



**SAMSUNG**

# User Manual

## CL65

This user manual includes detailed usage instructions for your camera. Please read this manual thoroughly.

📄 *Click a topic*

Quick reference

Contents

Basic functions

Extended functions

Shooting options

Playback/Editing

Wireless network/Bluetooth

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# Health and safety information

Always comply with the following precautions and usage tips to avoid dangerous situations and ensure peak performance of your camera.



**Warning**—situations that could cause injury to yourself or others



**Caution**—situations that could cause damage to your camera or other equipment



**Note**—notes, usage tips, or additional information



## Safety warnings

### Do not use your camera near flammable or explosive gases and liquids

Do not use your camera near fuels, combustibles, or flammable chemicals. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the camera or its accessories.

### Keep your camera away from small children and pets

Keep your camera and all accessories out of the reach of small children and animals. Small parts may cause choking or serious injury if swallowed. Moving parts and accessories may present physical dangers as well.

### Prevent damage to subjects' eyesight

Do not use the flash in close proximity (closer than 1 m/3 ft) to people or animals. Using the flash too close to your subject's eyes can cause temporary or permanent damage.

### Handle and dispose of batteries and chargers with care

- Use only Samsung-approved batteries and chargers. Incompatible batteries and chargers can cause serious injuries or damage to your camera.
- Never dispose of batteries in a fire. Follow all local regulations when disposing of used batteries.
- Never place batteries or cameras on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when overheated.

### Avoid interference with pacemakers

Maintain a minimum of 15 cm (6 inches) between cameras and pacemakers to avoid potential interference, as recommended by manufacturers and the independent research group, Wireless Technology Research. If you have any reason to suspect that your camera is interfering with a pacemaker or other medical device, turn off the camera immediately and contact the manufacturer of the pacemaker or medical device for guidance.



## Safety precautions

CAUTION

### Handle and store your camera carefully and sensibly

- Do not allow your camera to get wet—liquids can cause serious damage. Do not handle your camera with wet hands. Water damage to your camera can void your manufacturer's warranty.
- Do not expose the camera to direct sunlight or high temperatures for an extended period of time. Prolonged exposure to sunlight or extreme temperatures can cause permanent damage to your camera's internal components.
- Avoid using or storing your camera in dusty, dirty, humid, or poorly-ventilated areas to prevent damage to moving parts and internal components.
- Remove the batteries from your camera when storing it for an extended period of time. Installed batteries may leak or corrode over time and cause serious damage to your camera.
- Protect your camera from sand and dirt when using it on beaches or in other similar areas.
- Protect your camera and monitor from impact, rough handling, and excessive vibration to avoid serious damage.

- Exercise caution when connecting cables or adapters and installing batteries and memory cards. Forcing the connectors, improperly connecting cables, or improperly installing batteries and memory cards can damage ports, connectors, and accessories.
- Do not insert foreign objects into any of your camera's compartments, slots, or access points. Damage due to improper use may not be covered by your warranty.

### Protect batteries, chargers, and memory cards from damage

- Avoid exposing batteries or memory cards to very cold or very hot temperatures (below 0° C/32° F or above 40° C/104° F). Extreme temperatures can reduce the charging capacity of your batteries and can cause memory cards to malfunction.
- Prevent batteries from making contact with metal objects, as this can create a connection between the + and – terminals of your battery and lead to temporary or permanent battery damage.
- Prevent memory cards from making contact with liquids, dirt, or foreign substances. If dirty, wipe the memory card clean with a soft cloth before inserting in your camera.
- Turn off the camera when inserting or removing the memory card.

- Do not bend, drop, or subject memory cards to heavy impact or pressure.
- Do not use memory cards that have been formatted by other cameras or by a computer. Reformat the memory card with your camera.
- Never use a damaged charger, battery, or memory card.

### **Use only Samsung-approved accessories**

Using incompatible accessories may damage your camera, cause injury, or void your warranty.

### **Protect your camera's lens**

- Do not expose the lens to direct sunlight, as this may discolor the image sensor or cause it to malfunction.
- Protect your lens from fingerprints and scratches. Clean your lens with a soft, clean, debris-free lens cloth.

### **Use earphones with caution**

- Do not use earphones while driving, cycling, or operating motorized vehicles. Doing so may create a traffic hazard and may be illegal in some areas.
- Use only the minimum volume setting necessary. Listening to earphones at high volume can damage your hearing.

### **Follow all safety warnings and regulations**

Comply with any regulations that restrict the use of a camera in a certain area.

### **Turn off the camera near medical equipment**

Your camera can interfere with medical equipment in hospitals or health care facilities. Follow all regulations, posted warnings, and directions from medical personnel.

### **Turn off the camera when in an aircraft**

Your camera can cause interference with aircraft equipment. Follow all airline regulations and turn off your camera when directed by airline personnel.

### **Avoid interference with other electronic devices**

Your camera emits radio frequency (RF) signals that may interfere with unshielded or improperly shielded electronic equipment, such as pacemakers, hearing aids, medical devices, and other electronic devices in homes or vehicles. Consult the manufacturers of your electronic devices to solve any interference problems you experience.



### Important usage information

#### **Allow only qualified personnel to service your camera**

Do not allow unqualified personnel to service the camera or attempt to service the camera yourself. Any damage that results from unqualified service is not covered by your warranty.

#### **Ensure maximum battery and charger life**

- Overcharging batteries may shorten battery life. After charging is finished, disconnect the cable from your camera.
- Over time, unused batteries will discharge and must be recharged before use.
- Disconnect chargers from power sources when not in use.
- Use batteries only for their intended purpose.

#### **Exercise caution when using the camera in humid environments**

When transferring the camera from a cold environment to a warm and humid one, condensation can form on the delicate electronic circuitry and memory card. In this situation, wait for at least 1 hour until all moisture has evaporated before using the camera.

#### **Check that the camera is operating properly before use**

The manufacturer takes no responsibility for any loss of files or damage that may result from camera malfunction or improper use.

#### **Use your camera in the normal position**

Avoid contact with your camera's internal antenna.

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Camera specifications or contents of this manual may be changed without prior notice due to upgrade of camera functions.

### Copyright information

- Microsoft Windows and the Windows logo are registered trademarks of the Microsoft Corporation.
- Mac is a registered trademark of the Apple Corporation.

## Organization of the user manual

### Basic functions 11

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Learn about your camera's layout, icons, and basic functions for shooting, and how to transfer files to and from your computer.

### Extended functions 24

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Learn how to take a photo by selecting a mode and how to record a video or voice memo.

### Shooting options 33

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Learn about the options you can set in Shooting mode.

### Playback/Editing 55

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Learn how to play back photos, videos, or voice memos and edit photos or videos. Also, learn how to connect your camera to your photo printer or TV.

### Wireless network/Bluetooth 71

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Learn to use several functions using wireless local area networks (WLANs) and the Bluetooth feature. With the WLAN, you can upload and send photos and videos to websites or email addresses. You can also share photos with devices that support the Digital Living Network Alliance (DLNA) standard. With the Bluetooth feature, you can send your photos to other Samsung mobile phones or PDAs.

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Refer to settings, error messages, specifications, and maintenance tips.

## Indications used in this manual

Shooting mode	Indication
Smart Auto	
Auto	
Program	
Scene	<b>SCENE</b>
DIS	
Movie	

### Shooting mode icons

These icons indicate that a function is available in the corresponding modes. The **SCENE** mode may not support functions for all scenes.

e.g.)



Available in the Program, DIS, and Movie modes

## Icons used in this manual

Icon	Function
	Additional information
	Safety warnings and precautions
[ ]	Camera buttons; for example: [ <b>Shutter</b> ] (represents the shutter button)
( )	Page number of related information
→	The order of options or menus you must select to perform a step; for example: Select  →  (represents Select , and then )
* †	Annotation

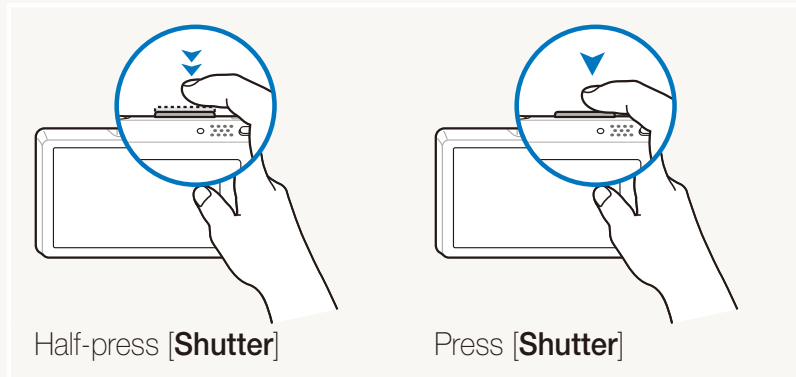
## Abbreviations used in this manual

Abbreviation	Definition
ACB	Auto Contrast Balance
AEB	Auto Exposure Bracket
AF	Auto Focus
DIS	Digital Image Stabilization
DPOF	Digital Print Order Format
EV	Exposure Value
WB	White Balance

## Expressions used in this manual

### Pressing the shutter

- Half-press [**Shutter**]: press the shutter halfway down
- Press [**Shutter**]: press the shutter all the way down



### Exposure (Brightness)

The amount of light that enters your camera determines the exposure. You can alter the exposure with shutter speed, aperture value, and ISO speed. By altering the exposure, your photos will be darker or lighter.



