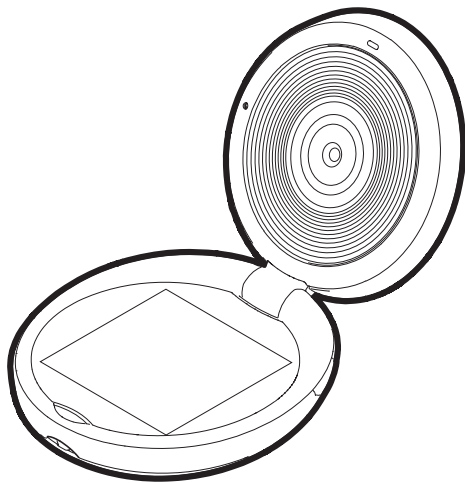**CASIO.**

EN

Digital Camera

TR-M11

User's Guide

Thank you for purchasing this CASIO product.
- Before using it, be sure to read the precautions contained in this User's Guide.
- Keep the User's Guide in a safe place for future reference.
- For the most up-to-date information about this product, visit the official CASIO
  Website at http://dc.casio.com/

Accessories

As you unpack your camera, check to make sure that all accessories shown below are included. If anything is missing, contact your original retailer.
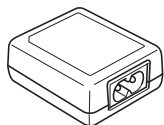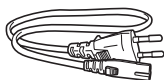
USB-AC adaptor (AD-C53U)	Power cord*	Micro USB cable
Basic Reference		

* The shape of the power cord plug varies according to the country or geographic area where the camera is sold.

• Items actually included depend on the camera model you purchase.

Read this first!

- The contents of this manual are subject to change without notice.
- The contents of this manual have been checked at each step of the production process. Feel free to contact us if you notice anything that is questionable, erroneous, etc.
- Any copying of the contents of this User's Guide, either in part or its entirety, is forbidden. Except for your own personal use, any other use of the contents of this manual without the permission of CASIO COMPUTER CO., LTD. is forbidden under copyright laws.
- CASIO COMPUTER CO., LTD. shall not be held liable for any damages or lost profits suffered by you or any third party due to the use or malfunction of this product.
- CASIO COMPUTER CO., LTD. shall not be held liable for any damages, lost profits, or claims by third parties arising out of the use of EXILIM Connect.
- CASIO COMPUTER CO., LTD. shall not be held liable for any damages or lost profits caused by loss of memory contents due to malfunction, repair, or any other reason.
- Note that the example screens and product illustrations shown in this User's Guide may differ somewhat from the screens and configuration of the actual camera.

LCD Panel

The liquid crystal panel of the monitor screen uses high-precision technology that provides a pixel yield in excess of 99.99%. This means that some very small number of pixels may not light or may remain lit at all times. This is due to the characteristics of the liquid crystal panel, and does not indicate malfunction.

Take test shots

Before shooting your final image, shoot a test shot to ensure that the camera is recording correctly.

Contents

Quick Start Basics   11

Recording Images   35

Recording Movie   41

Advanced Recording Settings   43

Contents

General Guide

The numbers in parentheses indicate the pages where each item is explained.

1 Strap hole (page 7)
2 Monitor screen
(pages 8, 13, 86)
3 Microphone (page 42)
4 Lens
5 LED light ring
(pages 38, 91)
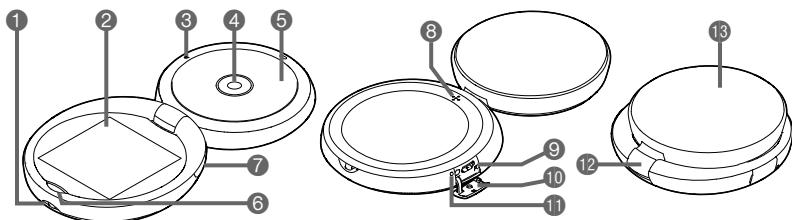
6 Sub LED light
(pages 38, 91)
7 Shutter button
(page 28)
8 Speaker
9 [USB] port
(pages 15, 18)

10 [USB] port cover
11 Operation lamp
(pages 16, 19, 23, 28)
12 Cover lock (page 25)
13 Top cover (page 25)

• To access the memory card, you need to remove the top cover (page 25).

**To attach the strap to the camera
(commercially available or separately available)**

Attach strap here.
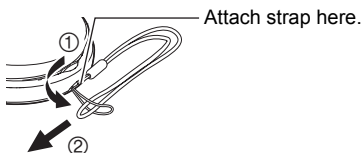
Monitor Screen Contents and How to Change Them

The monitor screen uses various indicators, icons, and values to keep you informed of the camera's status.

• The sample screens in this section are intended to show you the locations of all the indicators and figures that can appear on the monitor screen in various modes. They do not represent screens that actually appear on the camera.

■ REC Mode
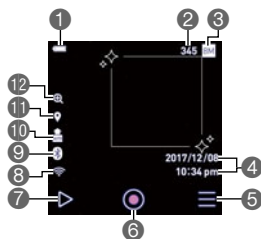
❶ Battery level indicator (page 20)
❷ Remaining snapshot memory capacity (page 125)/Remaining movie memory capacity (page 125)
❸ Snapshot image size (page 45)/ Movie quality (pages 41, 46)
❹ Date/Time (pages 21, 89)
❺ Menu icon (page 43)
❻ Start Movie (page 41)

❼ PLAY mode icon (page 23)
❽ Wireless LAN communication status (page 61)/Airplane mode (page 72)
❾ Bluetooth communication status (page 61)
❿ Auto Send (page 73)
⓫ Location info (page 74)
⓬ Digital zoom (page 39)

■ **PLAY Mode**
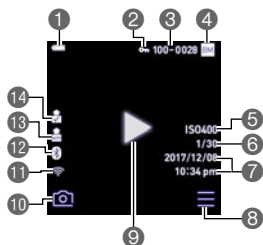
⓵ Battery level indicator (page 20)
⓶ Protect indicator (page 54)
⓷ Folder name-file name (page 84)
⓸ Snapshot image size (page 45)/
   Movie quality (page 41)
⓹ ISO sensitivity
⓺ Shutter speed/
   Movie recording time (page 47)
⓻ Date/time (pages 21, 89)
⓼ Menu icon (page 52)

⓽ Movie icon (page 47)
⓾ REC mode icon (page 23)
⓫ Wireless LAN communication status
   (page 61)/Airplane mode (page 72)
⓬ Bluetooth communication status
   (page 61)
⓭ Auto Send (page 73)
⓮ Image sent (page 71)

NOTE

• The folder name and file name in the upper right corner of the monitor screen has the meaning described below (page 84).
  Example: 100-0023: 23rd image file in the folder named "100CASIO".

■ Function On/Off Indication

On

Off
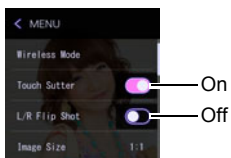
Each touch of or toggles to the opposite setting.

Quick Start Basics

What you can do with your CASIO camera

Your CASIO camera is packed with a powerful selection of features and functions to make recording of digital images easier, including the following main functions.
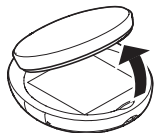
New Configuration

Introducing a totally new shape for a camera. Simply open the cover for digital imaging with an elegant design.
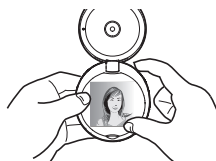
Beautiful Self-portraits

The Make-up function helps to make perfect self-portraits easier than ever before.
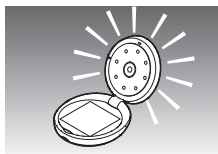
Ring Light for Perfect Illumination

A built-in ring light creates a subdued lighting effect.

Beautiful images, even in the dark

Now you can shoot great images even in total darkness.
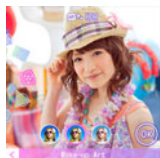
A variety of Make-up filters help to make every portrait a work of art.

You can use the make-up effects to enhance the face and apply various effects to surroundings.
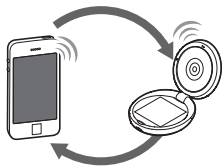
Wireless Connection

A simple operation sends images shot with the camera to a smartphone.

Using the Touch Panel

The monitor screen of the camera is a touch panel.
This means you can perform the following operations
by touching the screen with your fingers.

Monitor screen
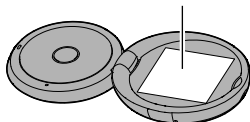
Touch
Momentarily touching the screen with your finger.
Touch the screen to select an icon or menu item, and
to configure settings.
You can zoom in and zoom out on a displayed image
by tapping it twice in succession.
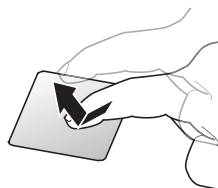
Touch-and-hold
Holding your finger against the screen.
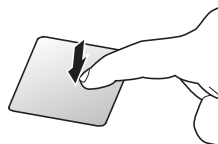
Drag
Holding your finger against the screen as you drag it
up, down, left, or right.
Use drag to move a screen image to a different
location, and to scroll between images.
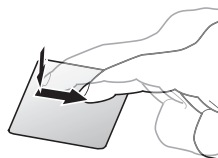
Flick
Holding your finger against the screen as you flick it
up, down, left, or right.
Use flick to scroll forward through images.
To scroll forward or back multiple images, first drag
in the direction opposite the direction you want to
scroll, and then flick in the desired scroll direction.
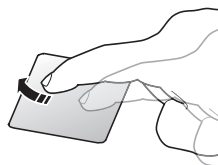
Spread

Holding your thumb and forefinger against the screen
as you spread them out.
Use spread to enlarge the screen image.

Squeeze

Holding your thumb and forefinger against the screen
as you bring them together.
Use squeeze to reduce the size of the screen image.

✹ **IMPORTANT!**

• Never use a pointed or hard object to perform screen operations. Doing so can
  damage the screen.
• The camera will have a hard time interpreting a screen operation made using your
  fingernails. Use the fleshy pad of your finger.

NOTE

• Applying a commercially available LCD protective sheet will reduce the operation
  sensitivity of the monitor screen.

First, charge the battery prior to use.

The camera has a built-in rechargeable lithium ion battery. The battery is not charged when you purchase the camera, so you will need to charge the camera before using it.

You can use either of the two following methods to charge the battery.
• USB-AC adaptor
• USB connection to a computer (Using the included micro USB cable.)

■ To charge with the USB-AC adaptor

While the camera is turned off, connect in the sequence shown below.
Charging time: Approximately 2 hours 20 minutes

[USB] port

Micro USB cable
(included with camera)

Connect the cable so the ⟵⟶ mark on the small (micro USB) connector is facing upwards.

USB-AC adaptor
(AD-C53U)

Power cord
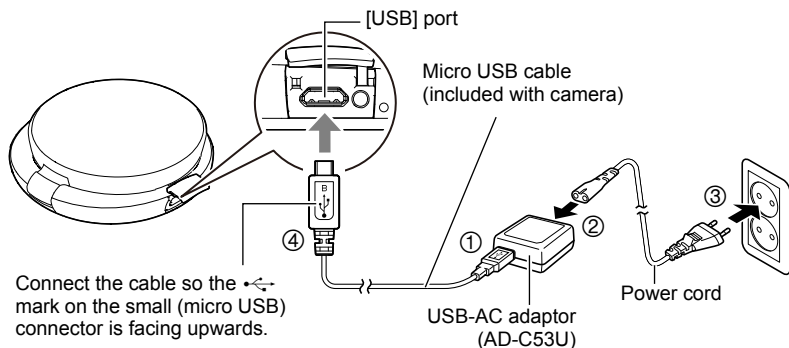
• When disconnecting the USB-AC adaptor from the camera, be sure to disconnect from the camera first.

✺ IMPORTANT!

• A battery that has not been used for a long time and/or ambient temperature can cause charging to take longer than normal. These conditions may also cause the operation lamp to flash red. If this happens, refer to page 115.
• Opening the camera while the USB-AC adapter is connected will start up the camera on battery power. Because of this, charging will stop.
• The USB-AC adaptor will become warm during charging. This is normal and does not indicate malfunction.
• The shape of the power plug depends on each country or geographic area.

Operation Lamp Operation

Lamp Status	Description
Lit Red	Charging
Flashing Red	Abnormal ambient temperature, USB-AC adaptor problem, or battery problem (page 115), or charging terminated by the timer
Off	Charging complete
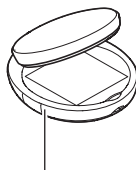
Operation lamp

USB Cable Connection Precautions

• When connecting the USB cable to the camera, make sure that the cable connector and monitor screen panel are oriented correctly as shown in the illustration below.

Making sure the ⟜ mark on the USB cable connector is facing the top of the camera, plug it in.
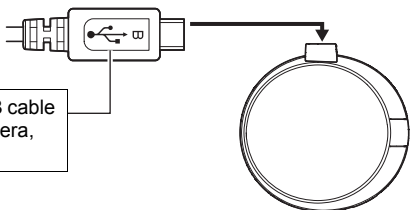
The operation lamp always initially light after charging starts. Even if the battery is already fully charged, the lamp will light momentarily.
If the lamp does not light, check the orientation of the USB cable connector.

• Make sure that you insert the cable connector into the USB port until you feel it click securely into place. Failure to insert the connector fully can result in poor communication or malfunction.
• Note that even while the connector is fully inserted, you still will be able to see the metal part of the connector as shown in the illustration.

17
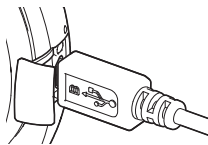
■ To charge using a USB connection to a computer

While the camera is turned off, connect in the sequence shown below (①, ②).

[USB] port

Computer
(power turned on)

USB port

① ②

Micro USB cable
(included with camera)
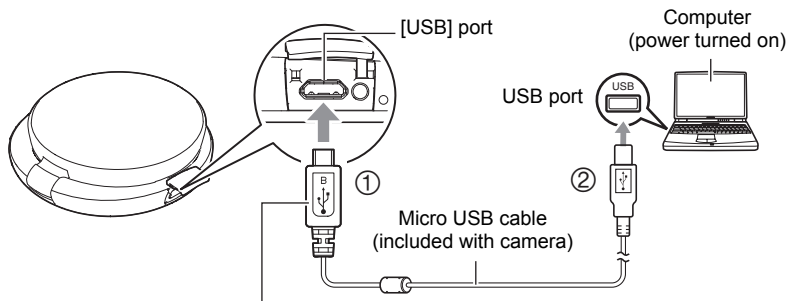
Connect the cable so the ⟶⟵ mark on the small (micro USB)
connector is facing upwards.

• If the camera is turned on, close its cover to turn off before connecting to a
computer.
Charging time: Approximately 2 hours 50 minutes

☀ IMPORTANT!

• The first time you connect the camera to your computer with the USB cable, an
error message may appear on your computer. If this happens, disconnect and then
reconnect the USB cable.
• A battery that has not been used for a long time, certain types of computers, and
connection conditions can cause charging to take longer than normal. These
conditions may also cause the operation lamp to flash red. If this happens, refer to
page 115.
• For faster charging, use of the supplied USB-AC adaptor is recommended.
• You cannot use the camera to shoot images while it is being charged over a
computer USB connection. If you want to shoot with the camera, disconnect the
USB cable.
• If you turn on the camera while charging over a USB connection to a computer is in
progress, the camera will establish a USB connection with the computer. Though
charging normally should continue at this time, certain types of computers or
connection environments may stop charging if supply power is low. This will be
indicated by the camera's operation lamp lighting green.
• Charging is not performed while the connected computer is in the hibernate mode.

