certains effets biologiques, mais ces résultats n'ont pas été confirmés par des recherches supplémentaires. RICOH WG-M2 a été testé et jugé conforme aux limites d'exposition aux rayonnements IC énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC.

Information for Users on Collection and Disposal of Old Equipment and Used Batteries



1. In the European Union

These symbols on the products, packaging and/or accompanying documents mean that used electrical and electronic equipment and batteries should not be mixed with general household waste.

Used electrical/electronic equipment and batteries must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of these products.



By disposing of these products correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

If a chemical symbol is added beneath the symbol shown above, in accordance with the Battery Directive, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in the battery at a concentration above an applicable threshold specified in the Battery Directive.

For more information about collection and recycling of used products, please contact your local authorities, your waste disposal service or the point of sale where you purchased the products.

2. In other countries outside the EU

These symbols are only valid in the European Union. If you wish to discard used products, please contact your local authorities or dealer and ask for the correct method of disposal.

For Switzerland: Used electrical/electronic equipment can be returned free of charge to the dealer, even when you don't purchase a new product. Further collection facilities are listed on the home page of www.swico.ch or www.sens.ch.



The CE Mark is a Directive conformity mark of the European Union.

Regarding User Registration**<http://www.ricoh-imaging.com/registration/>**

In order to better serve you, we request that you complete the user registration, which can be found on our website. Thank you for your cooperation.

RICOH IMAGING COMPANY, LTD.

1-3-6, Nakamagome, Ohta-ku, Tokyo 143-8555, JAPAN
(<http://www.ricoh-imaging.co.jp>)

**RICOH IMAGING EUROPE
S.A.S.**

Parc Tertiaire SILIC 7-9, avenue Robert Schuman - B.P. 70102, 94513
Rungis Cedex, FRANCE
(<http://www.ricoh-imaging.eu>)

**RICOH IMAGING AMERICAS
CORPORATION**

633 17th Street, Suite 2600, Denver, Colorado 80202, U.S.A.
(<http://www.us.ricoh-imaging.com>)

**RICOH IMAGING CANADA
INC.**

5520 Explorer Drive Suite 300, Mississauga, Ontario, L4W 5L1, CANADA
(<http://www.ricoh-imaging.ca>)

**RICOH IMAGING CHINA CO.,
LTD.**

23D, Jun Yao International Plaza, 789 Zhaojiabang Road, Xu Hui District,
Shanghai, 200032, CHINA
(<http://www.ricoh-imaging.com.cn>)

<http://www.ricoh-imaging.co.jp/english>

This contact information may change without notice.
Please check the latest information on our websites.

- Specifications and external dimensions are subject to change without notice.