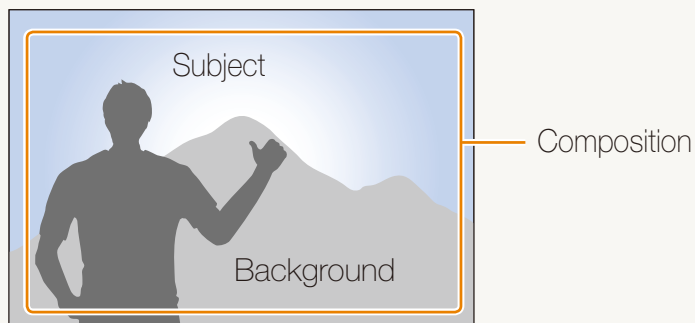
Normal exposure



Overexposure (too bright)

### Subject, background, and composition

- **Subject**: the main object of a scene, such as a person, animal, or still life
- **Background**: the objects around the subject
- **Composition**: the combination of a subject and background





# Quick reference

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## Taking photos of people

- **SCENE** mode > Beauty Shot, Portrait, Children ▶ 33
- Red-eye, Red-eye Fix (to prevent or correct red-eye) ▶ 45
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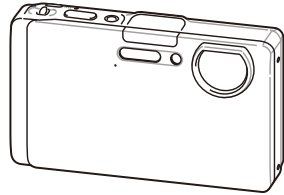
# Basic functions

Learn about your camera's layout, icons, and basic functions for shooting, and how to transfer files to and from your computer.

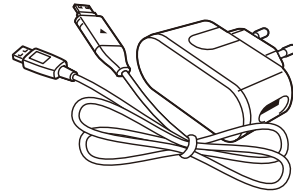
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# Unpacking

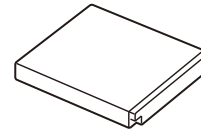
Check your product box for the following items.



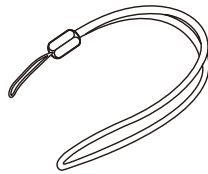
Camera



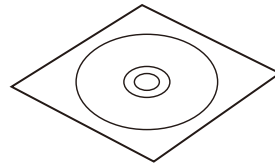
AC adapter/USB cable  
(ADXX-XXXXXA)/(ADXX-XXXXXA)



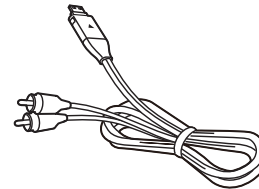
Rechargeable battery  
(ADXX-XXXXXA)



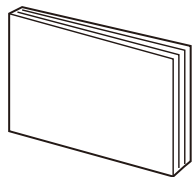
Strap  
(Silver: ADXX-XXXXXA/  
Black: ADXX-XXXXXA)



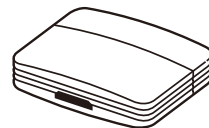
Software CD-ROM  
(ADXX-XXXXXB)



AV cable  
(ADXX-XXXXXB)

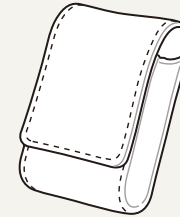


Quick Start Manual  
(ADXX-XXXXXA)



HDMI adapter  
(ADXX-XXXXXA)

## Optional accessories



Camera case



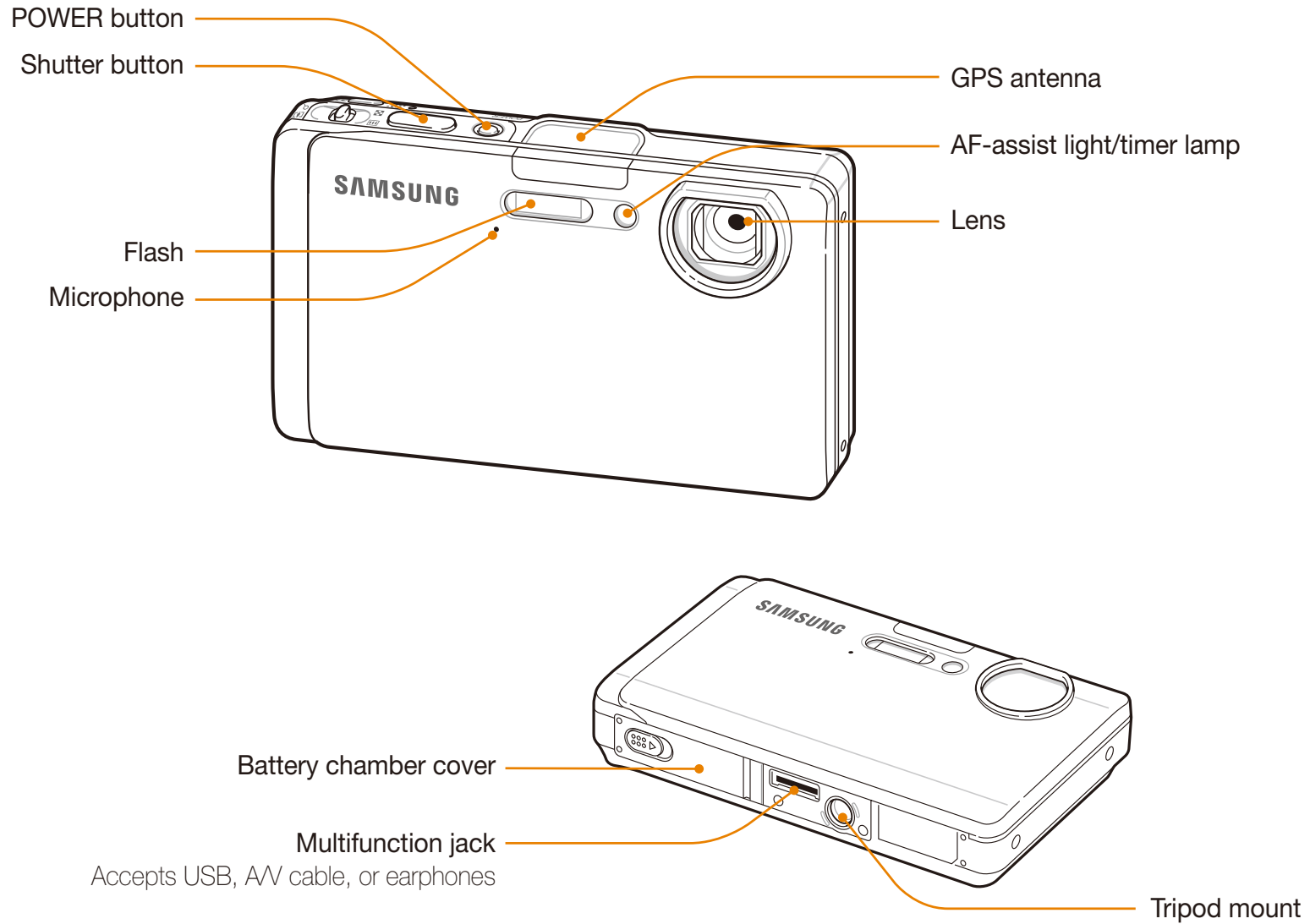
Memory card

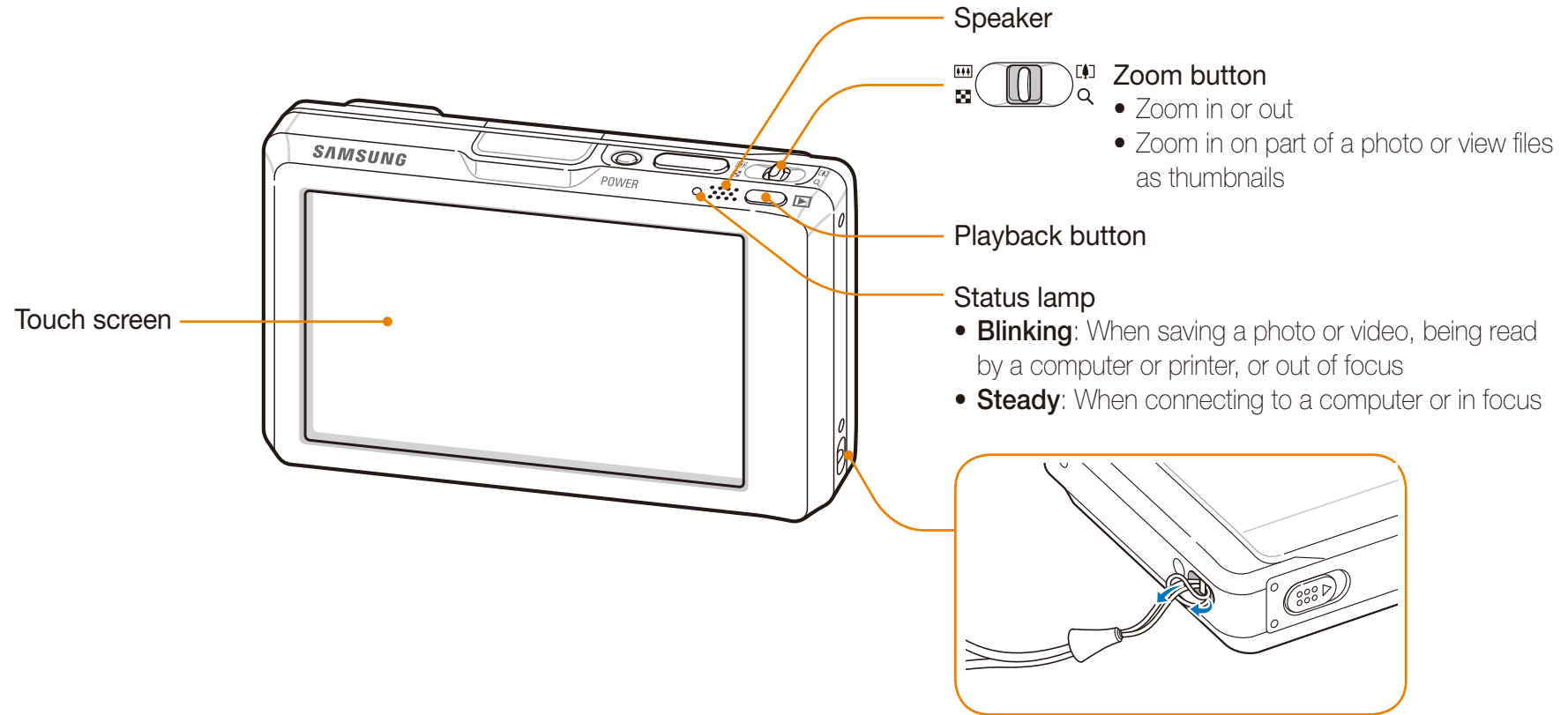


The illustrations may differ from your actual items.