Operation Lamp Operation

Lamp Status	Description
Lit Red, (Lit/Flashing Amber)	Charging
Flashing Red	Abnormal ambient temperature, charging taking abnormally long, or battery problem (page 115)
Off, (Lit Green)	Charging complete

Operation lamp
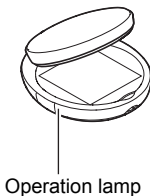
• The information in parentheses in the above table shows the lamp status while the camera is turned on during charging.

Other Charging Precautions

• With the two charging methods described above, you can charge the camera's battery without removing it from the camera. Never use any other type of charger device. Attempting to use a different charger can result in unexpected accident.

• This model can be charged only from a USB 2.0 specification USB port.

• USB charging devices and power supply devices are subject to fixed standards. Use of an inferior device or a device that is not up to standard can cause malfunction and/or failure of your camera.

• Operation is not guaranteed in the case of a computer built or modified by you. Even in the case of a commercially available computer, certain USB port specifications may make it impossible to charge via the USB cable.

• A battery that is still warm immediately after normal use may not charge fully. Give the battery time to cool before charging it.

• A battery discharges slightly even when it is not loaded in the camera. Because of this, it is recommended that you charge the battery immediately before you need to use it.

• Charging the camera's battery may cause interference with TV and radio reception. If this happens, plug the USB-AC adaptor into an outlet that is further away from the TV or radio.

• Actual charging time depends on current battery capacity and charging conditions.

• Do not use the USB-AC adaptor with any other device.

• Never use the power cord with another device.

• Use only the USB-AC adaptor and USB cable specified in this manual for charging. Use of any other type of devices may result in improper charging.

Checking the Current Battery Level

As battery power is consumed, a battery indicator on the monitor screen indicates its current level as shown below.

Remaining Power	High ←————————————————→ Low
Battery Indicator	▭ → ▣ → ▬ → ▬
Indicator Color	White → White → Red → Red

▬ indicates battery power is low. Charge the battery as soon as possible.
Recording is not possible when ▬ is indicated. Charge the battery immediately.

• The level shown by the battery indicator may change when you switch between the REC mode and PLAY mode.
• Leaving the camera for about 7 days with no power supplied while the battery is dead will cause its date and time settings to be cleared. A message telling you to configure time and date settings will appear the next time you turn on the camera after restoring power. When this happens, configure date and time settings (page 89).
• See page 127 for information about battery life and number of shots.

Configuring Basic Settings the First Time You Turn On the Camera

The first time you turn on the camera, a screen appears for configuring the display language, date, and time settings. Failure to set the date and time correctly will cause the wrong date and time data to be recorded with images.

✳ IMPORTANT!

• A screen for language selection will not appear in step 2 of the procedure below if you purchased a camera intended for the Japanese market. To change the display language from Japanese in this case, use the procedure under "Specifying the Display Language (Language)" (page 90). Note that a version of this manual in the language you select may not be included with a camera intended for the Japanese market.

• Camera models sold in certain geographic areas may not support display language selection.

1. Open the camera.

This turns on power and displays the startup screen.

2. Drag (page 13) upwards and downwards until you find the language you want, and then touch to select it.
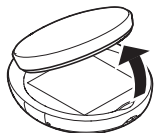
3. Touch the date display format you want.

Example: July 10, 2018
YY/MM/DD → 18/7/10
DD/MM/YY → 10/7/18
MM/DD/YY → 7/10/18

4. Touch the value you want to change (year, month, day, hour, minute).

5. Touch "▲", "▼" to change the currently selected value.

• To switch between 12-hour and 24-hour format, touch the 12/24 hour switch icon.

6. When the date and time settings are the way you want, touch "OK".

7. Select the aspect ratio for snapshots.

• Touch "1:1" (square) or "4:3" (rectangular) to select it.

8. Select the mode you want the camera to be in when you turn it on.

• Touch "Make-up" or "Auto".

9. Touch "Apply".

• If you selected "Auto" in step 8, this is the end of this procedure.

10. **Touch "OK".**

11. **Select the complexion setting you want.**
- You can select one of seven skin tone patterns.

12. **Touch "OK".**
- You will be able to change the complexion setting later, if you want. See page 36 for details.

If you make a mistake configuring display language, date, or time settings with the above procedure, refer to the following pages for information about how to correct the settings.
– Display language: Page 90
– Date and time: Page 89

NOTE
- Each country controls its local time offset and the use of summer time, and so they are subject to change.

Turning Power On and Off

■ To turn on the camera

Open the camera.
This will automatically turn on the camera (indicated by the operation lamp lighting green) and enter the REC mode.

IMPORTANT!

• The camera will not start up if you open it while it is being charged by a computer. A USB connection will be established between computer and camera (page 18).

Operation lamp
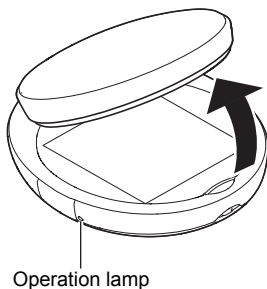
■ To enter the REC mode and PLAY mode

To enter the PLAY mode	In the REC mode, touch " ▷ " (PLAY).
To enter the REC mode	In the PLAY mode, touch " 📷 " (REC).
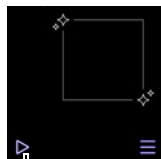
" ▷ " (PLAY) / " 📷 " (REC)

■ To turn off the camera

Close the camera.

NOTE

• To conserve battery power, an Auto Power Off function will turn off power automatically if you do not perform any operation for about five minutes.
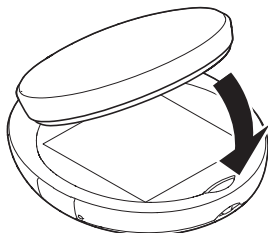
Preparing a Memory Card

Though the camera has built-in memory that can be used to store images and movies, you probably will want to purchase a commercially available memory card for greater capacity. The camera does not come with a memory card. Images recorded while a memory card is loaded are saved to the memory card. When no memory card is loaded, images are saved to built-in memory.
• For information about memory card capacities, see page 125.

Supported Memory Cards

– microSD Memory Card
– microSDHC Memory Card
– microSDXC Memory Card

• The above are supported memory card types as of July 2017.
• This camera supports use of microSD memory cards of the following types and capacities: microSD memory cards up to 2GB; microSDHC memory cards greater than 2GB, up to 32GB; microSDXC memory cards greater than 32GB, up to 2TB. Note that the ability to use any particular card with this camera, even if it satisfies the above capacity and type requirements, is not guaranteed.

⚠ **Warning!**

● Memory cards are small and present a risk of accidentally being swallowed by infants and young children. Keep memory cards out of the reach of infants and young children. If a memory card is ever swallowed accidentally, contact a physician immediately.

■ Memory Card Handling Precautions

Certain types of memory cards can slow down processing speeds. In particular, high-quality movies may not be able to be stored correctly. A slow memory card can take too much time to record data and result in breaks in the image and/or audio during playback. When this happens "●" (Movie Stop) will be "●".

To load a memory card

1. **While sliding the cover lock in the direction indicated by the arrow, open the top cover.**

Top cover

Cover lock
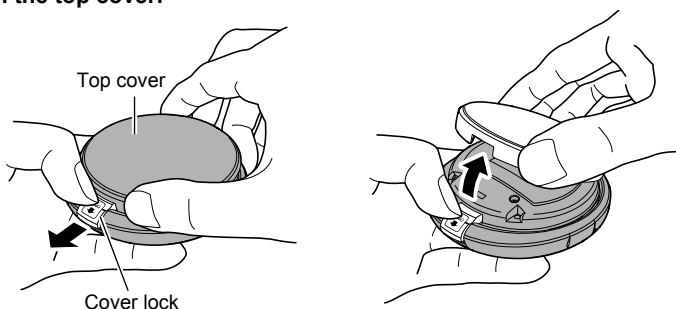
• Remove the 🅾 sticker before using the camera for the first time after purchasing it.

2. **Load a memory card.**

Positioning the memory card as shown in the nearby illustration insert it into the camera's memory card slot and press until you hear it click into place.

Front

Front   Back
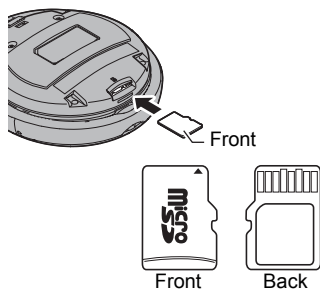
3. **Replace the top cover.**

①
②
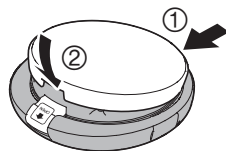
After hooking the cover at point ①, close the cover.

✹ IMPORTANT!

• Never insert anything besides a supported memory card (page 24) into the memory card slot.
• Should water or any foreign object ever get into the card slot, immediately turn off the camera, and contact your retailer or nearest CASIO authorized service center.

■ To replace the memory card

Press the memory card and then release it. This will cause it to pop out of the memory card slot slightly. Pull the card out the rest of the way and then insert another one.
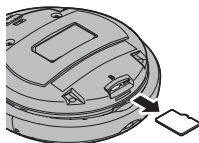
✹ IMPORTANT!

• Turn off the camera before replacing the memory card.
• Never remove the memory card while the operation lamp is flashing green after turn off the camera by closing its cover. Doing so can cause the image save operation to fail and even damage the memory card.

To format (initialize) a new memory card

Format a memory card on the camera before using it for the first time.

✹ IMPORTANT!

• Formatting a memory card that already has snapshots or other files on it, will delete its contents. Normally you do not need to format a memory card again. However, if storing to a card has slowed down or if you notice any other abnormality, re-format the card.
• Be sure to use the camera to format a memory card. Formatting a card on a computer will result in a non-SD standard format, which can greatly slow down processing time and cause compatibility, performance, and other problems.

1. **Load a memory card (page 25).**

2. **Open the camera to turn it on.**

3. **Touch " ☰ " (Menu).**

4. **Drag upwards and downwards until you find "Setup", and then touch it.**

5. **Touch "Format".**

6. **Touch "Format" and then touch "Yes".**
This starts the memory card format operation.

To Shoot a Snapshot

Your camera has a variety of different recording modes to suit various shooting objectives (page 35). This section explains general shooting procedures using the auto recording mode.

Selecting an Auto Recording Mode

Your camera has an Auto Recording Mode.

1. **Open the camera to turn it on.**

2. **Flick the screen upwards.**

3. **Touch "Auto" to select the auto recording mode.**

To shoot a snapshot

1. **Position the camera so it is easy to grasp and so the shutter button is easy to press.**

2. **Point the camera at the subject.**
   • Spread your fingers apart on the screen to change the zoom factor (page 39).

Pinch your fingers. (Wide Angle)   Spread your fingers. (Telephoto)

3. **Half-press the shutter button to focus the image.**

When focus is complete, the camera will beep, the operation lamp will light green, and the focus frame will turn green.

Half-press

Press lightly until the button stops.
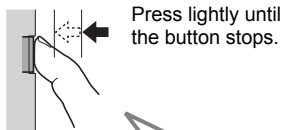
Beep, beep (Image is in focus.)

When you half-press the shutter button, the camera automatically adjusts exposure and focuses on the subject it is currently pointed at. Mastering how much pressure is required for a half-press and a full-press of the shutter button is an important technique for good-looking images.

Shutter button
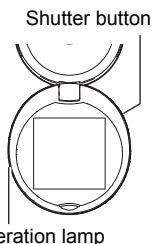
Operation lamp

Focus frame

4. **Continuing to keep the camera still, press the shutter button the rest of the way down.**

This records the snapshot.

Full-press
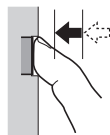
Snap (Image is recorded.)

NOTE

• You can use the screen touch operation (page 44) or the selfie timer (page 37) to shoot snapshots.
• You can specify the image size for snapshots. See page 45 for more information.

■ If the image does not focus...

If the focus frame stays red and the operation lamp is flashing green, it means that the image is not in focus (because the subject is too close, etc.). Re-point the camera at the subject and try to focus again.

■ Shooting with Auto

"Focus lock" (page 29) is the name of a technique you can use when you want to shoot an image in which the subject to be focused on is not within the focus frame in the center of the screen.

■ Using Focus Lock

"Focus lock" is a technique you can use when you want to compose an image in which the subject you want to focus on is not within the focus frame in the center of the screen.

1. **Align the monitor screen's focus frame with the subject you want to focus on and then half-press the shutter button.**

Subject to be focused on
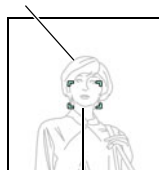
Focus frame

2. **Keeping the shutter button half-pressed (which maintains the focus setting), move the camera to compose the image.**

3. **When you are ready to shoot the image, press the shutter button the rest of the way down.**

| NOTE

• Focus lock also locks exposure (AE).

Viewing Snapshots

Use the following procedure to view snapshots on the camera's monitor screen.
• For information about how to play back movies, see page 47.

1. Touch " ▷ " (PLAY) to enter the PLAY mode.
This will display one of the snapshots currently stored in memory.
  • If "Type 2" is selected for the "Review" setting (page 46), touch the Review image on the monitor screen.
  • You can display and delete information about the displayed snapshot as required (page 86).
  • To zoom in on a displayed image, tap the monitor screen twice in succession (page 50).
    If you are recording a snapshot that is very important to you, it is recommended that you zoom the image and check its details after recording it.

" ▷ " (PLAY)

2. Drag left or right across the screen image to scroll through the snapshots.
  • To scroll forward or back multiple images, first drag in the direction opposite the direction you want to scroll, and then flick in the desired scroll direction.

NOTE

• Pressing the shutter button while in the PLAY mode or while a menu screen is displayed will switch directly to the REC mode.
• A question mark (?) will be displayed for images that cannot be displayed for some reason.

Deleting Snapshots and Movies

You can use either of the two delete operations described below.
- Deleting a file by flicking it on the playback screen
  This can be used to delete a single file.
- Deleting files using the PLAY mode " ≡ " (Menu)
  You can delete all files, delete selected files, or delete a single file.

⚹ **IMPORTANT!**

- A file (image) delete operation cannot be undone.

Deleting a File by Flicking It on the Playback Screen

This procedure can be used to delete a single file.

1. **In the PLAY mode, drag left or right across the screen until the file you want to delete is displayed.**

2. **Flick the screen downwards.**

3. **Touch "Delete".**
   This will delete the selected image.

Deleting Files Using the PLAY Mode " ≡ " (Menu)

■ **To delete all files**

1. **In the PLAY mode, touch " ≡ " (Menu).**

2. **Touch "Delete".**

3. **Touch "Delete All Files".**

4. **Touch "Delete".**
   This deletes all of the files and displays the message "There are no files."

■ **To delete selected files**

1. **In the PLAY mode, touch " ≡ " (Menu).**

2. **Touch "Delete".**

3. **Touch "Delete Files".**
   This displays a file selection screen.

Quick Start Basics

4. **Touch the image you want to delete.**

Touching an image causes a check mark to appear in its check box.
- To clear (deselect) a check box, touch its image.

5. **After selecting all of the images you want to delete, touch "OK" or "▣".**

6. **Touch "Delete".**

This will delete the selected images.
- To cancel the delete operation, touch "Cancel".

NOTE

- You can also select images and delete them while the image menu screen is displayed (page 50).

■ Deleting a Single File

1. **In the PLAY mode, drag left or right across the screen until the file you want to delete is displayed.**

2. **Touch " ≡ " (Menu).**

3. **Touch "Delete".**

4. **Touch "Delete 1 File".**

This will delete the selected image.