# Camera layout

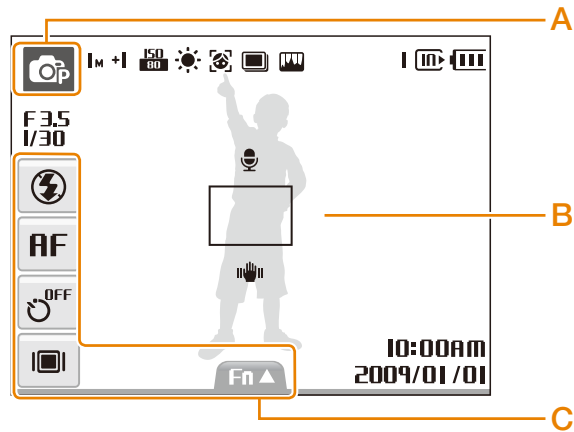
Before you start, familiarise yourself with your camera's parts and their functions.





# Icons

The icons displayed will change according to the mode you select or the options you set.



## A. Status icons

Icon	Description
<b>F3.5</b> <b>1/30</b>	Aperture and shutter speed
<b> M</b>	Photo resolution
<b>+I</b>	Exposure value
<b>ISO</b> <b>AUTO</b>	ISO speed
	White balance
	Face detection
	Burst mode
	Image adjustment (sharpness, contrast, saturation)
<b>I</b>	Available number of photos
<b>00:01:00</b>	Available recording time
	Internal memory
	Memory card inserted
	<ul style="list-style-type: none"> <li> : Fully charged</li> <li> : Partially charged</li> <li> : Charging needed</li> </ul>
<b>x5.0</b> 	Zoom ratio
	Voice memo
	Auto focus frame
	Camera shake
<b>●○○</b>	Option set 1 (of 3)
<b>10:00 AM</b> <b>2009/01/01</b>	Current date and time

## B. Option icons (touch)

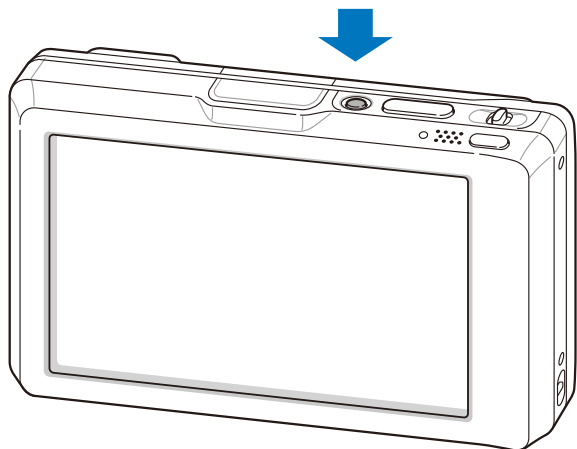
Icon	Description
	Flash option
<b>AF</b>	Auto focus option
	Timer option
	Display type
<b>Fn▲</b>	<p>Image setting options</p> <ul style="list-style-type: none"> <li> : Exposure value</li> <li><b>AWB</b> : White balance</li> <li><b>ISO</b> <b>AUTO</b> : ISO speed</li> <li> : Face tone</li> <li> : Face retouch</li> <li> : Focus area option</li> <li> : Face detection option</li> <li><b> M</b> : Photo resolution</li> <li><b>320</b> : Video resolution</li> <li> : Photo quality</li> <li><b>30</b>  : Frame rate</li> <li> : Exposure with ACB</li> <li> : Video stabilizer</li> <li> : Metering option</li> <li> : Burst type</li> <li> : Style effect</li> <li> : Image adjustment (sharpness, contrast, saturation)</li> <li><b>LT</b> : Long time shutter</li> <li> : Audio recording</li> <li> : Another row of options</li> </ul>



# Turning your camera on or off

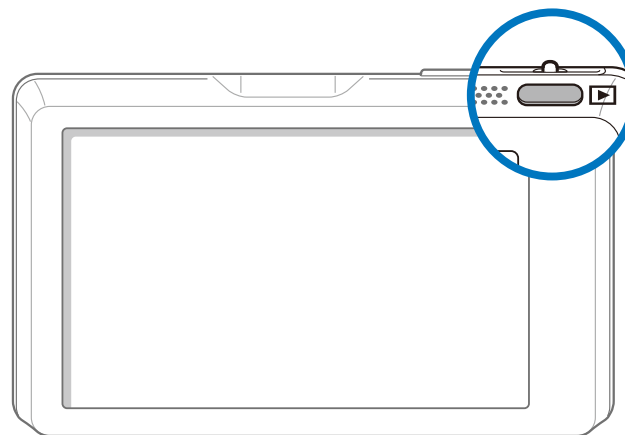
Learn how to start your camera.

Rotate the lens cover to open. You can also press **[POWER]** with the lens cover open.



## Turning on your camera in Playback mode

Press **[Playback]**. The camera turns on and accesses Playback mode immediately.



Press and hold **[Playback]** to mute camera sounds.

# Using the touch screen

Learn basic actions to use the touch screen. Use the supplied touch pen to touch or drag on the screen.



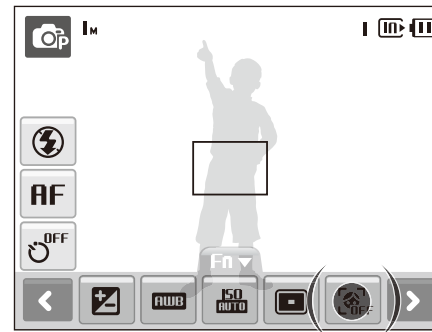
Do not use other sharp objects, such as pens or pencils, to touch the screen. Doing so may damage the screen.



- When you touch or drag on the screen, discolorations will occur. It is not a malfunction but a characteristic of the touch screen. Touch or drag lightly to reduce these annoying effects.
- The touch screen may not recognize your touches correctly when:
  - you touch multiple items at the same time
  - you use the camera in high humidity environments
  - you use the camera with an LCD protection film or another LCD accessory
- If you touch the screen with your finger, the screen may not recognize your input.

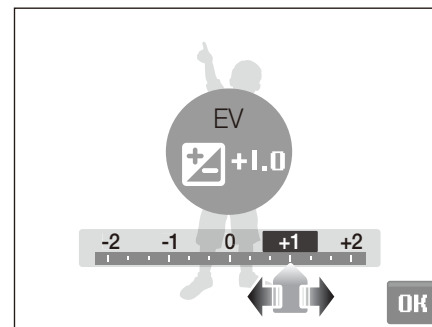
## Touching

Touch an icon to select a menu or option.






## Dragging

Drag left or right to scroll horizontally.



### Using gestures

Perform certain functions by drawing commands on the touch screen.

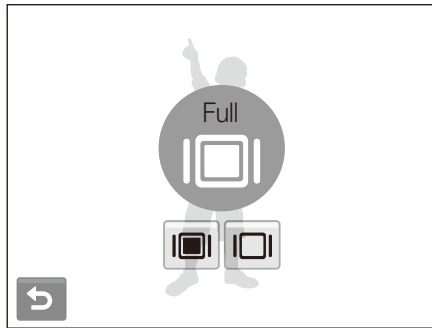
Gesture	Description
 	<ul style="list-style-type: none"><li>• Draw a horizontal bar from left to right to view the next file.</li><li>• Draw a horizontal bar from right to left to view the previous file.</li></ul>
	Draw an X to delete a photo.




# Setting the touch screen

Learn how to change the basic settings for the touch screen according to your preferences.

## Selecting a display type


In Shooting or Playback mode, select  → an option.

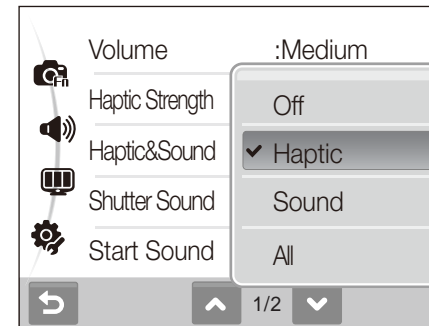


Option	Description
	<b>Full:</b> Display the name of an option when you select an icon.
	<b>Basic:</b> Display icons without the name of an option. This option is available only in Playback mode.
	<b>Hide:</b> Hide icons on the screen if you perform no operations for 3 seconds (touch the screen to display icons again).

## Setting the touch vibration or sound

Set whether your camera vibrates or emits a specified sound when you touch on the screen.

- 1 In Shooting or Playback mode, press **[MENU]**.
- 2 Select  → **Haptic&Sound**.




- 3 Select an option.

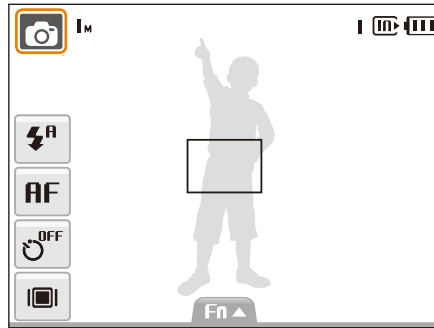
Option	Description
<b>Off</b>	The camera will neither vibrate nor sound.
<b>Haptic</b>	The camera will vibrate.
<b>Sound</b>	The camera will sound.
<b>All</b>	The camera will vibrate and sound simultaneously.

- 4 Press **[MENU]** to return to the previous mode.

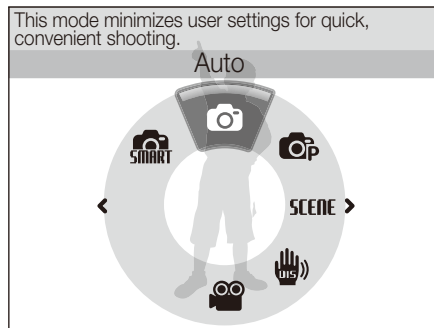
# Taking photos

Learn basic actions to take photos easily and quickly in the Auto mode.

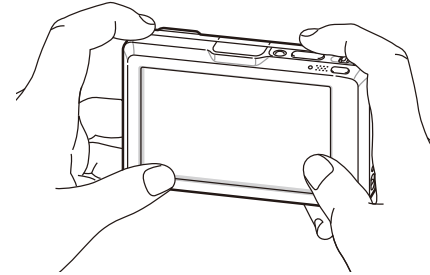
- 1 Make sure that the camera is in the  mode (Auto), the camera's default shooting mode.



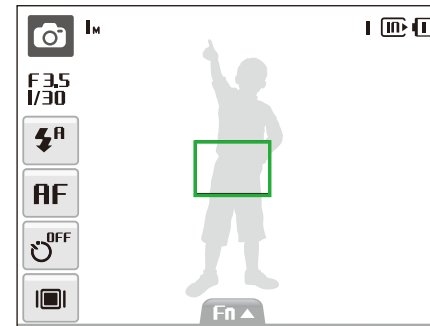
- If not, select the mode icon → .



- 2 Align your subject in the frame.



- 3 Half-press **[Shutter]** to focus.
  - A green frame means the subject in focus.



- 4 Press **[Shutter]** to take a photo.

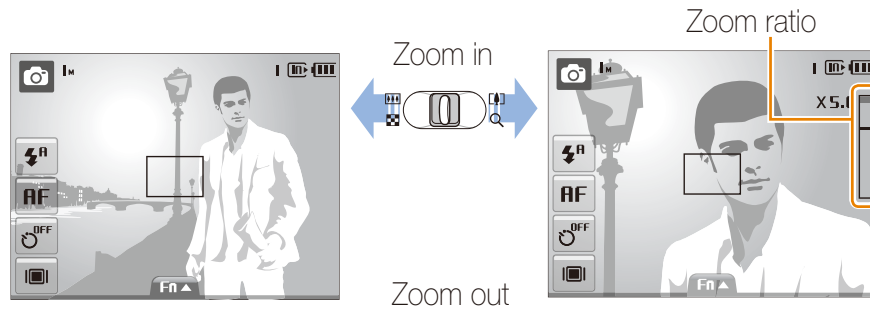


See page 29 for tips to get clearer photos.

## Zooming

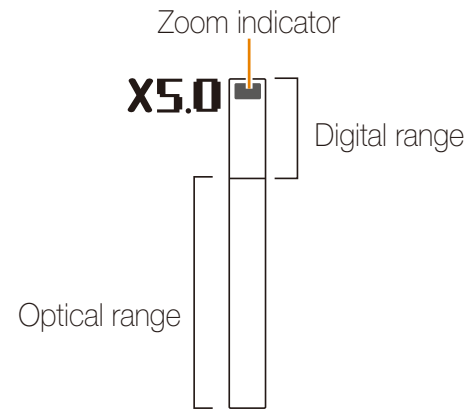
You can shoot close-up photos by adjusting the zoom. Your camera has a 4.6X optical zoom and 5X digital zoom. By using both, you can zoom in up to 23 times.

Push [**Zoom**] up to zoom in on your subject. Push [**Zoom**] down to zoom out.



## Digital zoom

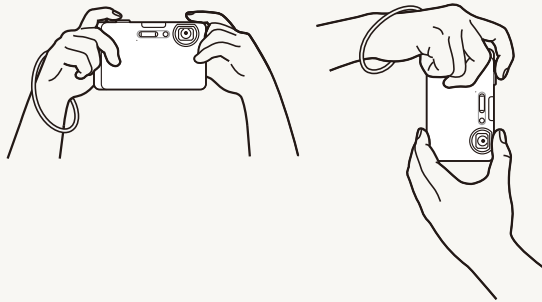
If the zoom indicator is in the digital range, your camera is using the digital zoom. The picture quality may deteriorate when you use the digital zoom.



- The digital zoom is not available when using **SMART**, **RAW**, **SCENE** (in some scenes), and **FACE** modes and when used with **Face Detection**.
- It may take longer to save a photo when using the digital zoom.

## Tips for getting a clearer photo


### Holding your camera correctly



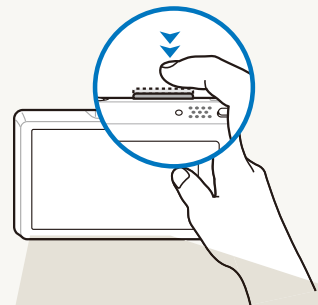
Make sure nothing is blocking the lens.

### Reducing camera shake

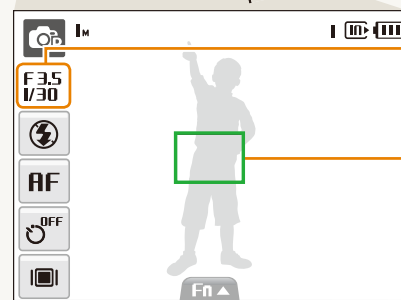


Select the  mode to reduce camera shake digitally. (p. 36)

### Half-pressing the shutter button



Half-press [**Shutter**] and adjust the focus. Focus and exposure will be adjusted automatically.

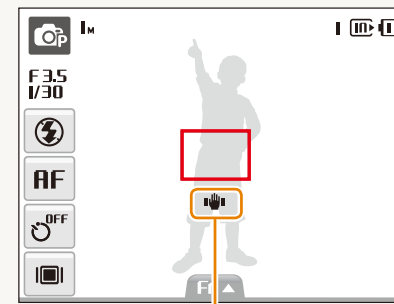


The aperture value and shutter speed are automatically set.

#### Focus frame

- Press [**Shutter**] to take the photo if displayed in green.
- Change the frame and half-press [**Shutter**] again if displayed in red.

### When «» is displayed



Camera shake

When shooting in the dark, avoid setting the flash option to **Slow Sync** or **Off**. The aperture remains open longer and it may be harder to hold the camera still.

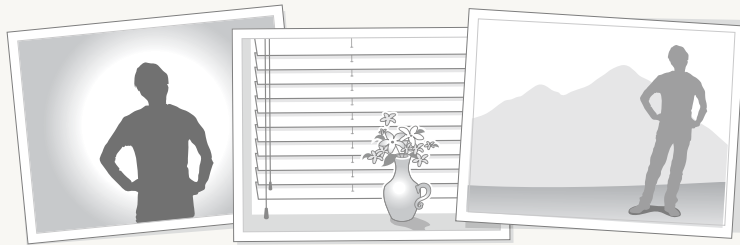
- Use a tripod or set the flash option to **Fill in**. (p. 45)
- Set ISO speed options. (p. 46)



## Preventing your subject from being out of focus

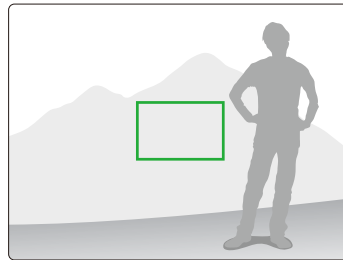
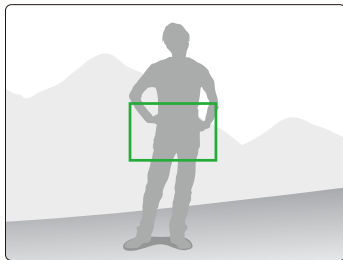
It may be difficult to get your subject in focus when:

- there is little contrast between the subject and background  
(When your subject is wearing a color of clothing that is similar to the background)
- the light source behind the subject is too bright
- the subject is shiny
- the subject includes horizontal patterns, such as blinds
- the subject is not positioned in the center of the frame



### Use the focus lock

Half-press **[Shutter]** to focus. When the subject is in focus, you can reposition the frame to change the composition. When you are ready, press **[Shutter]** to take your photo.