Snapshot Shooting Precautions

Operation
- If unwanted light is shining onto the lens, shade the lens with your hand when shooting an image.

Monitor Screen when Shooting Snapshots
- Subject brightness conditions can cause monitor screen response to slow and can cause digital noise in the monitor screen image.
- The image that appears on the monitor screen is for image composition. The actual image will be recorded in accordance with the currently selected recording mode (page 35).

Shooting Indoors under Fluorescent Lighting
- Minute flickering of fluorescent lighting can affect the brightness or color of an image.

Other Precautions
- When shooting where lighting is dim, the recording operation takes longer because the camera performs a noise reduction process. Do not perform any operation while the image recording operation is in progress.
- Due to the characteristics of the imaging element used by the camera, very fast moving objects in an image may appear distorted.

■ Auto Focus Restrictions
- Any of the following can make proper focus impossible.
    – Solid color wall or other very low contrast subject
    – Strongly back lit subject
    – Very shiny subject
    – Multiple subjects at varying distances from the camera
    – Subject in a dark location
    – Camera movement while shooting
    – Fast-moving subject
    – Subjects outside the focus range of the camera
- If you cannot focus properly while shooting with Auto recording mode, try using focus lock (page 29).

Shooting Settings

Flick from the edge of the screen in the direction of the arrows.

Selfie timer*1
(page 37)

Make-up*2
(page 36)

LED light
(page 38)

Recording Mode*3
(page 35)
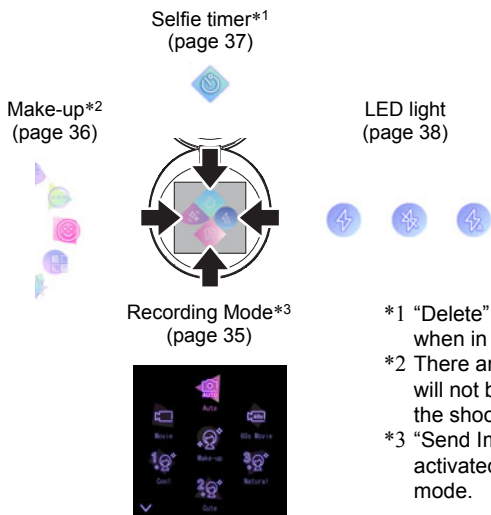
*1 "Delete" operations will be activated when in the playback mode.
*2 There are cases in which this item will not be displayed depending on the shooting mode selected.
*3 "Send Image" operations will be activated when in the playback mode.

The angle at which the setup screen is displayed will change to 90-degrees when the screen is set to a 90-degree horizontal view.

Recording Images

Selecting a Recording Mode

The camera has a variety of different recording modes.

1. **In the REC mode, flick the screen upwards.**
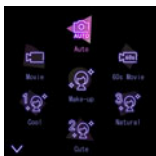
2. **Touch the icon of the recording mode you want to use.**
   This enters the selected recording mode.

Auto	Standard Auto recording mode. This is the mode normally used for shooting (page 27).
Make-up	Makes it easier to shoot beautiful portraits. Skin tone and texture settings can be selected to suit shooting conditions (page 36).
Movie	For shooting movies (page 41).
60s Movie	For shooting 60-second movies (page 41).
Cool	Configures Make-up settings to produce a "Cool" effect.*
Natural	Configures Make-up settings to produce a "Natural" effect.*
Cute	Configures Make-up settings to produce a "Cute" effect.*

* Make-up settings are fixed.

Recording Beautiful Portraits (Make-up)

Make-up enables adjustment of human skin tone hues and texture, and softening of facial shadows caused by harsh sunlight for better looking portraits.

1. **In the REC mode, flick the screen rightwards.**
This displays the Make-up setting screen.

2. **Touch the item whose setting you want to change, and then adjust it.**
   • There are other setting items that are not shown on the display. To display hidden items, drag your finger on the screen in a circle.

	Smooth Skin	Adjusts skin smoothness.
	Skin Tone	Adjusts the complexion setting.
	Face Brightness	Adjusts face brightness.
	Sculpt	Adjusts detail enhancement.
	Tint	Adjusts the hue.
	Lighting	Adjusts the texture and shadows of the skin using LED light illumination.
	Make-up Art	Applies a filter to an image while maintaining Skin Tone and Smooth Skin facial effects.
	Dark Circles Remover	Lessens under-eye circles.
	Slim Face	Makes a face slim.
	Mole Remover	Removes moles.*
	Catch light	Inserts highlights into the pupils of the eyes of the subject.

   * Not all moles are removed.

3. **Touch "OK".**

4. **Press the shutter button to shoot.**

NOTE

• Make-up mode setting items are different from the settings that can be configured in other recording modes.

Shooting a Self-portrait (Selfie timer)

1. **Flick the screen downwards.**

2. **Drag " " (Selfie Timer) to specify the selfie timer countdown duration.**

The camera will shoot an image when the countdown reaches zero.

• You can set a selfie timer countdown duration within the range of two to ten seconds. The further you drag, the longer the duration.

• To stop an ongoing selfie timer operation, touch the screen performing the countdown.
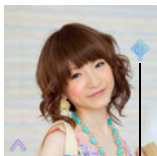
" " (Selfie Timer)

NOTE

• When the illumination setting (page 91) is "On" or "Timer only", the LED lights synchronized with the selfie timer count.

Using the LED Light (LED)

Use the LED light when shooting where lighting is dim. The effectiveness of the LED light is reduced the further you are from the subject.

1. **Flick the screen leftwards.**

2. **Touch the item whose setting you want to change.**

Setting	REC Screen Icon Display	Description
On		LED always lights when shooting.
Off		LED never turns on.
Auto		The LED light turns on automatically when surroundings are dark.

☀ **IMPORTANT!**

• Do not turn on the LED light near a person's eyes and do not allow anyone to look directly into the light.
• Since the camera is equipped with a wide-angle lens, the center tends to be brighter while the periphery tends to be darker.
• Take care to ensure that your finger is not blocking or is not too close to the LED light. Fingers can cause unwanted shadows when shooting.

Recording Images
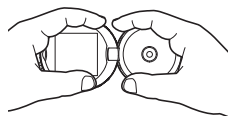
Shooting with Zoom

Your camera is equipped with various types of zoom: SR Zoom and digital zoom.

SR Zoom	Applies super resolution technology to suppress image deterioration.
Digital zoom	A digital process is used to enlarge the center of the image, so there is deterioration of image quality.

1. **Perform the required screen operation to change the zoom factor as desired.**
Zoom in: Spread
Zoom out: Squeeze

Wide Angle   Telephoto

Wide Angle : Reduces the size of the subject and broadens the range.
Telephoto   : Enlarges the subject and narrows the range.

2. **Press the shutter button to shoot the image.**

NOTE

• Telephoto images are prone to blurring caused by camera movement when you press the shutter button. Because of this, stabilizing the camera by placing it on a level surface, etc. is recommended.
• "⊕" is displayed on the monitor screen while digital zoom is being used.
• SR Zoom is disabled while any one of the following recording modes (page 35) is selected: Make-up, Cool, Natural, Cute.

■ Zoom Factor

• The image deterioration point depends on the image size (page 45).

Image Size	Undeteriorated Zoom Limit	Maximum Zoom Factor
1:1 (8M)	1.5X	4.0X
4:3 (12M)	1.5X	4.0X

Recording Movie

To record a movie

The following procedure explains how to record a movie.

Specifying Movie Image Quality

1. **In the REC mode, touch " ☰ " (Menu).**

2. **Drag the screen image upwards and downwards until you find "Movie Quality", and then touch to select it.**

3. **Touch the quality setting you want.**

Movie quality	Movie Size (Pixels)
1024	1024✕1024
480	480✕480

4. **To close the menu screen, touch " ☰ " (Menu) or press the shutter button.**

Shooting the movie

1. **Flick the screen upwards.**

2. **Touch "Movie" or "60s Movie" to specify the movie recording mode.**

Recording time/
Remaining recording time

3. **Touch the " ⬤ " (Start Movie) icon.**
This starts movie recording.
   • Movie recording include monaural audio.
   • Zoom operations are supported during movie recording (page 39).
   • You can also start and stop recording by pressing the shutter button.

" ⬤ " (Start Movie)/
" ⬤ " (Stop Movie Recording)

4. **Touch the " ⬤ " (Stop Movie Recording) icon to finish recording.**
   • In the case of "60s Movie", recording stop automatically after 60 seconds.
   • The maximum allowed for a single movie recording is 4 GB in file size or 29 minutes in length. Recording will stop automatically when either of these values is exceeded.
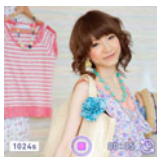
Minimizing the Effects of Camera Movement during Movie Recording

You can configure the camera to minimize the effects of camera movement during movie recording.

⁂ **IMPORTANT!**

• Spending a long time using movie recording will cause the camera to become slightly warm to the touch. This is normal and does not indicate malfunction.

• Movie recording also records audio. Note the points below when shooting a movie.

Microphone

– Take care that the microphone is not blocked by your fingers, etc.

– Good audio recording results are not possible when the camera is too far away from what you are trying to record.

• Shooting movies for long periods in areas where temperature is relatively high can cause digital noise (dots of light) to appear in the movie image. A rise in the camera's internal temperature also may force movie recording to stop automatically. If this happens, stop recording and allow the camera to cool down, which should cause normal operation to resume.

• Use of the camera's built-in memory or certain types of memory cards can slow down processing speeds. In particular, high-quality movies may not be able to be stored correctly. A slow memory card can take too much time to record data and result in breaks in the image and/or audio during playback. When this happens "●" (Movie Stop) will be "●".
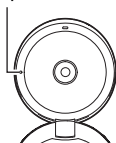
▌**NOTE**

• SR Zoom (page 39) is disabled during movie recording.

• The effects of camera movement in an image become more pronounced when you shoot close up or with a large zoom factor. Because of this, stabilizing the camera by placing it on a level surface, etc. is recommended.

Advanced Recording Settings

The following are menu operations you can use to configure various camera settings.

Using the REC Menu

■ Example Menu Screen Operation

1. **In the REC mode, touch "☰" (Menu).**
This will display the menu screen.
- Menu contents are different in the REC mode and PLAY mode.
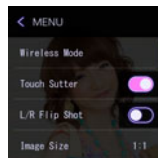
2. **Drag upwards and downwards until you find the item whose setting you want to change.**

3. **Touch the item.**

4. **Configure the setting of the item in accordance with the screen contents.**
- To cancel and exit the menu, press the shutter button.

> **NOTE**
- Depending on the recording mode, some of the items on the menu that appears may not be usable.

■ Menu Operations in This Manual

Menu operations are represented in this manual as shown below. Touch the indicated icons and items, and perform operations as they are indicated, from left to right.

> **Procedure**
>
> **Enter the REC Mode → "☰" (Menu) → Touch Shutter**

Using Touch Shutter (Touch Shutter)

Enter the REC Mode → " ≡ " (Menu) → Touch Shutter

You can use the procedure below to shoot a snapshot.

1. **Turn on the function (page 10).**

2. **Point the camera at the subject.**

3. **When you want to shoot, touch the monitor screen.**
   The camera automatically comes into focus and then shoots.
   • You can still use the shutter button to shoot even when On is selected for
     Touch Shutter.

NOTE
• When "Auto" is selected as the recording mode, the camera will automatically focus
  on the point you touch.

Horizontally Flipping the Recording Image (L/R Flip Shot)

Enter the REC Mode → " ≡ " (Menu) → L/R Flip Shot

Shooting a snapshot while "On" is selected for this function, an image of what is
displayed on the monitor screen is saved in memory.

NOTE
• L/R flipping is not performed during movie recording.
• Images already stored in camera memory cannot be L/R flipped.

Changing the Image Size (Image Size)

Enter the REC Mode → " ☰ " (Menu) → Image Size

This setting can be used to configure snapshot image size.

Setting	Image Size (Pixels)	REC Screen Icon Display	Description
1:1	8M (2976×2976)	8M	Shoots a 1:1 square size image.
4:3	12M (4000×3000)	12M	Shoots a 4:3 rectangular image.

■ Pixels and image size

A digital camera image is a collection of small dots called "pixels". The more pixels there are in an image, the more detail there will be. However, you generally can do with fewer pixels when printing an image (L size) through a print service, attaching an image to e-mail, when viewing the image on a computer, etc.

Pixel

The size of an image indicates how many pixels it contains, and is expressed as horizontal pixels×vertical pixels.

• Note that larger images have more pixels, so they take up more memory space.
• For information about image size and number of images that can be stored, see page 125.
• For information about movie size, see page 125.
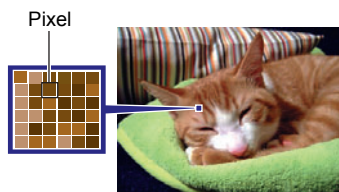
Movie Image Quality Settings (Movie Quality)

Enter the REC Mode ⟶ **" ☰ " (Menu)** ⟶ **Movie Quality**

This setting can be used to configure movie image quality and recording mode settings. For information about movie image quality settings, see page 41.

Turning on Image Review (Review)

Enter the REC Mode ⟶ **" ☰ " (Menu)** ⟶ **Review**

While Review is turned on, the camera will display an image immediately after it is recorded.

Type 1	Displays a full-screen view of the image for about one second.
Type 2	Displays a Review image in the lower left corner of the monitor screen. Touching the Review image will enter the PLAY mode and display a full-screen view of the image.
Off	Turns off review image display

Viewing Snapshots and Movies

Viewing Snapshots

See page 30 for the procedure for viewing snapshots.

NOTE

• Flicking the screen upwards while in the PLAY mode performs an "Send Image" operation. Flicking downwards performs a "Delete" operation.

Viewing a Movie

1. **Touch " ▷ " (PLAY) to enter the PLAY mode.**

2. **Drag left or right across the screen image to scroll through the movies until the one you want is displayed.**

Image quality

Movie icon: ▷

Movie recording time
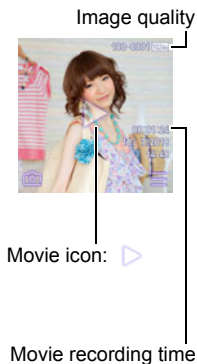
3. **Touch " ▷ " (Movie) to start playback.**

Playback in progress
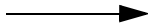
Playback paused

Touch " ▣ ".

Touch " ▷ ".
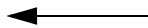
Progress bar

Movie Playback Controls

Pause/Play	Touch " ■ " (pause) or " ▷ " (play).
Fast forward/ Fast reverse	During playback, touch " ◀ " (fast reverse) or " ▶ " (fast forward). • Each touch of either button increases the speed of the fast forward or fast reverse operation. • To return to normal playback speed, touch " ▷ ".
Stop playback	During playback, touch " □ ".
Volume adjustment	During playback, touch " ◈ " and then drag the volume bar to the desired level. • Volume can be adjusted only while movie playback is in progress.
1 frame forward/ back	While playback is paused, touch " ▷ " or " ◁ ". • Touching and holding this icon advances frames continuously.
Progress bar on/off	Touch the screen.
Movie editing	Pause movie play at the location where you want to cut, and then touch " ✂ " (page 49).

• Playback may not be possible for movies not recorded with this camera.

Editing a Movie on the Camera (Movie Editing)

The Movie Editing feature lets you cut out a specific part of a movie.

1. Enter the PLAY mode and then start playback of the movie you want to edit.

2. When playback reaches the location where you want to cut, touch "⊟" to pause.

3. Touch "✄".

4. Touch the option that specifies what you want to cut.

Previous Cut	Cuts everything from the beginning of the movie up to the current location.
Next Cut	Cuts everything from the current location to the end of the movie.