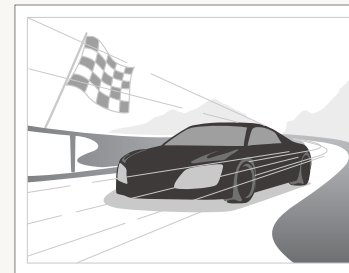


- When you take photos in low light



Turn on the flash.  
(p. 45)

- When subjects are moving fast



Use the continuous  
or motion capture  
function. (p. 58)



# Extended functions

Learn how to take a photo by selecting a mode and how to record a video or voice memo.



<b>Shooting modes</b> .....	26
Using the Smart Auto mode .....	26
Using the Scene mode .....	27
Using the Beauty Shot mode .....	27
Using the frame guide .....	28
Adjusting the exposure in the Night mode .....	29
Using the DIS mode .....	30
Using the Program mode .....	30
Recording a video .....	31
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Recording a voice memo .....	33
Adding a voice memo to a photo .....	33

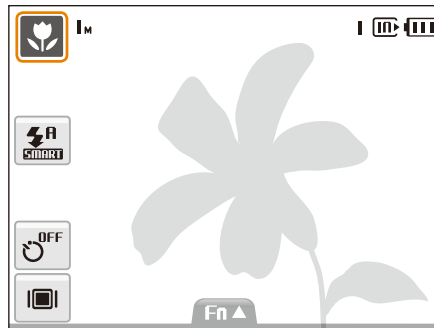
# Shooting modes





Take photos or record videos by selecting the best shooting mode for the conditions.








## Using the Smart Auto mode

In this mode, your camera automatically chooses the appropriate camera settings based on a detected type of scene. It will be helpful if you are not familiar with the camera settings for various scenes.

- 1 In Shooting mode, select  → .
- 2 Align your subject in the frame.
  - The camera selects a scene automatically. An appropriate mode icon will appear at the top left of the screen.





Icon	Description
	Appears when taking photos of landscapes.
	Appears when taking photos of bright backgrounds.
	Appears when taking photos of landscapes at night. This is available only when the flash is off.
	Appears when taking portraits at night.

Icon	Description
	Appears when taking photos of landscapes with backlighting.
	Appears when taking portraits with backlighting.
	Appears when taking portraits.
	Appears when taking close-up photos.
	Appears when taking close-up photos of text.
	Appears when the camera and subject are stable for a while.
	Appears when taking photos of actively moving subjects.


- 3 Half-press **[Shutter]** to focus.
- 4 Press **[Shutter]** to take the photo.

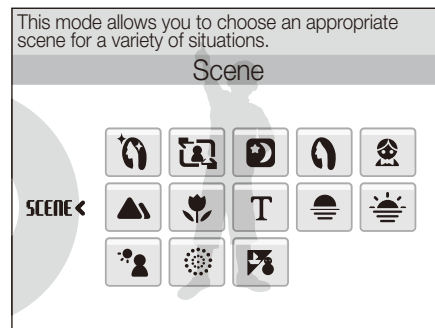


- If the camera does not recognize a proper scene mode,  will not change and the default settings will be used.
- Even if there is a face detected, the camera may not select a portrait mode depending on the subject's position or lighting.
- The camera may not select the correct scene depending on shooting environments, such as camera shake, lighting and distance to the subject.
- Even if you use a tripod, the  mode may not be detected depending on the subject's movement.

## Using the Scene mode

Take a photo with options preset for a specific scene.

- 1 In Shooting mode, select  → **SCENE**.
- 2 Select a scene.



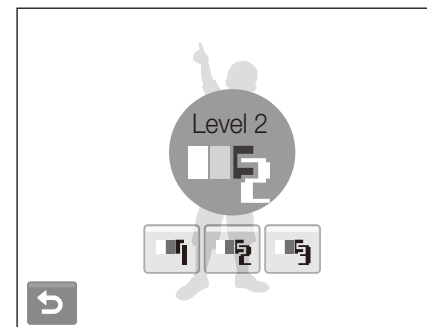
- For the Beauty Shot mode, see “Using the Beauty Shot mode.”
- For the Frame Guide mode, see “Using the frame guide” on page 34.
- For the Night mode, see “Adjusting the exposure in the Night mode” on page 35.


- 3 Align your subject in the frame and half-press [**Shutter**] to focus.
- 4 Press [**Shutter**] to take the photo.

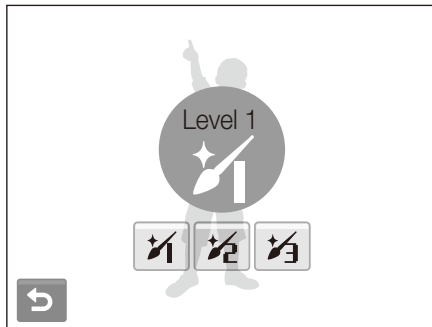
## Using the Beauty Shot mode

Take a photo of a person with options to hide facial imperfections.

- 1 In Shooting mode, select  → **SCENE** → .
- 2 To make the subject's skin tone appear lighter (face only), select **Fn▲** →  → an option.
  - Select a higher setting to make skin tone appear lighter.



- 3 To hide facial imperfections, select **Fn▲** →  → an option.
- Select a higher setting to hide a greater number of imperfections.





- 4 Align your subject in the frame and half-press [**Shutter**] to focus.
- 5 Press [**Shutter**] to take the photo.

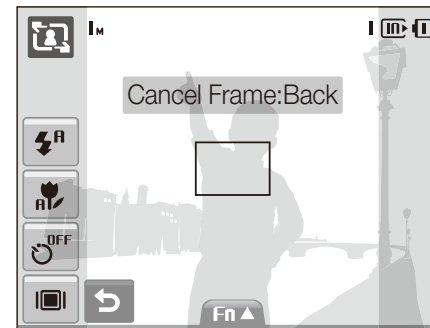



The focus distance will be set to **Auto Macro**.

## Using the frame guide

When you want another person to take a photo of you, you can compose the scene with the frame guide feature. The frame guide will help the other person take a photo of you by showing the part of the pre-composed scene.

- 1 In Shooting mode, select  → **SCENE** → .
- 2 Align your subject in the frame and press [**Shutter**].
  - Transparent guides will appear on the left and right of the frame.

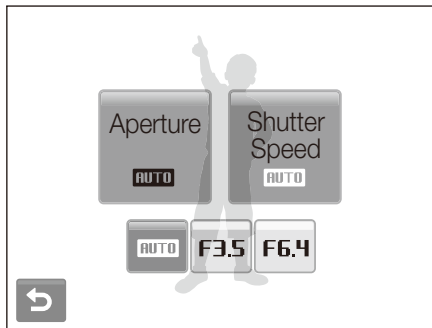


- 3 Ask another person to take a photo.
  - The person must align the subject in the frame by using the guides, and then press [**Shutter**] to take the photo.
- 4 To cancel the guides, select .

## Adjusting the exposure in the Night mode

In the Night mode, you can catch brief flashes of light as curved streaks by extending the exposure. Use a slow shutter speed to extend the time until the shutter closes. Increase the aperture value to prevent overexposure.

- 1 In Shooting mode, select  → **SCENE** → .
- 2 Select **Fn▲** → **LT** → **Aperture**.



- 3 Select an option.
- 4 Select **Fn▲** → **LT** → **Shutter Speed**.
- 5 Select a value to adjust the shutter speed and select **OK**.

- 6 Align your subject in the frame and half-press [**Shutter**] to focus.
- 7 Press [**Shutter**] to take the photo.



Use a tripod to prevent your photos from blurring.

## Using the DIS mode



Reduce camera shake and prevent blurred photos with Digital Image Stabilization (DIS) functions.



Before correction



After correction



- 1 In Shooting mode, select  → .
- 2 Align your subject in the frame and half-press [**Shutter**] to focus.
- 3 Press [**Shutter**] to take the photo.

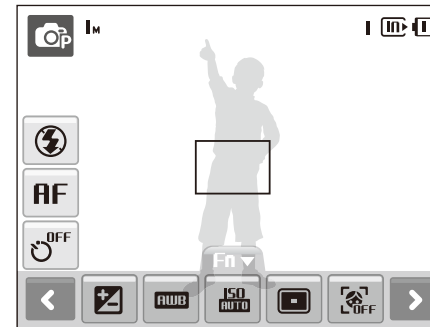


- The digital zoom will not work in this mode.
- If your subject is moving rapidly, the photo may be blurry.

## Using the Program mode

Set various options (except for shutter speed and aperture value) in the Program mode.

- 1 In Shooting mode, select  → .
- 2 Set options. (For a list of options, refer to “Shooting options.”)



- 3 Align your subject in the frame and half-press [**Shutter**] to focus.
- 4 Press [**Shutter**] to take the photo.

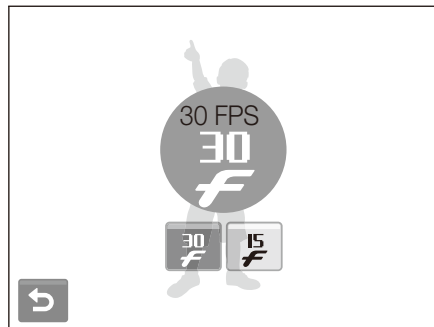
## Recording a video

Record videos of up to 2 hours in length. The recorded video is saved as an MPEG-4.AVI file.



The zoom sound may be recorded if you use the zoom while recording a video.

- 1 In Shooting mode, select → .
- 2 Select **Fn**▲ → → a frame rate (the number of frames per second).
  - As the number of frames increases, action appears more natural, but the file size is increased.



- 3 Select **Fn**▲ → → → a sound option.

Option	Description
	<b>Off:</b> Record a video without sound.
	<b>On:</b> Record a video with sound.

- 4 Select **Fn**▲ → → a stabilizer option.

Option	Description
	<b>Off:</b> Record a video with the image stabilization function turned off.
	<b>On:</b> Record a video with the image stabilization function turned on to prevent your video from blurring.

- 5 Set other options as desired. (For options, refer to “Shooting options.”)
- 6 Press [**Shutter**] to start recording.
- 7 Press [**Shutter**] again to stop recording.

### To pause recording

The camera allows you to pause temporarily while recording a video. With this function, you can record your favorite scenes as a single video.

Select **||** to pause while recording. Select it again to resume.





# Recording voice memos



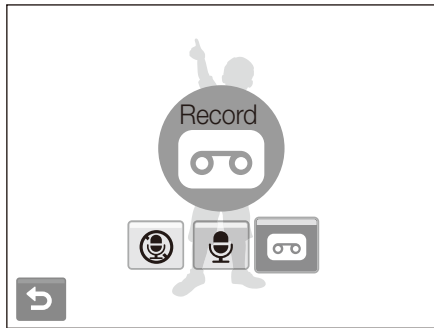
Learn how to record a voice memo that you can play back at any time. You can add a voice memo to a photo as a short reminder of shooting conditions.



You will get the best sound quality when recording 40 cm away from the camera.

## Recording a voice memo

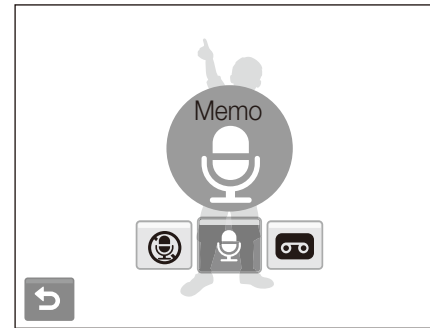
- 1 In Shooting mode, select **Fn▲** → **▶** → **📷** → **🎤**.



- 2 Press [**Shutter**] to record.
  - Select **||** to pause and **●** to resume.
  - The available recording time will be displayed on the top of the screen.
  - You can record voice memos of up to 10 hours in length.
- 3 Press [**Shutter**] to stop.
- 4 Select **↶** to switch to Shooting mode.

## Adding a voice memo to a photo

- 1 In Shooting mode, select **Fn▲** → **▶** → **📷** → **🎤**.



- 2 Align your subject in the frame and take a photo.
  - You will begin recording a voice memo right after taking the photo.
- 3 Record a short voice memo (10 seconds maximum).
  - Press [**Shutter**] to stop recording a voice memo.

# Shooting options

Learn about the options you can set in Shooting mode.

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Selecting a resolution .....	35	Adjusting the exposure manually (EV) .....	47
Selecting image quality .....	36	Compensating for backlighting (ACB) .....	48
<b>Using the timer</b> .....	37	Changing the metering option .....	49
<b>Shooting in the dark</b> .....	39	Selecting a light source (White balance) .....	50
Preventing red-eye .....	39	<b>Using burst modes</b> .....	52
Using the flash .....	39	<b>Improving your photos</b> .....	53
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# Selecting a resolution and quality

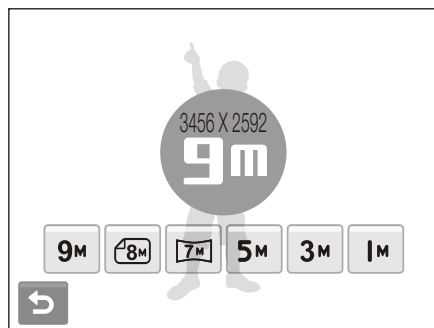
Learn how to change the image resolution and quality settings.

## Selecting a resolution

As you increase the resolution, your photo or video will include more pixels, so it can be printed on larger paper or displayed on a larger screen. When you use a high resolution, the file size will also increase.


### When taking a photo:

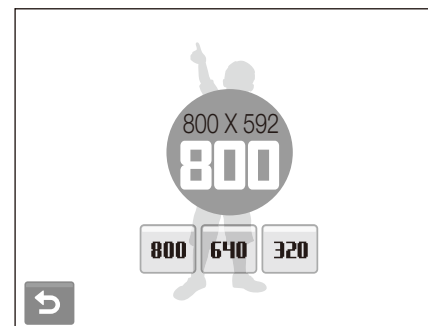
- 1 In Shooting mode, select **Fn▲** → **9M**. (In some modes, select **Fn▲** → **▶** → **9M**.)
- 2 Select an option.



Option	Description
<b>9M</b>	<b>3968 X 2232</b> : Print on A2 paper.
<b>8M</b>	<b>3264 X 2448</b> : Print on A3 paper in wide ratio (3:2).
<b>5M</b>	<b>2592 X 1944</b> : Print on A4 paper.
<b>3M</b>	<b>2048 X 1536</b> : Print on A5 paper.
<b>1M</b>	<b>1024 X 768</b> : Attach to email.

### When recording a video:

- 1 In the  mode, select **Fn▲** → **800**.
- 2 Select an option.

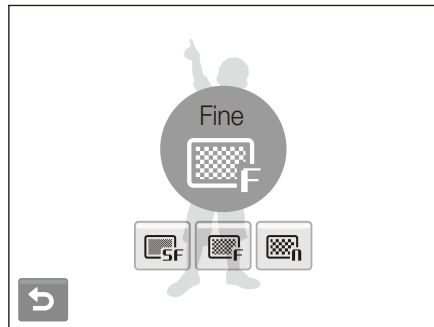





Option	Description
<b>800</b>	<b>1280 X 720</b> : Play back on an SDTV.
<b>640</b>	<b>640 X 480</b> : Play back on a general TV.
<b>320</b>	<b>320 X 240</b> : Post on a web page.

## Selecting image quality SCENE

Photos you take are compressed and saved in JPEG format. Higher quality images will result in larger sizes.

- 1 In Shooting mode, select **Fn▲** → . (In some modes, select **Fn▲** →  → .)
- 2 Select an option.




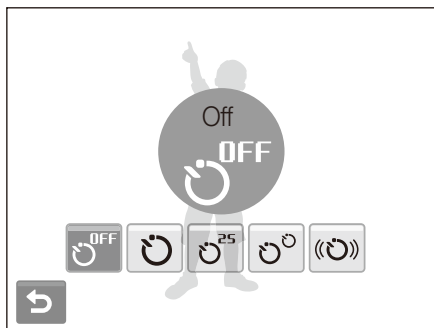
Option	Description
	<b>Super Fine</b>
	<b>Fine</b>
	<b>Normal</b>






# Using the timer



Learn how to set the timer to delay shooting.

- 1 In Shooting mode, select .
- 2 Select an option.



Option	Description
	<b>Off:</b> The timer is not active.
	<b>10 Sec:</b> Take a photo in 10 seconds.
	<b>2 Sec:</b> Take a photo in 2 seconds.
	<b>Double:</b> Take a photo in 10 seconds and take another in 2 seconds.
	<b>Motion Timer:</b> Detect your movement and then take a photo. (p. 44)

The options may differ depending on the shooting mode.

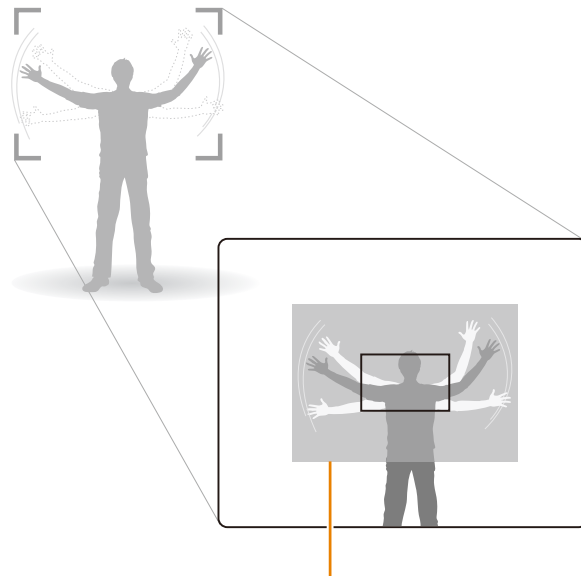
- 3 Press **[Shutter]** to start the timer.
  - The AF-assist light/timer lamp blinks. The camera will automatically take a photo at the specified time.



- Select the timer icon to cancel the timer.
- Depending on the selected face detection option, the timer is not available or some timer options are not available.