5. Touch "Cut".
The selected cut operation will take considerable time to complete. Don't try to perform any camera operation until the "Busy... Please wait..." message disappears from the monitor screen. Note that a cut operation can take a long time if the movie being edited is long.

⁂ **IMPORTANT!**

• When you edit a movie, only the result is saved. The original movie is not retained. An editing operation cannot be undone.

NOTE

• A movie that is shorter than five seconds cannot be edited.
• Editing of movies recorded with a different type of camera is not supported.
• Movie Editing is not possible if the resulting movie is less than one second in length.
• You will not be able to edit a movie if the amount of remaining memory capacity is less than the size of the movie file you want to edit. If there is not enough memory available, delete files you no longer need to free up more.
• Splitting of a movie into two movies and splicing of two different movies into a single movie are not supported.

Viewing the Image Menu

The image menu shows multiple images on a single screen.

1. **In the PLAY mode, squeeze your fingers on the screen.**

This displays the image menu.
- Drag upwards or downwards to scroll to the next page of images.
- To view the normal (single image) display mode, touch the image your want to view.
- In the case of a movie, the first image in the movie is displayed.
- A question mark (?) will be displayed for images that cannot be displayed for some reason.
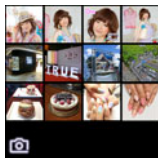
Zooming an On-screen Image

Snapshots can be zoomed on the monitor screen up to 8X.
- The actual available zoom factors depend on the size of the original image.

1. **In the PLAY mode, drag left or right to display the image you want to view.**

2. **To enlarge the image, spread your thumb and forefinger (page 14) on the display or touch twice in the area you want to enlarge.**
- Dragging an enlarged screen image will change the part of the image that is displayed.
- Squeezing your thumb and forefinger (page 14) on the displayed image will reduce it in size.
- To return an enlarged image to its actual size, tap it twice.

Sending a Selected Camera Image to a Smartphone (Send Selected Image)

You can select a snapshot and/or movie file in camera memory and send it to a smartphone.

1. In the PLAY mode, drag left or right across the screen image to scroll through files until you find the one you want to send.

2. Flick the screen upwards.

3. Touch "Send".
This will send the selected image.
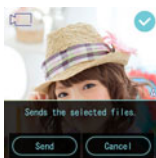
⚡ **IMPORTANT!**

• Wireless connection settings must be configured to send selected images from the camera to a smartphone. Refer to "Connecting the Camera with a Smartphone (Wireless Connection)" (page 57).

Other Playback Functions (PLAY)

The following are menu operations you can use to configure various camera settings.

Using the PLAY Menu

■ Example Menu Screen Operation

1. In the PLAY mode, touch "☰" (Menu).

   This will display the menu screen.
   • Menu contents are different in the REC mode and PLAY mode.
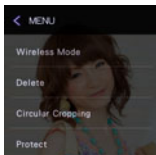
2. Touch the item whose setting you want to change.

3. Configure the setting of the item in accordance with the screen contents.

■ Menu Operations in This Manual

Menu operations are represented in this manual as shown below. Touch the indicated icons and items, and perform operations as they are indicated, from left to right.

> **Procedure**
>
> **Enter the PLAY Mode → "☰" (Menu) → Protect**

Deleting Snapshots and Movies (Delete)

Procedure

Enter the PLAY Mode → "☰" (Menu) → Delete

See page 31 for details.

Cropping a Circular Image (Circular Cropping)

Enter the PLAY Mode → " ☰ " (Menu) → Circular Cropping

Creates a circular cropped image of the type that is popular on social networking services.

NOTE

• This function cannot be with a 4:3 image.
• The aspect ratio of cropped images is 1:1 (1536×1536 pixels), which is equivalent to 2M size.
  The image is not actually circular. A background is added to make the image appear circular.

Protecting a File Against Deletion (Protect)

Enter the PLAY Mode → " ≡ " (Menu) → Protect

You can protect images to prevent them from being deleted.
• A protected image will be indicated by "▨".

All Files On	Protects all files.
All Files Off	Unprotects all files.
Select	Protects and unprotects specific files. ①Drag upwards or downwards to display the image you want to protect. ②Touch an image to be protected, and "▨" will appears on the image. You can repeat steps ① and ② as many times as necessary to select multiple images. ③Touch "OK" or "▨". To unprotect an image, touch it in step ② of the above procedure to remove "▨".
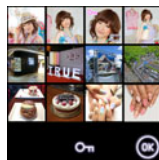
IMPORTANT!

• Note that even if a file is protected, it will be deleted if you perform the format operation (page 91).

Rotating an Image (Rotation)

Procedure

Enter the PLAY Mode → " ☰ " (Menu) → Rotation

1. **Drag left or right to display the image you want to rotate.**

2. **Touch " ↺ ".**
This will rotate the image 90 degrees to the left.

3. **When the image is in the orientation you want, touch " ‹ ".**

NOTE

• Note that this procedure does not actually change the image data. It simply alters how the image is displayed on the camera's monitor screen.
• An image that has been protected or zoomed cannot be rotated.

Cropping a Snapshot (Trimming)

Enter the PLAY Mode → Display snapshot → " ☰ " (Menu) → Trimming

You can crop a snapshot to trim parts you do not need, and save the result in a separate file. The original snapshot is also retained.

1. **Drag left or right to display the image you want to trim.**

2. **Select the aspect ratio of the saved image.**
For a 4:3 aspect ratio image, you can select either of two trimmed image aspect ratio: 4:3 or 1:1 (square).
• If the aspect ratio of the original image is 1:1 (square), select 1:1 (square) on the aspect ratio selection screen. Selecting 4:3 will cause an error message to appear.

3. **Drag the image until the part you want to keep is displayed.**
• To enlarge the image, touch the screen with your thumb and forefinger and then spread them apart. To reduce the size of the image, touch the screen with your thumb and forefinger and then squeeze them together.

4. **Touch "OK".**
This will crop the image, leaving only the displayed part.

NOTE

• The recording date of the cropped image will be the same as the recording date of the original snapshot.
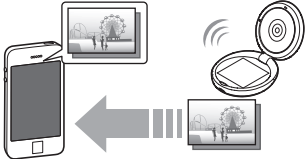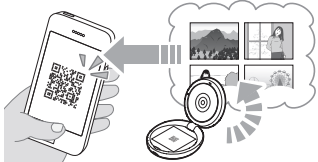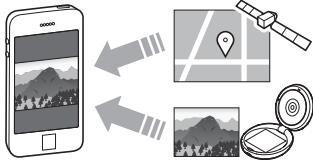
Connecting the Camera with a Smartphone (Wireless Connection)
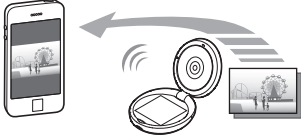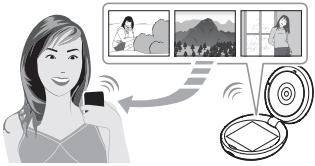
Controlling Your Camera with a Smartphone

Your camera has both Bluetooth® wireless technology and wireless LAN capabilities built in. After establishing a wireless connection with a smartphone, you can perform the operations described in the table below. Requires installation of the EXILIM Connect app on your smartphone.

• Your camera can connect using Bluetooth wireless technology with a smartphone that supports Bluetooth low energy technology.

Bluetooth®

With this function:	You can do this:
Auto Send	Images can be automatically sent as they are shot to a smartphone that has been Bluetooth wireless technology paired with the camera (page 73).
One Time Share	Share selected snapshots for viewing on smartphones (page 69). The Scene app needs to be installed on the smartphone in order to use One Time Share.
Add location info to snapshots	Configure settings to have a smartphone add shooting location information (latitude, longitude) to snapshots when they are sent from the camera (page 74).
Shoot with phone	Remotely control and shoot with the camera using a smartphone (page 65).

With this function:	You can do this:
Send to phone 	Send snapshots and movies recorded with your camera to your smartphone. After sending an image to a smartphone, you can then upload it from the smartphone to a social networking service (page 67).
View on phone 	View snapshots stored in camera memory on a smartphone, and copy snapshots and movies to a smartphone for viewing. You can also view snapshots and movies in camera memory on a computer, and copy them to a computer (page 68).

❊ **IMPORTANT!**

• Inside an aircraft or anywhere else where use of wireless communication is restricted or prohibited, put the camera into the airplane mode.
• Some smartphone models may not be able to play back movie files from your camera.
• Depending on your smartphone model, its operating system version, and/or its remaining storage capacity can cause failure of a movie or snapshot save operation. Receiving a camera file, perform the required operation on your smartphone to check if the file was stored properly.
• Location information is not added to snapshot data stored in camera memory.
• A movie received on an Android terminal:
    – Depending on your movie player, you may not be able to playback movies and/ or audio.
• Images recorded on another manufacturer's camera cannot be sent using this function.

NOTE

• Note that using wireless functions requires more battery power usage than normal. Make sure that the camera battery is sufficiently charged before starting a wireless LAN operation.
• The operating range depends on the local communication environment and on the type of smartphone you are connected to.

■ About EXILIM Connect

For detailed information about EXILIM Connect, refer to the EXILIM Connect User's Guide (which you can download at the website below).
http://www.exilim.com/manual/

• Note that to view the EXILIM Connect User's Guide, you will have to install Adobe Reader. Consult CASIO authorized service center if you are unable to open to display the PDF format User's Guide.
• Note that EXILIM Connect User's Guides may not be available in all languages. If you cannot find a EXILIM Connect User's Guide in your native language, please use a version in another language.

Using a Wireless Mode

Your camera has a variety of different wireless modes. Select the wireless mode that suits your specific requirements.
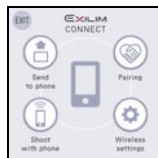
1. Touch " ≡ " (Menu).

2. Touch "Wireless Mode".
   This displays a wireless mode screen.

3. Touch the wireless mode you want.

Send to phone
Select to view images you shoot with the camera on a smartphone (pages 67, 68).
Pairing
Select this mode to establish a Bluetooth wireless technology connection between the camera and a smartphone (page 63).
Shoot with phone
Select this mode for remote control of image recording from a smartphone (page 65).
Wireless settings
Select this mode to configure wireless settings (page 72).

Connecting the Camera with a Smartphone
(Wireless Connection)

■ Wireless Connection Icons

After you configure camera and smartphone connection settings, the icons below will appear on the camera screen to indicate the current communication status.

	Semi-transparent	Pairing is complete, but there is no Bluetooth wireless technology connection.
	Opaque	Pairing is complete, and there is a Bluetooth wireless technology connection.
	Semi-transparent	Wireless LAN is enabled, but there is no connection.
	Opaque	Wireless LAN connected.
	Opaque	Wireless LAN connected, and image data is being sent.
	Opaque	Camera is in the Airplane Mode.
	Opaque	"Location info" is enabled.

Getting Ready to Establish a Connection between a Smartphone and Your Camera

Installing the EXILIM Connect Smartphone app on your smartphone makes it possible to remotely control the camera from your smartphone and to send images recorded with the camera to your smartphone. Search the EXILIM Connect app on Google Play or App Store and install it on your smartphone.

■ App operation guarantees

No guarantees are made concerning the ability to operate the EXILIM Connect app on any particular smartphone or tablet.

※ IMPORTANT!

• For information about operating system version supported by the app, check the information on Google Play or the App Store.
• App functions and the required operating environment are subject to change without notice.

Installing the EXILIM Connect App on Your Smartphone

■ **Android terminal**

1. **Open "Google Play".**

2. **In the search field, type "EXILIM Connect".**

3. **Install "EXILIM Connect".**

■ **iPhone (iOS)**

1. **Open "App Store".**

2. **In the search field, type "EXILIM Connect".**

3. **Install "EXILIM Connect".**

Establishing a Wireless Connection for the First Time

The first time you establish a wireless connection between the camera and a smartphone, you need to use the procedure below to configure wireless connection settings. This operation is required for the first connection only.

■ Smartphone that supports Bluetooth low energy technology

Connecting the camera to a smartphone using Bluetooth wireless technology (pairing) makes it simple to configure wireless connection settings.

> **IMPORTANT!**

- Performing this operation automatically configures your smartphone's wireless LAN connection settings (page 64).
- Your camera can be paired with a single smartphone at one time.
- Some smartphone models may not be compatible with this camera.
- If you want to re-pair the camera with the smartphone it is already paired with, first unpair them and then pair again. Re-pairing the camera and smartphone will result in all pending unsent images to remain unsent.

Camera Operation

1. **Touch "Wireless Mode".**

This will display the wireless mode screen.

2. **Touch "Pairing".**

3. **Touch "Start".**

Smartphone Operation

4. **Start up the "EXILIM Connect" app.**

5. **Tap "Pairing".**

6. **Perform the required connection operation as instructed by the app and your smartphone.**

This establishes a Bluetooth wireless technology connection between the camera and smartphone.
- For information about how to configure wireless connection settings, refer to the EXILIM Connect manual (page 59).

Camera Operation

7. **Touch "Complete".**

• After the camera is paired, Bluetooth wireless technology operation will consume battery power even when the camera it turned off. Because of this, it is recommended that you charge the camera's battery before you plan to use it.

■ Smartphone that does not support Bluetooth low energy technology

Configure smartphone wireless LAN connection settings (input the camera SSID and password).

1. **Touch "Wireless Mode".**

2. **Touch "Shoot with phone".**

3. **Touch "Start".**

This will enable connection with a smartphone and the camera will display a screen for input of an SSID and password.

4. **For the smartphone Wi-Fi setting, input the camera SSID and Password.**

When the message "Start up the phone app." appears on the camera's monitor screen, it means that the smartphone has established a wireless connection with the camera.

• What you need to do to establish a wireless LAN connection depends on the type of smartphone you are using. For details about how to establish a wireless LAN connection see the user documentation that comes with your smartphone.

■ What to do if you are unable to establish a wireless LAN connection between the camera and a smartphone.

This problem may be caused when the smartphone is already wirelessly connected to one of the networks or devices below. Go to your smartphone's Wi-Fi settings and select this camera's SSID.

– Household wireless LAN
– Public wireless LAN
– Portable wireless LAN device

Using a Smartphone as a Camera Remote Controller (Shoot with phone)

This function lets you remotely shoot a snapshot or movie with the camera using a smartphone. You also can perform remote zoom, self-timer, and other operations as well.

NOTE

• When using a smartphone to shoot with the camera, you can add location information obtained by the smartphone to the image data. For information about how to do this, refer to the EXILIM Connect User's Guide (page 59).

■ **Bluetooth Wireless Technology Connection**

1. **Perform one of the operations below.**
   – Turn off the camera.
   – Display the wireless mode screen.
      ① Touch " ☰ " (Menu).
      ② Touch "Wireless Mode".

2. **On the smartphone, start up the "EXILIM Connect" app.**

3. **On the smartphone, tap "Remote Capture".**

4. **Compose the image on the smartphone's screen as you shoot.**

For information about how to use "Shoot with phone", refer to the EXILIM Connect manual (page 59).
• For snapshots, Make-up is automatically selected as the recording mode while shooting with Remote Capture.

NOTE

• Make-up settings cannot be changed using a smartphone. Settings are configured on the camera.

■ Cannot Connect with Bluetooth Wireless Technology

1. Touch "Wireless Mode".

2. Touch "Shoot with phone".

3. Touch "Start".

• If there is a wireless LAN connection between the smartphone and camera, advance to step 5 of this procedure.

4. For the smartphone's Wi-Fi settings, select the SSID displayed on the camera and establish a wireless LAN connection between the camera and smartphone.