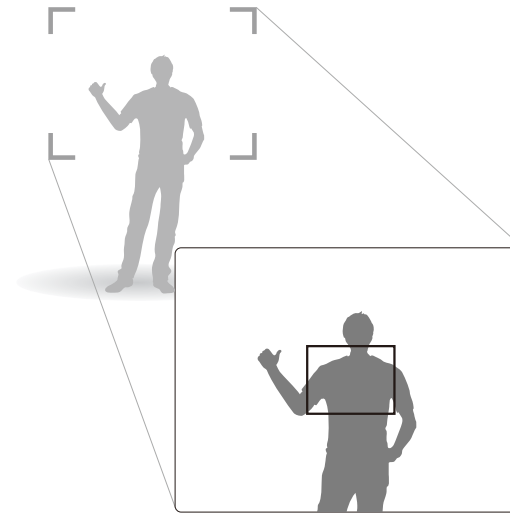
### Using the motion timer

- 1 In Shooting mode, select  $\text{OFF} \rightarrow \langle \text{ON} \rangle$ .
- 2 Press [**Shutter**].
- 3 Stand within 3 m from the camera within 6 seconds after pressing [**Shutter**].
- 4 Make a motion, such as waving your arms, to activate the timer.
  - The AF-assist light/timer lamp will start to blink rapidly when the camera detects you.



The detection range of the motion timer

- 5 Pose for your photo while the AF-assist light/timer lamp is blinking.
  - The AF-assist light/timer lamp will stop blinking just before the camera automatically takes a photo.



The motion timer may not work when:

- you are more than 3 m away from the camera
- your movements are too subtle
- there is too much light or backlight

# Shooting in the dark

Learn how to take photos at night or in low light conditions.


## Preventing red-eye SCENE

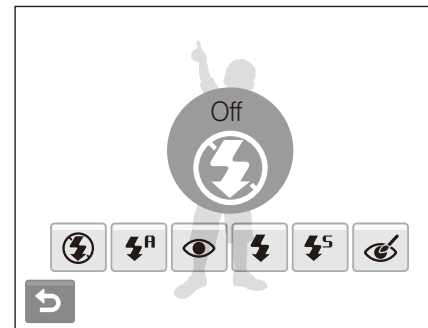
If the flash fires when you take a photo of a person in the dark, a red glow may appear in the eyes. To prevent this, select **Red-eye** or **Red-eye Fix**.












## Using the flash SCENE

Use the flash when taking photos in the dark or when you need more light on your photos.

- 1 In Shooting mode, select .
- 2 Select an option.



Option	Description
	<b>Off:</b> <ul style="list-style-type: none"><li>• The flash will not fire.</li><li>• Camera shake warning () will be displayed when shooting in low light.</li></ul>
	<b>Auto:</b> The camera will select a proper flash setting for the detected scene in the  mode.
	<b>Auto:</b> The flash fires automatically when the subject or background is dark.

Option	Description
	<p><b>Red-eye*</b>:</p> <ul style="list-style-type: none"> <li>The flash fires when the subject or background is dark.</li> <li>The camera reduces red-eyes.</li> </ul>
	<p><b>Fill in:</b></p> <ul style="list-style-type: none"> <li>The flash always fires.</li> <li>Light intensity is adjusted automatically.</li> </ul>
	<p><b>Slow Sync:</b></p> <ul style="list-style-type: none"> <li>The flash fires and the shutter stays open longer.</li> <li>Select this when you want to capture ambient light to reveal more details in the background.</li> <li>Use a tripod to prevent your photos from blurring.</li> </ul>
	<p><b>Red-eye Fix*</b>:</p> <ul style="list-style-type: none"> <li>The flash fires when the subject or background is dark.</li> <li>The camera corrects red-eyes through its advanced software analysis.</li> </ul>

The options may differ depending on the shooting mode.

\* There is an interval between two bursts of the flash. Do not move until the flash fires a second time.

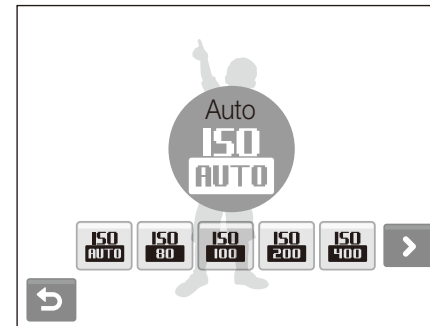


- Flash options are not available if you set burst options or select **Self-Portrait** or **Blink Detection**.
- Make sure that your subjects are within the recommended distance from the flash. (p. 98)
- If there is reflected light or much dust in the air, tiny spots may appear on your photo.

## Adjusting the ISO speed

The ISO speed is the measure of a film's sensitivity to light as defined by the International Organization for Standardization (ISO). The higher ISO speed you select, the more sensitive to light your camera becomes. With a higher ISO speed, you can get a better photo without using the flash.

- In Shooting mode, select **Fn▲** → **ISO AUTO**.
- Select an option.
  - Select **ISO AUTO** to use an appropriate ISO speed based on the brightness of the subject and lighting.



The higher ISO speed you select, the more image noise you may get.



# Changing the camera's focus

Learn how to adjust the camera's focus according to your subjects.

## Using macro

Use macro to take close-up photos of subjects, such as flowers or insects. Refer to macro options in “Using auto focus.”

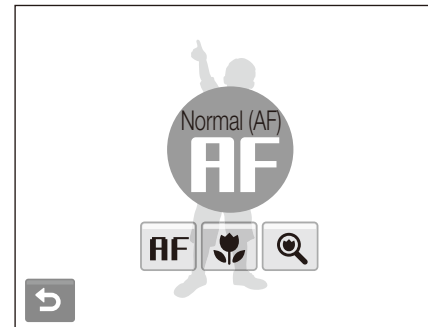





- Try to hold the camera very still to prevent blurry photos.
- Turn off the flash if the distance to the subject is less than 40 cm.

## Using auto focus

To take sharp photos, select the appropriate focus according to your distance from the subject.

- 1 In Shooting mode, select **AF**.
- 2 Select an option.

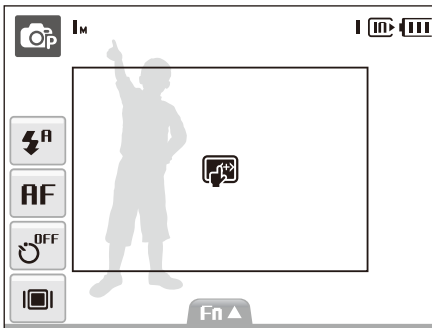


Option	Description
<b>AF</b>	<b>Normal (AF):</b> Focus on a subject farther than 80 cm.
	<b>Auto Macro:</b> Focus on a subject farther than 5 cm (farther than 50 cm when using zoom).
	<b>Macro:</b> Focus on a subject 5 - 80 cm (50 - 80 cm when using zoom).
	<b>Super Macro:</b> Focus on a subject between 3 to 8 cm.

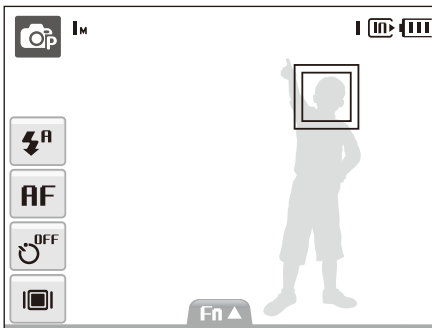
The options may differ depending on the shooting mode.

## Using smart touch focus

Smart touch AF allows you to track and auto focus on your subject, even when you are moving. Simply set the focus area to **Smart Touch AF** (p. 49) and touch the subject you want to track in the touch area (indicated by a frame).



A focus frame will appear on the subject and will follow the subject as you move the camera.



The color of the focus frame indicates the tracking and focus status:

- White: Tracking the subject
- Green: Auto focus when you half-press [**Shutter**]




- If you do not touch any area on the screen, the focus frame will appear in the center of the screen.
- Tracking a subject may fail when:
  - the subject is too small
  - the subject moves
  - the subject is backlit or you are shooting in a dark place
  - colors on the subject and the background are the same
  - patterns on the subject and the background are the same
  - the camera shakes excessively

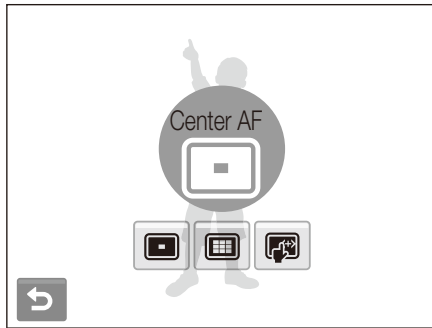
In these cases, the focus frame will appear as a white single-line frame.




- If the camera fails to track the subject, you must reselect the subject to track.
- If the camera fails to fix the focus, the focus frame will change to a red single-line frame.

## Adjusting the focus area SCENE

You can get clearer photos by selecting an appropriate focus area according to your subject's location in the scene.

- 1 In Shooting mode, select **Fn▲** → .
- 2 Select an option.



Option	Description
	<b>Center AF:</b> Focus on the center (suitable when subjects are located in the center).
	<b>Multi AF:</b> Focus on one or more of 9 possible areas (when the digital zoom is in use, the focus will change to <b>Center AF</b> ).
	<b>Smart Touch AF:</b> Focus on and track the subject that you touch on the screen.

The options may differ depending on the shooting mode.

# Using face detection

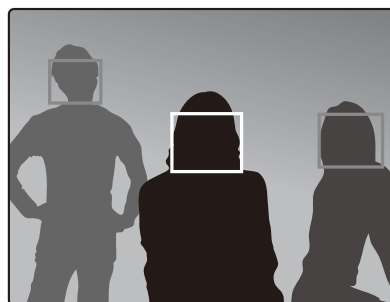
If you use face detection options, your camera can automatically detect a human face. When you focus on a human face, the camera adjusts the exposure automatically. Take photos quickly and easily by using **Blink Detection** to detect closed eyes or **Smile Shot** to capture a smiling face. You can also use **Smart Face Recognition** to register faces and prioritize the focus on them.