5. On the smartphone, start up the "EXILIM Connect" app.

6. Compose the image on the smartphone's screen as you shoot.

For information about how to use "Shoot with phone", refer to the EXILIM Connect manual (page 59).

• For snapshots, Make-up is automatically selected as the recording mode while shooting with Remote Capture.

Sending a Snapshot or Movie File from Camera Memory to a Smartphone (Send Selected Image)

You can select one more snapshot and/or movie file in camera memory and send it to a smartphone. You can select up to 100 files, totaling no more than 500MB for a single send. After sending an image to a smartphone, you can then upload it to a social networking service.

1. **Touch "Wireless Mode".**

2. **Touch "Send to phone".**

3. **Touch "Send Selected Image".**

4. **Touch the image you want to send to the smartphone.**
   Selecting the image of a file causes its check box to become selected.
   • To exit the Send Selected Image operation, touch " [EXIT] ".

5. **After selecting the images of all of the files you want to send to the smartphone, touch "OK" or " ".**
   For information about how to use "Send Selected Image", refer to the EXILIM Connect manual (page 59).

Viewing Snapshots and Movies in Camera Memory on a Smartphone (View on phone)

You can connect the camera to a smartphone over wireless LAN to view and download snapshots and movies in camera memory on up to eight connected smartphones. You can also view snapshots and movies in camera memory on a computer, and copy them to a computer. A smartphone does not need to have the EXILIM Connect app installed in order to access camera images using this function.

1. **Touch "Wireless Mode".**

2. **Touch "Send to phone".**

3. **Touch "View on phone".**

This establishes a connection between the smartphone and camera, and displays a URL.

- If the message "Connect your phone to the access point below." remains on the camera's monitor screen, change the smartphone's Wi-Fi settings so your camera is selected for connection (page 64).
- After about 60 seconds, the camera's monitor screen will go blank. Touching the monitor screen will cause its image to reappear.

4. **On the smartphone, start up its browser app.**

- Accessing the URL displayed by the camera will display an image stored in camera memory.
- To exit the wireless LAN function, touch "Exit" on the camera's monitor screen.

URL

💥 **IMPORTANT!**

- Some smartphone models may not be able to play back movie files.

❚ **NOTE**

- You can also view image in camera memory on a computer's browser by establishing a wireless LAN connection with the computer.
- For information about how to start up EXILIM Connect and view images, refer to the EXILIM Connect manual (page 59). Note that the operation you need to perform depends on whether or not there is a Bluetooth wireless technology connection with the smartphone.

Sharing Snapshots with an Unpaired Smartphone (One Time Share)

Share selected snapshots for viewing on smartphones that are not paired with the camera. With One Time Share, you can send selected snapshots to a smartphone that is Bluetooth paired, which then uploads them to a "Scene Server." To upload snapshots to the Scene sever, you need to have the Scene app installed on the smartphone that is paired with the camera.

• Your smartphone must have Internet access to use this function. If your camera is paired with an iPhone (iOS), you also need to use the iPhone to access the EXILIM Connect settings screen and link with the Scene app before using this function. For information about how to configure settings, refer to the EXILIM Connect User's Guide (page 59).

1. **Touch "Wireless Mode".**

2. **Touch "Send to phone".**

3. **Touch "One Time Share".**

4. **Touch a snapshot you want to share.**

Selecting an image causes a check mark to appear in its check box.

5. **After selecting all of the snapshots you want to share, touch "OK".**

This will cause the images you selected to be sent to the smartphone, which will then upload them to the Scene Server.

• A QR code will appear on the camera monitor screen when image send to the smartphone starts.

• If a send operation is taking a long time, the QR code screen will change to a send in progress message. To stop the send operation while this message is displayed, touch "Complete".

• An error message will appear on the camera's monitor screen if a send operation is not successful for some reason.

• Do not turn off power until the send operation is complete.

6. **Using the smartphone with which the snapshots are to be shared, read the QR code from the camera's monitor screen.**

• Your smartphone must have a QR code reader function in order to read the QR code.

7. **Use smartphone to access the URL produced by reading the QR code.**

This will display the snapshots that were uploaded when the QR code was created.

NOTE

- You can select up to 100 files, totaling no more than 500MB, for a single share operation.
- When a large number of images are selected, it will take some time to send them to the smartphone and/or upload them to the Scene server.
- To discontinue sharing of a set of images, use the Scene app to configure the settings required to stop sharing.
- One Time Share cannot be used if there is insufficient free space on the memory card.

Sending Images from the Camera to a Smartphone as They are Recorded (Auto Send)

Camera settings can be configured to send images automatically over a wireless connection to a smartphone after they are recorded.

Setting	Description
On	Automatically sends images to the smartphone after they are shot.
Off	Auto Send disabled.

1. **Touch "Wireless Mode".**

2. **Touch "Wireless settings".**

3. **Touch "Auto Send".**

4. **Turn on the function.**
   • Images that are sent will be marked by a "⬛" (image sent) icon (page 9).

⁑ **IMPORTANT!**

• To use Auto Send, the camera must be paired with a smartphone (page 63).

▌**NOTE**

• Auto Send can be used only with a smartphone that supports Bluetooth low energy technology. Both a Bluetooth and wireless LAN connection are required between the camera and smartphone to auto send camera images.
• The icons below are displayed on the camera screen while the camera and smartphone are connected.
   – Wireless LAN connection: 📶
   – Bluetooth wireless technology connection: 📶
• You can specify the size of the image sent to the smartphone using "Resize before send" (page 73).
• You can use the smartphone apps below to view snapshots after sending them.
   – iPhone: Camera Roll
   – Android terminal: Gallery, Photo, or another photo browser app
• Auto Send is disabled while the camera's Airplane Mode setting is On (page 72). Auto Send become re-enabled when the camera's Airplane Mode setting is changed to Off.
• Images shot while the Auto Send setting is On will be sent to the smartphone, even if the Auto Send setting is changed to Off before they are sent.
• When On is selected for Auto Send, a message will appear whenever you try to delete a file.
• If you want the images to be sent, leave the camera on until the send operation is complete. After the send operation is complete, close the camera to turn off power.

Configuring Wireless Connection Settings

This section explains wireless mode operations and setting items.

1. Touch the "Wireless Mode".

This will display the wireless mode screen.
- Touching "⬛" or pressing the shutter button will return to the screen that was displayed before the wireless mode screen.

2. Touch "Wireless settings".

This will display the wireless setting screen.

3. Touch the item you want to configure.

4. Change the setting of the selected item.
- Changing a setting returns causes the wireless mode screen to reappear.

Entering the Camera's Airplane Mode (Airplane Mode)

Procedure

Wireless Mode → Wireless settings → Airplane Mode

Wireless connection with the camera is disabled while On is selected for the airplane mode setting. Enter the airplane mode to disable generation of radio waves from the camera while in a medical facility, on an aircraft, etc.

Sending Images from the Camera to a Smartphone as They are Recorded (Auto Send)

Procedure

Wireless Mode ⟶ **Wireless settings** ⟶ **Auto Send**

See page 71 for details.

Resizing Snapshots before Sending Them to a Smartphone (Resize before send)

Procedure

Wireless Mode ⟶ **Wireless settings** ⟶ **Resize before send**

This feature can be use to resize snapshots before they are sent to a smartphone using "Shoot with phone" or "Send to phone".

On	Images are resized before being sent. 4:3 Image: 12M to 3M 1:1 Image: 8M to 2M
Off	Images are sent in the size they were originally recorded.

• In the case of Auto Send, images are always resized before sending regardless of the setting here.

Add Location Info to Snapshots (Location info)

Wireless Mode → Wireless settings → Location info

You can enable the setting below to have the smartphone acquire and record location information (latitude and longitude) when you shoot a snapshot with the camera. Then when you send the snapshot to the smartphone, the location information will be added to it. Note that location information is not added to movies.

Setting	Description
On	Smartphone acquires and records location information when a snapshot is shot, and adds it to the image data when the snapshot is sent to the camera.
Off	Location information is not acquired or added.

⁂ **IMPORTANT!**

• Location information can be recorded only while there is a Bluetooth wireless technology connection between the camera and smartphone.
• To select On for the camera's "Location info" setting, pair the camera with a smartphone (page 63).
• While On is selected for "Location info", the smartphone acquires and records location information each time you shoot a snapshot with the camera.
• Location information is not added to snapshot data stored in camera memory. It is added when the snapshot is sent to the smartphone.
• To use this function, your smartphone's location services must be enabled, and it must be where location information can be received. Location information will not be available to add to images if the smartphone is unable to receive location information.
• Up to 10,000 location records can be maintained by the smartphone. If there are already 10,000 records, shooting a new snapshot will cause the oldest location record to be deleted to make room for the new one.
• Enabling location-based services causes the location information, and other personally identifiable information to be included in the snapshot data. Take care when sharing or publishing such images on web services, etc.
• This camera is not designed to be used for navigation, surveying, or other activities that require precision instruments.

Changing the Camera Password for Wireless LAN Connection (WLAN password)

Procedure

Wireless Mode → Wireless settings → WLAN password

Use procedure to change the password you used when establishing a wireless LAN connection between the camera and a smartphone.

☀ **IMPORTANT!**

• Before changing the wireless LAN password, unpair the camera from its paired smartphone (page 76).

1. **Touch the password digit you want to change.**

2. **Touch "△" or "▽" to change the currently selected digit.**

3. **When the password is the way you want, touch "OK".**

NOTE

• Changing the wireless LAN password will terminate the connection with the smartphone. To reconnect with the smartphone, configure wireless connection settings (page 63). If your smartphone does not support Bluetooth low energy technology, perform the operations below to change your smartphone's Wi-Fi settings.

– iPhone:
Tap the right arrow of the field where the SSID of the camera is displayed in the Wi-Fi settings to delete network settings. After deleting, select the camera SSID again and input the new password.

– Android terminal:
Tap the field where the SSID of the camera is displayed in the Wi-Fi settings and select Forget. Select the camera SSID again and input the new password.

Unpairing the Camera from a Smartphone (Unpairing)

Procedure

Wireless Mode → Wireless settings → Unpairing

Unpairs the camera from a smartphone.
To use the camera with a different smartphone, first unpair it from the current smartphone.

NOTE

• When unpairing, be sure also to perform the unpairing operation on the smartphone as well. For details, refer to the EXILIM Connect User's Guide (page 59).
• Unpairing the camera from a smartphone will result in all pending unsent images to remain unsent.

Printing

Professional Print Service
You can take a memory card that contains the images you want to print to a professional print service and have them printed.

Printing on a Home Printer
You can use a printer equipped with a memory card slot to print images directly from a memory card. For details, see the user documentation that comes with your printer.

Printing with a Computer
After transferring the images to your computer, use commercially available software to print.
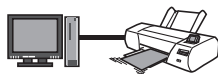
Printing with a Computer

There are a variety of different ways to print images stored on a computer. This section shows one standard printing example.

■ Printing on a Windows Computer

1. **Use the procedure under "Viewing and Storing Images on a Computer" (page 79) to store the image you want to print, and then display the image on your computer screen.**

2. **Click "Print" and then "Print".**

3. **Configure the desired print settings and then click "Print".**

■ Printing on a Macintosh

1. **Use the procedure under "Connecting the Camera to Your Computer and Saving Files" (page 82) to store the image you want to print, and then display the image on your Macintosh screen.**

2. **Click "File" and then "Print".**

3. **Configure print settings and then click "Print".**
This will print the selected image.

Using the Camera with a Computer

Things you can do using a computer...

You can perform the operations described below while the camera is connected to a computer.

Save images to a computer and view them there		• Save images and view them manually (USB connection) (pages 79, 82).
Play back and edit movies		• You can play back movies (pages 81, 83). • To edit movies, use commercially available software as required.

The procedures you need to perform are different for Windows and the Macintosh.

• Windows users should refer to "Using the Camera with a Windows Computer" on page 78.
• Macintosh users should refer to "Using the Camera with a Macintosh" on page 81.

Using the Camera with a Windows Computer

When you want to do this:	Operating System Version	Required Software:
Save images to a computer and view them there manually	Windows 10, Windows 8.1, Windows 7	Installation not required.
Play movies	Windows 10, Windows 8.1, Windows 7	Windows Media Player 12

• The above recommended computer system environments do not guarantee proper operation.
• The type of computer being used, certain settings, and other installed software may interfere with proper operation.

Viewing and Storing Images on a Computer

You can connect the camera to your computer in order to view and store images (snapshot and movie files).

Never use your computer to modify, delete, move, or rename any image files that are in the camera's built-in memory or on its memory card.
Doing so can cause problems with the camera's image management data, which will make it impossible to play back images on the camera and can drastically alter remaining memory capacity. Whenever you want to modify, delete, move, or rename an image, do so only on images that are stored on your computer.

❉ **IMPORTANT!**

• Never unplug the USB cable, or operate the camera while viewing or storing images. Doing so can cause data to become corrupted.

NOTE

• You also can use your computer's card slot (if it has one) or a commercially available card reader to access image files directly from the camera's memory card. For details, see the user documentation that comes with your computer.

■ To connect the camera to your computer and save files

1. **Turn off the camera and then use the micro USB cable that comes with the camera to connect it to your computer.**

   • For details about connecting to the camera and precautions when connecting, see page 18.

[USB] port

Micro USB cable
(included with camera)
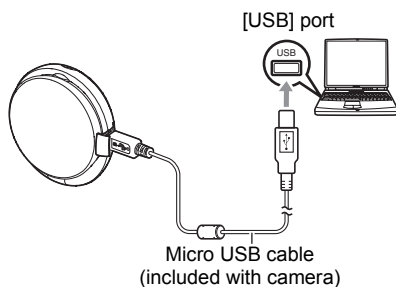
2. **Open the camera to turn it on.**

When you turn on the camera, check to make sure that the color of its operation lamp changes from red to green or amber (page 19). Note that in this case the monitor screen will remain blank.

   • The first time you connect the camera to your computer with the USB cable, an error message may appear on your computer. If this happens, disconnect and then reconnect the USB cable.

---

3. **Windows 10 users: Click "Start" and then "Explorer". Next, in the sidebar, click "PC".**
   Windows 8.1 users: Click "Desktop" and then "Explorer".
   Windows 7 users: Click "Start" and then "Computer".

---

4. **Double-click "Removable Disk".**
- Your computer recognizes the memory card loaded in the camera (or built-in memory if there is no card) as a removable disk.

5. **Right-click the "DCIM" folder.**

6. **On the shortcut menu that appears, click "Copy".**

7. **Windows 10, Windows 8.1 users: Click "Documents".**
Windows 7 users: Click "Start" and then "Documents".
- If you already have a "DCIM" folder in "Documents", the next step will overwrite it. If you want to keep the existing "DCIM" folder, you need to change its name or move it to a different location before performing the next step.

8. **Windows 10, Windows 8.1 users: On the "Documents" menus, click "Home" and then "Paste".**
Windows 7 users: On the "Documents" menu, click "Organize" or "Edit", and then "Paste".
This will paste the "DCIM" folder (and all the image files it contains) into your "Documents" folder. You now have a copy of the files that are in camera memory on your computer.
- After copying images, it is recommended that you right-click the DCIM folder and change its name to something else.

9. **After you finish copying images, disconnect the camera from the computer.**
Close the camera to turn off power. After checking to make sure that the operation lamp is unlit or lit red, disconnect the USB cable.

■ **To view images you copied to your computer**

1. **Double-click the copied "DCIM" folder to open it.**

2. **Double-click the folder that contains the images you want to view.**

3. **Double-click the image file you want to view.**
- For information about file names, see "Memory Folder Structure" on page 85.

■ **Movie Playback Precautions**

- To play back a movie, first save it to your computer and then double-click the movie file. Proper movie playback may not be possible for data accessed over a network, from a memory card, etc.
- Proper movie playback may not be possible on some computers. If you experience problems, try the following.
  – Quit any other applications you have running, and stop resident applications.

Using the Camera with a Macintosh

When you want to do this:	Operating System Version	Required Software:
Save images to your Macintosh and view them there manually	OS X 10.5 or higher	Installation not required.
Play movies		QuickTime Player

- The above recommended computer system environments do not guarantee proper operation.
- Proper operation depends on the level of performance of the computer you are using.

Connecting the Camera to Your Computer and Saving Files

Never use your computer to modify, delete, move, or rename any image files that are in the camera's built-in memory or on its memory card.
Doing so can cause problems with the camera's image management data, which will make it impossible to play back images on the camera and can drastically alter remaining memory capacity. Whenever you want to modify, delete, move, or rename an image, do so only on images that are stored on your computer.

✴ IMPORTANT!

• Never unplug the USB cable, or operate the camera while viewing or storing images. Doing so can cause data to become corrupted.

NOTE

• You also can use your computer's card slot (if it has one) or a commercially available card reader to access image files directly from the camera's memory card. For details, see the user documentation that comes with your computer.

■ To connect the camera to your computer and save files

1. **Turn off the camera and then use the micro USB cable that comes with the camera to connect it to your Macintosh.**

   • For details about connecting to the camera and precautions when connecting, see page 18.
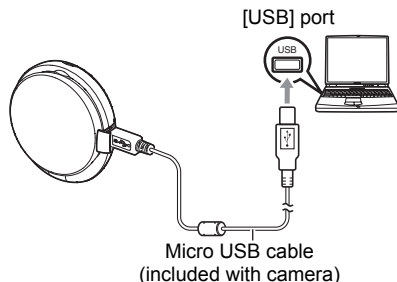
[USB] port

Micro USB cable
(included with camera)

2. **Open the camera to turn it on.**

   • When you turn on the camera, check to make sure that the color of its operation lamp changes from red to green or amber (page 19). In this mode, your Macintosh recognizes the memory card loaded in the camera (or the camera's built-in memory if it does not have a memory card loaded) as a drive. The appearance of the drive icon depends on the Mac OS version you are using.
   • The first time you connect the camera to your Macintosh with the USB cable, an error message may appear on your computer. If this happens, disconnect and then reconnect the USB cable.

3. Double-click the camera's drive icon.

The camera's operation lamp will light green at this time. In this mode, your Macintosh recognizes the memory card loaded in the camera (or the camera's built-in memory if it does not have a memory card loaded) as a drive. The appearance of the drive icon depends on the Mac OS version you are using.

4. Drag the "DCIM" folder to the folder to which you want to copy it.

5. After the copy operation is complete, drag the drive icon to Trash.

6. Disconnect the camera from the computer.

Close the camera to turn off power. After checking to make sure that the operation lamp is unlit or lit red, disconnect the USB cable.

■ **To view copied images**

1. Double-click the camera's drive icon.

2. Double-click the "DCIM" folder to open it.

3. Double-click the folder that contains the images you want to view.

4. Double-click the image file you want to view.

• For information about file names, see "Memory Folder Structure" on page 85.
• An image that was rotated on the camera will be displayed on your Macintosh screen in its original (unrotated) orientation.

■ **Movie Playback Precautions**

• To play back a movie, first save it to your computer and then double-click the movie file. Proper movie playback may not be possible for data accessed over a network, from a memory card, etc.
• Proper movie playback may not be possible on some Macintosh models. If you experience problems, try the following.
  – Shut down other applications that are running.

Files and Folders

The camera creates a file each time you shoot a snapshot, record a movie, or perform any other operation that stores data. Files are grouped by storing them in folders. Each file and folder has its own unique name.
• For details about how folders are organized in memory, see "Memory Folder Structure" (page 85).

Name and Maximum Number Allowed	Example
File	
Each folder can contain up to 9999 files named CIMG0001 through CIMG9999. The extension on the file name depends on the file type.	26th file name: CIMG0026.JPG Extension Serial number (4 digits)
Folders	
Folders are named from 100CASIO to 999CASIO. There can be up to 900 folders in memory.	First folder name: 100CASIO Serial number (3 digits)

• You can view folder and file names on your computer. For details about how file names are displayed on the camera's monitor screen, see page 9.
• The total number of folders and files allowed depends on the image size and quality, and capacity of the memory card being used for storage.

Memory Card Data

The camera stores images you shoot in accordance with the Design Rule for Camera File System (DCF).

■ About DCF

The following operations are supported for DCF-compliant images. Note, however, that CASIO makes no performance guarantees concerning these operations.

• Transferring this camera's DCF-compliant images to another manufacturer's camera and view them.
• Printing this camera's DCF-compliant images on another manufacturer's printer.
• Transferring another camera's DCF-compliant images to this camera and view them.

■ Memory Folder Structure

Memory

```
┌─□ DCIM              DCIM Folder
│   ├─□ 100CASIO      Recording Folder
│   │   CIMG0001.JPG  Image File
│   │   CIMG0002.MOV  Movie File
│   │   ⋮
│   ├─□ 101CASIO      Recording Folder
│   ├─□ 102CASIO      Recording Folder
│   │   ⋮
│
└─□ EX_CNCT           Created after execution of Auto Send or other function with EXILIM Connect.
    ⋮
```
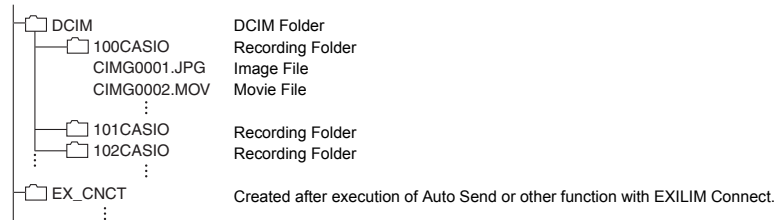
• In addition to the above, there is also an "EXILIM" folder for storage of shooting information.

■ Supported Image Files

• Image files shot with this camera
• DCF-compliant image files

This camera may not be able to display an image, even if it is DCF-compliant. When displaying an image recorded on another camera, it may take a long time for the image to appear on this camera's monitor screen.

■ Built-in Memory and Memory Card Data Handling Precautions

• Whenever copying memory contents to your computer, you should copy the DCIM folder and all of its contents. A good way to keep track of multiple DCIM folders it to change their names to dates or something similar after you copy them to your computer. If you later decided to return a DCIM folder to the camera, however, be sure to change its name back to DCIM. The camera is designed to recognize only a root file with the name DCIM. Note the camera also will not be able to recognize the folders inside the DCIM folder unless they have the names they originally had when you copied them from the camera to your computer.
• Folders and files must be stored in accordance with the "Memory Folder Structure" shown on page 85 in order for the camera to be able to recognize them correctly.

Other Settings (Set Up)

This section explains menu items that you can use to configure settings and perform other operations in both the REC mode and PLAY mode.

Adjusting Monitor Screen Brightness (Screen)

| Procedure |

" ≡ " (Menu) ⟶ Setup ⟶ Screen

You can use the following procedure to change the brightness of the monitor screen.

Auto	With this setting, the camera detects available light levels and automatically adjusts the brightness of the monitor screen accordingly.
+2	Brightness that is greater than +1, which makes the screen easier to view. This setting consumes more power.
+1	Bright setting for outdoor use, etc. Brightness that is greater than 0.
0	Normal monitor screen brightness for indoor use, etc.
−1	Screen brightness for viewing in a dark environment without disturbing others around you.

Selecting Display Information (Info)

| Procedure |

" ≡ " (Menu) ⟶ Setup ⟶ Info

Selecting "On" or "Make-up" displays setup status and other information.
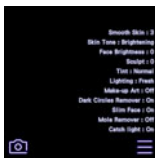
NOTE

• When "Info" is enabled (On) in the PLAY mode, the exposure, shutter speed, and ISO sensitivity setting values of the currently displayed image are displayed in red when the current image's Auto Exposure (AE) is not correct.

Locking the Screen (Screen Lock)

" ☰ " (Menu) → Setup → Screen Lock

Normally, the arrangement of icons and the images displayed on the camera monitor screen change automatically in accordance with the camera's orientation. Selecting "On" for the "Screen Lock" setting will lock the screen so its contents do not readjust to match the camera orientation.

Specify the Shutter Sound

" ☰ " (Menu) → Setup → Shutter Sounds

You can select from among two shutter sounds.

Configuring Camera Sound Settings (Sounds)

" ☰ " (Menu) → Setup → Sounds

Startup		Toggles the operation tone between on and off.
Half Shutter		
Shutter		
Operation		
Volume	**Operation Vol**	Specifies the sound volume.
	Playback Vol	Specifies the volume of movie audio output.

• Setting a volume level of 0 mutes output.

Configuring World Time Settings (World Time)

" ☰ " (Menu) → Setup → World Time

Setting a Travel Destination

You can use the World Time screen to view the current time in a zone that is different from your Home City when you go on a trip, etc. World Time displays the current time in 162 cities in 32 time zones around the globe.

1. **Touch "Destination".**
  • To change the geographic area and city for the time where you normally use the camera, select "Home".

2. **Touch "City".**
  • To specify summer time for the destination city, select "DST" and then select the "On" setting (Summer time is used in some geographical areas to advance the current time setting by one hour during the summer months).

3. **Drag upwards and downwards to display the area of the destination city and then touch the area.**

4. **Drag upwards and downwards until you find the city you want, and then touch to select it.**

❉ **IMPORTANT!**

• Before configuring World Time settings, make sure that the Home City setting is the place where you live or normally use the camera. If it isn't, select "Home" on the screen in step 1 and configure the Home City, date, and time settings as required (page 89).

Selecting the Time Display

Use this procedure to specify the time displayed by the camera for your home city and destination.

1. **Touch "Time".**

2. **Touch "Home" or "Destination".**
  This will configure the time setting of the location you touched in the previous step.

Setting the Camera's Clock (Adjust)

" ☰ " (Menu) → Setup → Adjust

1. Touch the value you want to change (year, month, day, hour, minute).

2. Touch " ▲ " or " ▼ " to change the currently selected value.

   • You can specify a date from 2001 to 2049.
   • Be sure to select your Home City (page 88) before setting the time and date. If you set the time and date while the wrong city is selected for your Home City, the times and dates of all of the World Time cities (page 88) will be wrong.
   • To switch between 12-hour and 24-hour format, touch the 12/24 hour switch icon.
   • Touching and holding " ▲ " or " ▼ " scrolls at high speed.

12/24 hour
switch icon

3. Touch "OK".

Specifying the Date Style (Date Style)

" ☰ " (Menu) → Setup → Date Style

You can select from among three different styles for the date.

Example: July 10, 2018

YY/MM/DD	18/7/10
DD/MM/YY	10/7/18
MM/DD/YY	7/10/18

Specifying the Display Language (Language)

Procedure

" ☰ " (Menu) ⟶ Setup ⟶ Language

■ **Specify the display language you want.**

1. **On the menu screen, touch "Setup".**

2. **Touch "Language".**

3. **Drag upwards and downwards until you find the language you want, and then touch to select it.**

‹ Setup	
World Time	
Adjust	2017/ 7/ 4
Date Style	YY/MM/DD
Language	English

• Camera models sold in certain geographic areas may not support display language selection.

Other Settings (Set Up)
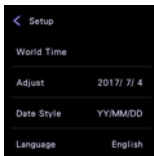
Displaying a Startup Screen at Power On (Startup)

Procedure

" ☰ " (Menu) ⟶ Setup ⟶ Startup

Selecting "On" for Startup causes a built-in startup screen to appear on the monitor screen whenever the camera is turned on.

Specifying LED Light Operation (Illumination)

Procedure

" ☰ " (Menu) ⟶ Setup ⟶ Illumination

The LED lights when you turn on the camera and synchronized with the Selfie Timer (page 37).

On	Lights when the camera is turned on and with the Selfie Timer count.
Timer only	Lights with the Selfie Timer count.
Startup only	Lights when the camera is turned on.
Off	Does not light when the camera is turned on and with the Selfie Timer count.

Formatting Built-in Memory or a Memory Card (Format)

Procedure

" ☰ " (Menu) ⟶ Setup ⟶ Format

If a memory card is loaded in the camera, this operation will format the memory card. It will format built-in memory if no memory card is loaded.
• The format operation will delete all contents on the memory card or in built-in memory. It cannot be undone. Make sure you do not need any data currently on the card or in built-in memory before you format it.
• Formatting built-in memory or a memory card will delete all protected images stored there.
• Check the battery level before starting a format operation and make sure it is not too low. Formatting may not be performed correctly and the camera may stop operating normally if the camera powers down while formatting is in progress.

Resetting the Camera to Factory Defaults (Reset)

Procedure

" ≡ " (Menu) → Setup → Reset

See page 118 for details about the camera's factory default settings.
The settings below are not reset.
World Time settings, clock settings, date style, screen language, WLAN password

NOTE

• Resetting the camera does not unpair it from a smartphone (page 63).
• Resetting the camera causes the Airplane Mode setting (page 72) to become Off.

Checking the Current Camera Firmware Version (Version)

Procedure

" ≡ " (Menu) → Setup → Version

Selecting this menu item displays the camera model name, the version of firmware
installed on the camera, the camera's MAC address, and the camera's serial number.
• Note that the MAC address is fixed number that functions as the camera's network
  device identifier.
• Check this screen after updating the camera's firmware to confirm that updating
  was actually performed.

Other Settings (Set Up)

Appendix

Safety Precautions

⚠ DANGER

This symbol indicates information that, if ignored or applied incorrectly, creates the danger of death or serious personal injury.

⚠ WARNING

This indication stipulates matters that have the risk of causing death or serious injury if the product is operated incorrectly while ignoring this indication.

⚠ CAUTION

This indication stipulates matters that have the risk of causing injury as well as matters for which there is the likelihood of occurrence of physical damage only if the product is operated incorrectly while ignoring this indication.

Symbol Examples

This circle with a line through it (⊘) means that the indicated action must not be performed. Indications within or nearby this symbol are specifically prohibited. (The example at left indicates that disassembly is prohibited.)

The black dot (●) means that the indicated action must be performed. Indications within this symbol are actions that are specifically instructed to be performed. (The example at left indicates that the power plug must be unplugged from the electrical socket.)

⚠ DANGER
■ **Built-in Rechargeable Battery**
• To charge the battery, use only the method specifically described in this manual. Attempting to charge the battery by an unauthorized means creates the risk of battery overheating, fire, and explosion.
• Do not expose or immerse the battery in fresh water or salt water. Doing so can damage the battery, and cause deterioration of its performance and loss of service life.
• The battery is intended for use with a CASIO Digital Camera only. Use with any other device creates the risk of the battery damage, or deterioration of battery performance and service life.

⚠ DANGER

- Failure to observe any of the following precautions creates the risk of battery overheating, fire, and explosion.
  - Never use or leave the battery near open flame.
  - Do not expose the battery to heat or fire.
  - Make sure the battery is oriented correctly when charging it.
  - Never carry or store the battery together with items that can conduct electricity (necklaces, pencil lead, etc.).
  - Never disassemble the battery, pierce it with a needle, or expose it to strong impact (hit it with a hammer, step on it, etc.), and never apply solder to it. Never place the battery into a microwave oven, dehumidifier, high-pressure generating device, etc.
  - Never remove the outer sticker from the battery.
- Do not use or leave the battery under direct sunlight, in an automobile parked in the sun, or in any other area subject to high temperatures. Doing so can damage the battery, and cause deterioration of its performance and loss of service life. Also, these conditions can cause the battery to swell to the point that you may not be able to remove it.
- Battery fluid can damage your eyes. Should battery fluid get into your eyes accidentally, immediately rinse them with clean tap water and then consult a physician.

⚠ WARNING

■ Smoke, abnormal odor, overheating, and other abnormalities

• Continued use of the camera while it is emitting smoke or strange odor, or while it is overheating creates the risk of fire and electric shock. Immediately perform the following steps whenever any of the above symptoms are present.

   1. Close the camera to turn off power.

     * If the camera will not turn off for some reason, hold down shutter button for about ten seconds.

   2. If you are using the USB-AC adapter to power the camera, unplug the power plug from the power outlet.

   3. Contact your retailer or nearest CASIO authorized service center.

■ Keep Away From Fire

• Never expose the camera to fire, which can cause it to explode and creates the risk of fire and personal injury.

■ Avoid Use While In Motion

• Never use the camera to record or play back images while operating an automobile or other vehicle, or while walking. Looking at the monitor while in motion creates the risk of serious accident.

■ LED Light

• Never use the LED light while it is pointed in the direction of a person operating a motor vehicle. Doing so can interfere with the driver's vision and create the risk of accident.

■ USB-AC Adapter

• Misuse of USB-AC adapter creates the risk of fire and electric shock. Be sure to observe the following precautions.

   – Use only the specified USB-AC adapter.

   – Never use the USB-AC adapter with another device.

   – Use a power outlet that matches the power supply specified for the USB-AC adapter.

   – Never plug the USB-AC adapter or power cord into a wall outlet that is shared by other devices, or into a shared extension cord.

   – Never locate the USB-AC adapter near a stove or other heating device.

• Misuse of the USB-AC adapter can cause them to become damaged, creating the risk of fire and electric shock. Be sure to observe the following precautions.

   – Never place heavy objects on the USB-AC adapter or subject it to direct heat.

   – Do not modify the USB-AC adapter, allow it to become damaged, or forcibly bend it.

   – Do not twist or pull on the power cord.

   – When in use, locate the cord where it will not be tripped over.

⚠ WARNING

- Never touch the power plug while your hands are wet. Doing so creates the risk of electric shock.

- Should the power cord or power plug become damage, contact your retailer or nearest CASIO authorized service center.

- Do not use the USB-AC adapter in areas where liquids* might spill on them. Liquids create the risk of fire and electric shock.
  - * Liquids: Water, sports drinks, seawater, animal or pet urine, etc.

- Do not place a flower vase or any other liquid container on top of the USB-AC adapter. Water creates the risk of fire and electric shock.

- Do not touch the camera or USB-AC adapter during lightning storms.

If a power cord was included with your camera

- The power cord that comes with the camera is designed for use in the country where the camera was purchased. If you use the camera in another country, be sure to use a power cord that conforms to that country's ratings and power supply voltage. Use of an improper power cord creates the risk of fire and electric shock.

- Before going out, be sure to unplug the USB-AC adapter from the power outlet and put in a place away from objects used by animals and pets. An animal or pet chewing on the power cord can cause it short, leading to the risk of fire.

■ Water and Foreign Matter

- Water, other liquids, or foreign matter (especially metal) getting inside the camera creates the risk of fire and electric shock. Immediately perform the following steps whenever any of the above symptoms are present. Particular care is required when using the camera where it is raining or snowing, near the ocean or other body of water, or in a bathroom.
  1. Close the camera to turn off power.
     - * If the camera will not turn off for some reason, hold down shutter button for about ten seconds.
  2. If you are using the USB-AC adapter to power the camera, unplug the power plug from the power outlet.
  3. Contact your retailer or nearest CASIO authorized service center.

■ Disassembly and Modification

- Never try to take it apart or modify it in any way. Doing so creates the risk of electric shock, burn injury, and other personal injury. Be sure to leave all internal inspection, maintenance, and repair up to your retailer or nearest CASIO authorized service center.

⚠️ WARNING

■ Dropping and Rough Treatment

• Continued use of the camera after it is damaged by dropping or other rough treatment creates the risk of fire and electric shock. Immediately perform the following steps whenever any of the above symptoms are present.

  1. Close the camera to turn off power.

    * If the camera will not turn off for some reason, hold down shutter button for about ten seconds.

  2. If you are using the USB-AC adapter to power the camera, unplug the power plug from the power outlet.

  3. Contact your retailer or nearest CASIO authorized service center.

■ Memory Cards

• Memory cards are small and present a risk of accidentally being swallowed by infants and young children. Keep memory cards out of the reach of infants and young children. If a memory card is ever swallowed accidentally, contact a physician immediately.

■ Precaution when Camera is On

• Do not touch the camera for long periods while it is on. The camera becomes warm when on, and long term contact creates the risk of low-temperature burns.

■ Interference with other digital devices

• Should you notice radio interference or other problems on other devices is being caused while using this camera, stop using the wireless functions (Remote Capture, image transfer, wireless image viewing, etc.) of this camera, or turn off the camera. Use of wireless functions creates the risk of radio interference and abnormal operation of other devices.

• When in a medical facility or aircraft, comply with instructions of personnel in charge. Electromagnetic waves and other signals emitted by the camera's wireless function create the risk of accident.

• Do not use the camera's wireless function while in the vicinity of high precision digital devices or digital devices that use weak signals. Doing so can interfere with proper operation of such digital devices and create the risk of accident.

• When using the camera's wireless function, keep it away from any person wearing a pacemaker. Magnetism emitted by the camera may affect cardiac pacemakers and other medical devices. Should you ever notice any abnormality, immediately move away from the product and contact a physician.

<table>
<tr><td colspan="2" align="center">⚠ WARNING</td></tr>
<tr><td>• On a crowded train or any other crowded location where there is the possibility of being in the vicinity of a person wearing a cardiac pacemaker, stop using the wireless functions (Remote Capture, image transfer, wireless image viewing, etc.) of this camera, or turn off the camera. Radio waves emitted by the camera's wireless function may affect pacemaker operation.</td><td>❗</td></tr>
</table>

⚠ CAUTION

■ USB-AC Adapter

• Misuse of the USB-AC adapter creates the risk of fire and electric shock. Make sure you observe the following precautions.
  – Never cover the USB-AC adapter or power cord with a quilt, blanket, or other cover while it is in use, and do not use it near a heater. Doing so can interfere with heat radiation and cause the area around them to become hot.
  – Do not use detergent when cleaning the power cord, the USB-AC adapter, or the USB cable (especially the plugs and jacks).
  – Insert the power plug into the wall outlet as far as it will go.
  – Unplug the power plug from the wall outlet before leaving the camera unattended for long periods, such as when leaving on a trip, etc.
  – At least once a year, use a cloth or vacuum cleaner to clean any dust build up on the prongs of the power plug and in the area around them.
  – (Power cord included with your camera) When unplugging from the wall outlet, never pull on the power cord. Grasp the power plug and pull.

■ Built-in Rechargeable Battery

• If battery charging does not end normally within the specified charging time, stop charging anyway and contact your local CASIO authorized service center. Continued charging creates the risk of battery overheating, fire, and explosion.

• Be sure to read the user documentation that comes with the camera before using or charging the battery.

• Store batteries in a location that cannot be reached by infants and young children. When using a battery where infants and young children are present, be on guard to ensure that they do not have the chance to remove the battery from the camera.

• Do not leave batteries near areas used by pets. A pet chewing on a battery can lead to accidents caused by the battery leaking, overheating, or exploding.

• Should fluid from a battery accidentally get onto clothing or your skin, immediately rinse it off with clean tap water. Prolonged contact with battery fluid can cause skin irritation.

■ Connections

• Never plug any devices that are not specified for use with this camera into connectors. Connecting a non-specified device creates the risk of fire and electric shock.

■ Unstable Locations

• Never place the camera on an unstable surface, on a high shelf, etc. Doing so can cause the camera to fall, creating the risk of personal injury.

Appendix

⚠ CAUTION

■ Locations To Be Avoided

• Never leave the camera in any of the following types of locations. Doing so creates the risk of fire and electric shock.
  – Areas subject to large amounts of humidity or dust
  – Food preparation areas or other locations where oil smoke is present
  – Near heaters, on a heated carpet, in areas exposed to direct sunlight, in a closed vehicle parked in the sun, or other areas subject to very high temperatures

■ Monitor Screen

• Do not apply strong pressure to the LCD panel surface or subject it to strong impact. Doing so can cause the display panel glass to crack and lead to personal injury.

• Should the monitor screen ever become cracked, never touch any of the liquid inside the monitor screen. Doing so creates the risk of skin inflammation.

• Should monitor screen liquid ever get into your mouth, immediately rinse your mouth out and contact your physician.

• Should monitor screen liquid ever get into your eyes or onto your skin, immediately rinse with clean water for at least 15 minutes and contact your physician.

■ Backing Up Important Data

• Always keep backup copies of important data in camera memory by transferring it to a computer or other storage device. Note that data can be deleted in the case of camera malfunction, repair, etc.

■ LED Light

• Do not fire the LED light or use other light emitting functions while the light is pointed in the direction of and too close to a person's face. Doing so creates the risk of momentary loss of eyesight.

Precautions During Use

■ Data Error Precautions

Your digital camera is manufactured using precision digital components. Any of the following creates the risk of corruption of data in camera memory.

– Removing the battery or memory card while the camera is performing some operation
– Removing the battery or memory card while the operation lamp is flashing green after turning off the camera
– Disconnecting the USB cable while communication is in progress
– Other abnormal operations

Any of the above conditions can cause an error message to appear on the monitor screen (page 124). Perform the action indicated by the message that appears.

■ Operating Environment

• Operating Temperature Requirements: 0 to 40°C (32 to 104°F)
• Operating Humidity: 10 to 85% (non condensation)
• Do not place the camera in any of the following locations.
    – In an area exposed to direct sunlight, or large amounts of moisture, dust, or sand
    – Near heating or cooling devices, or in other areas subjected to extreme changes in temperature or humidity
    – Inside of a motor vehicle on a hot day, or in an area subjected to strong vibration

■ Condensation

Sudden and extreme temperature changes, such as when the camera is moved from the outdoors on a cold winter day into a warm room, can cause water droplets called "condensation" to form on the interior and the exterior of the camera, which creates the risk of malfunction. To prevent condensation from forming seal the camera in a plastic bag before changing locations. Then leave the bag sealed to allow the air inside to naturally change to the same temperature as the air in the new location. After that, remove the camera from the bag and open the battery cover for a few hours.

■ Lens

• Never apply too much force when cleaning the surface of the lens. Doing so can scratch the lens surface and cause malfunction.
• You may sometimes notice some distortion in certain types of images, such as a slight bend in lines that should be straight. This is due to the characteristics of lenses, and does not indicate malfunction of the camera.

■ Caring for your camera

• Never touch the lens with your fingers. Finger smudges, dirt, and other foreign matter on the lens can interfere with proper operation of the camera. Use a blower or other means to keep the lens and flash window free of dirt and dust, and wipe gently with a soft, dry cloth.
• To clean the camera, wipe it with a soft, dry cloth.

■ **Precautions During Wireless Function (Wireless LAN, Bluetooth Wireless Technology) Use**

• Operation of this product may affect or may be affected by nearby devices that use wireless functionality.
• This product is subject to the Export Administration Regulations (EAR) of the United States, and so it cannot be exported to or brought into countries that fall under U.S. Embargoes and Other Special Controls.

Radio transmission interception

The radio waves that are used to send and receive data can be intercepted by third parties.

Unauthorized access

CASIO COMPUTER CO., LTD. shall be held in no way liable for any unauthorized access and/or use of the access point equipped on this product if the product is ever lost or stolen.

Use as a wireless device

Use the wireless function of this product only as specifically described in this manual. Any other use is unintended use, and CASIO COMPUTER CO., LTD. shall be held in no way liable for any damages arising out of unintended use.

Magnetism, electrostatic charge, and radio interference

Do not use this product near a microwave oven or any other area where magnetism, electrostatic charge, or radio interference is generated. Radio wave reception may be poor in certain environments.
Also note that other devices using the same 2.4GHz band used by this product may cause reduced processing speeds in both devices.

Connection to a public LAN

This product does not support wireless LAN connection over a public wireless LAN environment.

Intended Areas of Use

This camera is intended for use in countries or areas listed at the website linked below.
http://world.casio.com/r-law/dc/
Even if you are in a country or area whose name is included in the list at the website linked above and even if your camera model is the same at the one described in this manual, your camera may not comply with radio laws and other laws in your area or country if you purchased a model intended for another country or area on the Internet, etc. In this case, it is up to you to determine if your camera can be used legally in your country or area.
Use of this camera in a country or area other than where it was originally purchased runs the risk of being in violation of local radio laws and other laws. Note that CASIO COMPUTER CO., LTD. shall not be held in any way liable for any such violations.

■ Other Precautions

The camera becomes slightly warm during use. This is normal and does not indicate malfunction.

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OpenVG 1.1 Reference Implementation

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Power Supply

Charging

■ If the camera's operation lamp starts flashing red...

If the operation lamp starts flashing red during charging, it means that further charging is not possible for one of the reasons below. Perform the actions described below to correct the problem and then try charging again.

Ambient temperature or the temperature of the battery is abnormally high or low

Unplug the USB cable from the camera and wait for a while until the camera is within the temperature range of 15°C to 35°C (59°F to 95°F), and then try charging again.

Safety timer activated

A battery that has not been used for a long time, certain types of computers, and connection conditions can cause charging to take longer than normal. If charging takes longer than about five hours, a safety timer will terminate it automatically, even if the battery is not fully charged. If the battery has not been used for a very long time, charging may terminate automatically after only about 60 minutes.

1) Using a battery that has not been used for a long time.
   Disconnect and then reconnect the USB cable to resume charging.
2) Insufficient power supply when connected to computer
   The camera can be charged only via a USB 2.0 standard USB port. Connect directly to a USB port what supplies a current of 500mA.

For details about the power supply capacity of a computer's USB port, contact the manufacturer of the computer. Though disconnecting and then reconnecting the USB cable will resume charging, you may need to do so repeatedly if the power supply capacity of the computer is low.

If problems persist after you perform the above steps or if the battery fails to charge after 5 hours, it could mean that the battery is faulty. Contact your nearest CASIO authorized service center.

Battery Precautions

- Operation provided by a battery under cold conditions is always less than operation under normal temperatures. This is due to the characteristics of the battery, not the camera.
- Charge the battery in an area where the temperature is within the range of 15°C to 35°C (59°F to 95°F). Outside this temperature range charging can take longer than normal or even fail.
- If the battery provides only very limited operation following a full charge, it probably means it has reached the end of its service life. Have the battery replaced with a new one. Contact your retailer or a CASIO authorized service center to have the battery replaced. Do not try to replace the battery yourself.
- Store batteries in a cool, dry place (20°C or lower).
- In order to prevent over discharge when storing the camera for long periods, fully the charge the battery at least once every six months.

Using the Camera in another Country

■ Precautions during Use

- The bundled USB-AC adaptor is designed for operation with any power supply in the range of 100V to 240V AC, 50/60Hz. Note, however, that the shape of the power plug depends on each country or geographic area. Before taking the camera and USB-AC adaptor along on a trip, check with travel agent about the power supply requirements in your destination(s).
- Do not connect the USB-AC adaptor to a power supply through a voltage converter or similar device. Doing so can lead to malfunction.

Using a Memory Card

See page 24 for information about supported memory cards and how to load a memory card.

■ Using a Memory Card

• If a memory card starts to behave abnormally during image playback, you can restore normal operation by reformatting it (page 91). However, it is recommended that you always take along multiple memory cards whenever using the camera far away from the home or office.
• As you record data to and delete data from a memory card a number of times, it loses its ability to retain data. Because of this, periodic re-formatting of a memory card is recommended.
• Electrostatic charge, electrical noise, and other phenomena can cause data to become corrupted or even lost. Make sure that you always back up important data on other media (CD-R, CD-RW, hard disk, etc.).

■ Memory Card Handling Precautions

Certain types of memory cards can slow down processing speed. Whenever possible use an Ultra High-Speed Type memory card. Note, however, that not all operations can be guaranteed even if an Ultra High-Speed Type memory card is used. Certain movie quality settings can result in too much time being required to record data, which can result in breaks in the image and/or audio during playback. If this happens, "⬛" (Movie Stop) will be "⬛".

■ Discarding or Transferring Ownership of a Memory Card or the Camera

The format and delete functions of the camera do not actually delete files from the memory card. The original data remains on the card. Note that responsibility for the data on a memory card lies with you. The following procedures are recommended whenever you discard a memory card or the camera, or if you transfer ownership to another party.

• When discarding a memory card, either physically destroy the memory card or use commercially available data delete software to completely delete the data on the memory card.
• When transferring ownership of a memory card to another party, use commercially available data deletion software to completely delete the data on it.
• Use the format function (page 91) to completely delete the data in built-in memory before discarding or transferring ownership of the camera.

Reset Initial Default Settings

The tables in this section show the initial default settings on menus that appear in the REC mode and PLAY mode when you reset the camera (page 92).

• A dash (–) indicates an item whose setting is not reset or an item for which there is no reset setting.

⁂ **IMPORTANT!**

• Some menu items may not be available, depending on the recording mode being use.

■ REC Menu

Wireless Mode	–		**Movie Quality**	1024
Touch Shutter	On		**Review**	Type 2
L/R Flip Shot	On		**Setup**	→ See below.
Image Size	1:1			

* Default setting depends on country or geographic region.

■ PLAY Menu

Wireless Mode	–		**Trimming**	–
Delete	–		**Movie repeat play**	Off
Circular Cropping	–		**Setup**	→ See below.
Protect	–			
Rotation	–			

■ Setup Menu

Screen	Auto
Info	Off
Screen Lock	Off
Shutter Sounds	1
Sounds	Startup: On / Half Shutter: On / Shutter: On / Operation: On / Operation Vol: 3 / Playback Vol: 3
World Time	–
Adjust	–

Date Style	–
Language	–
Startup	Off
Illumination	On
Format	–
Reset	–
Version	–

■ Make-up Level

Smooth Skin	3
Skin Tone	Brightening
Face Brightness	0
Sculpt	0
Tint	Normal
Lighting	Fresh

Make-up Art	Off
Dark Circles Remover	On
Slim Face	On
Mole Remover	Off
Catch light	On

■ Wireless settings

Airplane Mode	Off
Auto Send	Off
Resize before send	On
Location info	Off
WLAN password	–
Unpairing	No

When things don't go right...

Troubleshooting

Problem	Possible Cause and Recommended Action
Power Supply	
Power does not turn on.	1)The battery of new camera is not charged. Charge the battery before using the camera. 2)The camera battery may be dead. Charge the battery (page 15). If this does not resolve the problem, contact your retailer or a CASIO authorized service center.
The camera suddenly powers down.	1)The camera is designed to turn off automatically after no operation is performed for about five minutes. Turn power back on. 2)The battery may be dead. Charge the battery (page 15). 3)The camera's protection function may have activated because camera temperature is too high. Turn off the camera and wait until it cools down before trying to use it again.
Power will not turn off. Nothing happens when a button is pressed.	Hold down the shutter button for at least 10 seconds to reset the camera.
Charging	
The operation lamp does not light red and the battery won't charge.	1)Unplug the USB cable from the camera and then plug it back in again. 2)Make sure the camera is turned off when you connect the USB cable. Charging may not start if you connect the USB cable while power is turned on.
Image Recording	
Image is not recorded when the shutter button is pressed.	1)If the camera is in the PLAY mode, touch " 📷 " (REC) to enter the REC mode. 2)If the message "Memory Full" appears, transfer images to your computer, delete images you no longer need, or use a different memory card.
Images are out of focus.	1)If the lens is dirty, clean it off. 2)The subject may not be in the center of the focus frame when you compose the image. 3)You may be moving the camera when shooting. Place the camera on a tabletop or some other stable surface, or find some way to fix the camera in place. 4)You may be pressing the shutter button all the way without waiting for Auto Focus. Half-press the shutter button and allow enough time for Auto Focus to focus.

Problem	Possible Cause and Recommended Action
The subject is out of focus in the recorded image.	The image may not be focused properly. When composing the image, make sure the subject is located inside the focus frame.
The LED light does not light.	If the battery is dead, charge it (page 15).
Camera powers down during Self-timer countdown.	The battery may be dead. Charge the battery (page 15).
There is digital noise in images.	Sensitivity may have been increased automatically for a dark subject, which increases the chance of digital noise. Use a light or some other means to illuminate the subject.
A recorded image was not saved.	1) Camera power may have been turned off before the save operation was complete, which will result in the image not being saved. If the battery indicator shows ▉▉, charge the battery as soon as possible (page 15). 2) You may have removed the memory card from the camera before the save operation was complete, which will result in the image not being saved. Do not remove the memory card before the save operation is complete.
Shots in dark locations come out bad.	Use the LED light.
The image is out of focus during movie recording.	1) Focusing may not be possible because the subject is outside the focus range. Shoot within the allowable range. 2) The lens may be dirty. Clean the lens (page 102).
I can't change the settings of menu items. Menu items for some settings are not displayed on the menu.	Some menu items may not be available, depending on the recording mode in use.

Problem	Possible Cause and Recommended Action
Playback	
The color of the playback image is different from what appears on the monitor screen when shooting.	Sunlight or light from another source may be shining directly into the lens when you are shooting. Position the camera so sunlight does not shine directly into the lens.
Images are not displayed.	This camera cannot display non-DCF images recorded onto a memory card using another digital camera.
Images cannot be rotated.	Note that you cannot edit the following types of snapshots. • Snapshots recorded with another camera • Extracted subjects
File Deletion	
A file cannot be deleted.	The file may be protected. Unprotect the file (page 54).
Wireless Connection	
I can't establish a wireless connection. The wireless connection is broken.	1) The camera cannot connect with a smartphone if they are too far apart from each other. 2) The smartphone may be connected with another wireless device. Check the smartphone's Wi-Fi settings and confirm that the camera is selected for wireless connection (page 63). 3) Connection may have been lost due to interference caused by a nearby microwave oven, cordless phone, or other wireless device. Move the camera away from the device causing the problem.
Location Information	
Location information isn't being added to my images.	1) Pair the camera and smartphone, and then establish a Bluetooth wireless technology connection between them. 2) If you are shooting snapshots, select On for the camera's location information setting (page 74). 3) Configure smartphone settings to acquire location information, and make sure it is where location information can be received.

Problem	Possible Cause and Recommended Action
Other	
The wrong date and time are displayed, or the wrong date and time are being stored along with image data.	The date and time setting is off. Set the correct date and time (page 89).
The messages on the display are in the wrong language.	The wrong display language is selected. Change the display language setting (page 90).
Images cannot be transferred over a USB connection.	1) The USB cable may not be connected securely. Check all connections. 2) If the camera is not turned on, turn it on. 3) Your computer may not be able to recognize the camera if you connect via a USB hub. Always connect directly to the computer's USB port.
Language selection screen appears when the camera is turned on.	1) You did not configure initial settings after purchasing the camera or the camera may have been left with a dead battery. Check the camera setup (pages 21, 89). 2) There may be a problem with the camera's memory data. If this is the case, perform the reset operation to initialize the camera's setup (page 92). After that, configure each setting. If the language selection screen does not re-appear when you turn the camera on, it means that the camera's memory management data has been restored. If the same message appears after you turn power back on, contact your retailer or a CASIO authorized service center.
There are various indicators and values on the monitor screen.	The monitor screen shows indicators and other information about shooting conditions and the image you are recording. You can disable display of indicators and values by selecting "Off" for "Info" on the Setup menu.
Buttons are not responsive right after the power has been turned on.	With large capacity memory cards there is a delay after the power has been turned on before the buttons become responsive.

Display Messages

Battery is low.	Battery power is low.
Card ERROR	There is something wrong with the memory card. Turn off the camera, remove the memory card and then reload it into the camera. If this message re-appears when you turn the camera back on, format the memory card (page 91). ✹ **IMPORTANT!** • Formatting a memory card deletes all its files. Before formatting, try transferring recoverable files to a computer or some other storage device.
Communication stopped.	This message appears when the wireless LAN connection is broken for some reason during data communication between the camera and smartphone.
File could not be saved because battery is low.	Battery power is low, so an image file could not be saved.
Folder cannot be created.	You are trying to record a file while there are already 9999 files stored in the 999th folder. If you want to record more, delete files you no longer need (page 31).
LENS ERROR	This message appears and the camera turns off whenever lens performs some unexpected operation. If the same message appears after you turn power back on, contact a CASIO authorized service center or your original retailer.
Memory Full	Memory is full with images you recorded and/or files saved by editing operations. Delete files you no longer need (page 31).
Overheating. Power will turn off.	The camera's protection function may have activated because camera temperature is too high. Turn off the camera and wait until it cools down before trying to use it again.
Record Error	Image compression could not be performed for some reason during image data storage. Shoot the image again.
There are no files.	There are no files in built-in memory or on the memory card.
This card is not formatted.	The memory card loaded in the camera is not formatted. Format the memory card (page 91).
This function cannot be used.	This message will appear part way through an operation when you attempt to use a function that is not allowed in combination with another function.

Number of Snapshots/Movie Recording Time

Snapshot

Settings	Image Size (Pixels)	Approximate File Size	Built-in Memory[*1] Recording Capacity	microSD Memory Card[*2] Recording Capacity
1:1	8M (2976×2976)[*3]	2.97 MB	9	3048
4:3	12M (4000×3000)	4.13 MB	7	2286

Movies

Image Size / Pixels (Audio)	Approximate Data Rate (Frame Rate)	Built-in Memory[*1] Recording Capacity	Maximum Recording Time with microSD Memory Card[*2]	File Size of 1-minute Movie	Continuous Recording Time per Movie[*4]
1024 1024×1024 (Monaural)	14.2 Megabits/ second (30 frames/ second)	26 seconds [*5]	2 hours 14 minutes	106.5 MB	29 minutes
480 480×480 (Monaural)	3.8 Megabits/ second (30 frames/ second)	1 minute 40 seconds	8 hours 33 minutes	29.3 MB	29 minutes

*1 Built-in memory capacity after formatting (Approx. 49.9MB)
*2 When using a 16GB microSDHC memory card (SanDisk Corporation). Number of image and recording time values depend on the memory card you are using.
*3 Values when shooting a square image size.
*4 The allowable recording time will be shorter if the capacity of the microSD memory card you are using is smaller than the maximum size of one file.
*5 The data transfer rate of built-in memory is not sufficient for 1024×1024 movies. Whenever possible use an Ultra High-Speed Type memory card (pages 24, 42).

- Snapshot and movie recording capacity values are approximate and intended for reference only. Actual capacity depends on image contents.
- File size and data rate values are approximate and intended for reference only. Actual values depend on the type of image being shot.
- When using a memory card with a different capacity, calculate the number of images as a percentage of 16GB.
- Movie recording stops automatically after 29 minutes of recording. In the case of "60s Movie", recording stop automatically after 60 seconds.

Specifications

File Format	Snapshots:
	  JPEG (Exif Version 2.3; DCF 2.0 standard; DPOF compliant)
	Movies:
	  MOV format, H.264/AVC standard, IMA-ADPCM (monaural)

Recording Media	Built-in Memory (Image Storage Area: 49.9MB*) microSD/microSDHC/microSDXC * Built-in memory capacity after formatting

Recorded Image Sizes	Snapshots:
	  4:3 (12M 4000×3000), 1:1 (8M 2976×2976)
	Movies:
	  1024 (1024×1024 30 fps), 480 (480×480 30 fps)

Effective Pixels	10.5 Megapixels
Imaging Element	Size: 1/2.3-inch CMOS (backlit) Total Pixels: 12.76 Megapixels
Lens/Focal Distance	F2.8 f = 3.8 mm (equivalent to 21 mm in 35 mm format)
Zoom	Up to 4.0X when SR zoom and Digital zoom are used in combination
Metering	Multi-pattern
Exposure Control	Program AE
Shutter	CMOS electronic shutter
Shutter Speed	Snapshot (Auto): 1/4 to 1/16000 second
Aperture Value	F2.8
ISO Sensitivity (Standard Output Sensitivity)	Snapshots: Auto Movies: Auto
LED Light	Auto, On, Off
Communication function	Bluetooth: • Communication standard: Bluetooth® Ver.4.0 Wireless LAN: • Standard: IEEE 802.11b/g/n • Operation frequency range: 1 to 11ch • Encryption: WPA2
Monitor Screen	2.5-inch TFT color LCD 691,200 dots Capacitive type touch panel
External connection terminal	Micro USB port (Hi-Speed USB compliance, USB charging)
Microphones	Monaural
Speaker	Monaural
Power Requirements	Built-in rechargeable lithium ion battery

Appendix

Approximate Battery Life

All of the values provided below represent the approximate amount of time under normal temperature (23°C (73°F)) before the camera turns off. These values are not guaranteed. Low temperatures shorten battery life.

Number of snapshots (Operating Time)[1]	225 shots
Actual movie recording time (1024✕1024 movie)[1]	55 minutes
Approximate continuous movie recording time (1024✕1024 Movie)[2]	1 hour 20 minutes
Continuous Playback (Snapshots)[3]	4 hours 50 minutes

• Temperature: 23°C (73°F)
• Recording Medium: 16GB microSDHC memory card (SanDisk Corporation)

[1] In accordance with CIPA (Camera and Imaging Products Association) standards
[2] In accordance with CASIO standards
[3] One-image scroll approximately every 10 seconds

• The above values are based a new battery, starting from a full charge. Repeated charging shortens battery life.
• The above values are for reference only. They do not guarantee that the specified battery life will be attained under actual operating conditions.
• Frequency of Auto Focus and LED light usage, configured settings, the amount of time the camera is left turned on, and ambient temperature in the area where the camera is used all greatly affect recording time and number of shots values.

Power Consumption	3.7 V DC, Approximately 4.5 W
Dimensions	77.0 (W) ✕ 82.6 (H) ✕ 26.6 (D) mm (3.0" (W) ✕ 3.3" (H) ✕ 1.0" (D))
Weight	Approximately 139 g (4.9 oz) (including memory card) Approximately 138 g (4.9 oz) (excluding memory card)

■ USB-AC adaptor (AD-C53U)

Input	100 to 240 V AC, 50/60 Hz, 100 mA
Output	5.0 V DC, 650 mA
Operating Temperature Requirements	5 to 35°C (41 to 95°F)
Dimensions	53 (W) × 21 (H) × 45 (D) mm (2.1" (W) × 0.83" (H) × 1.8" (D)) (excluding projections)
Weight	Approximately 37 g (1.3 oz)

• Power cord precautions for use in Singapore
  The power cord set is not supplied. The power cord used must comply with
  relevant national and/or international standards.

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