- In some scene modes, face detection is unavailable.
- Face detection may not be effective when:
  - the subject is far from the camera (The focus frame will appear orange for **Smile Shot** and **Blink Detection**)
  - it is too bright or too dark
  - the subject is not facing the camera
  - the subject is wearing sunglasses or a mask
  - the subject is in backlighting or the lighting condition is unstable
  - the subject's facial expression changes remarkably
- Face detection is not available when using a photo style.
- When you use the face detection option, the digital zoom will not work.
- Depending on the selected face detection option, the timer is not available or some timer options are not available.

## Detecting faces

Your camera automatically detects human faces (up to 10 human faces).



In Shooting mode, select **Fn▲** →  → . The closest face appears in a white focus frame and the rest of the faces appear in grey focus frames.





The closer you are to the subject, the quicker your camera will detect faces.

## Taking a self portrait shot

Take photos of yourself. The focus distance will be set to close-up and your camera will emit a beep.

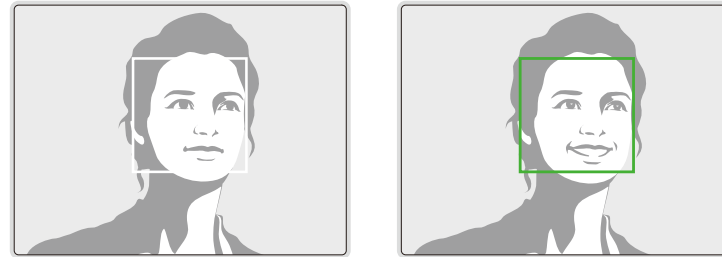


- 1 In Shooting mode, select **Fn▲** →  → .
- 2 When you hear a quick beep, press [**Shutter**].

 To turn the beep on or off, select **Self-Portrait** in the sound settings. (p. 88)

## Taking a smile shot

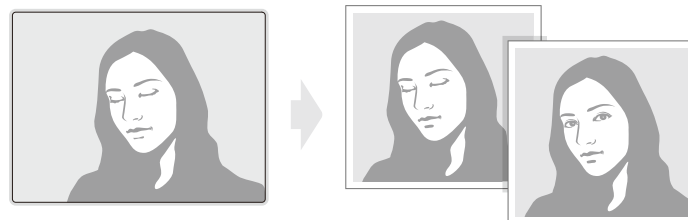
The camera automatically releases the shutter when it detects a smiling face.



In Shooting mode, select **Fn▲** →  → . When your subject smiles broadly, your camera can detect the smile more easily.

## Detecting eye blinking

If your camera detects closed eyes, it will automatically take 2 photos in succession.

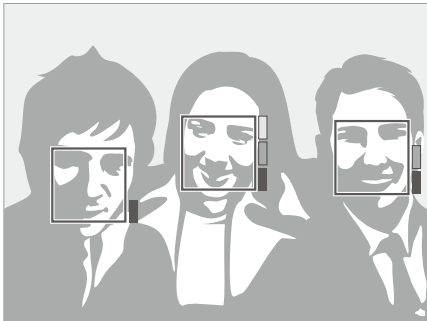


In Shooting mode, select **Fn▲** →  → .

- Hold your camera still while “**Capturing**” is displayed on the screen.
- When blink detection fails, “**Picture taken with eyes closed.**” message appears. Take another photo.

## Using smart face recognition

The camera automatically registers faces that you frequently photograph (up to 10 people). This feature will automatically prioritize the focus on those faces. This feature is available only when you use a memory card.



In Shooting mode, select **Fn**▲ →  → . The priority of the faces will be shown by the level indicator next to the frames.



- The camera may recognize and register faces incorrectly depending on lighting conditions, remarkable changes in the subject's pose or face, and whether or not the subject is wearing glasses.
- The camera may recognize faces and display the level indicator, even though they have not been registered.
- You can view registered faces in order of priority while in Playback mode. (p. 63) Even though faces are registered successfully, they may not be classified in Playback mode.
- If the camera recognizes a new face when there are 10 registered faces, it will replace the face in the lowest priority with the new one.
- The camera can recognize up to 3 faces in one scene.
- When the camera does not recognize faces, it will still detect the faces without prioritizing them.
- You can manually register faces from photos you have already taken. (p. 63)

# Adjusting brightness and color

Learn how to adjust the brightness and color for better image quality.

## Adjusting the exposure manually (EV)


Depending on the intensity of the ambient light, your photos may be too bright or dark. In these cases, you can adjust the exposure to get a better photo.

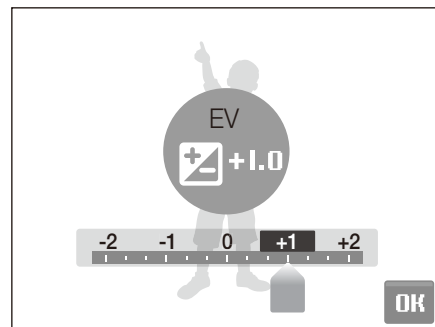


Darker (-)

Neutral (0)

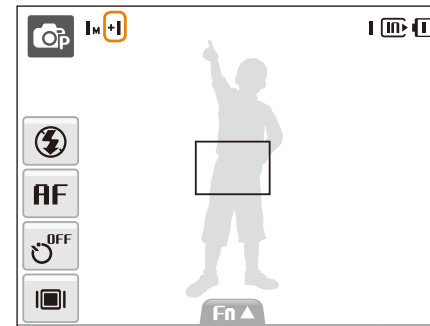
Brighter (+)

- 1 In Shooting mode, select **Fn▲** → .
- 2 Select a value to adjust the exposure.
  - +: brighter, -: darker



- 3 Select **OK**.

- The adjusted exposure value will appear as shown below.



- Once you adjust the exposure, the setting will remain the same. You may need to change the exposure value later to avoid overexposure or underexposure.
- If you cannot decide on an appropriate exposure, select **AEB** (Auto Exposure Bracket). The camera takes photos with different exposures: normal, underexposed, and overexposed. (p. 58)

## Compensating for backlighting (ACB)

When the light source is behind your subject or there is high contrast between your subject and the background, your subject is likely to appear dark in the photo. In this case, set the Auto Contrast Balance (ACB) option.




Without ACB




With ACB

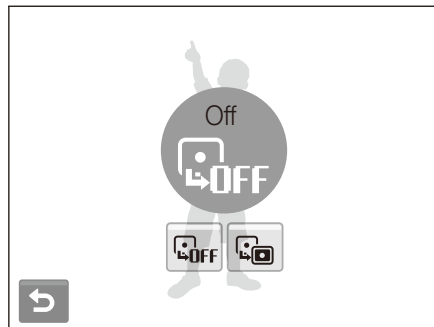
Option	Description
 OFF	<b>Off:</b> ACB is off.
	<b>On:</b> ACB is on.



- The ACB feature is always on in the  mode.
- This feature is not available when **Continuous**, **Motion Capture**, or **AEB** is in use.

1 In Shooting mode, select **Fn▲** → **➤** → .

2 Select an option.

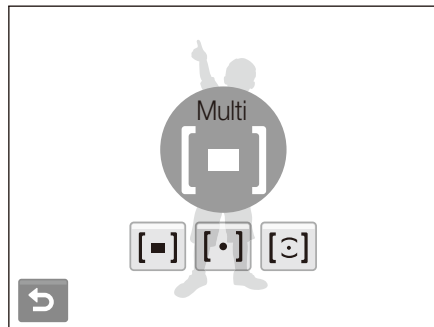







## Changing the metering option

The metering mode refers to the way in which a camera measures the quantity of light. The brightness and lighting of your photos will vary depending on the metering mode you select.

- 1 In Shooting mode, select **Fn▲** → **➤** → **[■]**. (In the  mode, select **[■]**.)
- 2 Select an option.



Option	Description
	<p><b>Multi:</b></p> <ul style="list-style-type: none"> <li>• Your camera divides the scene into several areas, and then measures the light intensity of each area.</li> <li>• Suitable for general photos.</li> </ul>

Option	Description
	<p><b>Spot:</b></p> <ul style="list-style-type: none"> <li>• Your camera measures only the light intensity of the very center of the frame.</li> <li>• If a subject is not in the center of the scene, your photo may be improperly exposed.</li> <li>• Suitable for a subject with backlighting.</li> </ul>
	<p><b>Center-weighted:</b></p> <ul style="list-style-type: none"> <li>• Your camera averages the meter reading of the entire frame with emphasis placed on the center.</li> <li>• Suitable for photos with subjects in the center of the frame.</li> </ul>

## Selecting a light source (White balance)



The color of your photo depends on the type and quality of the light source. If you want the color of your photo to be realistic, select an appropriate lighting condition to calibrate the white balance, such as Auto WB, Daylight, Cloudy, or Tungsten.



**AWB** (Auto WB)



 (Daylight)



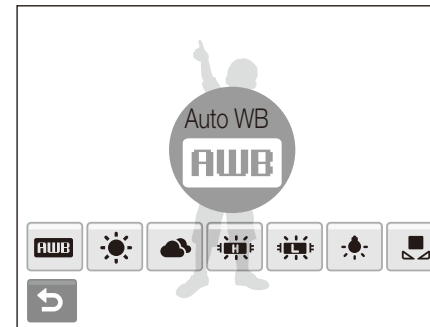
 (Cloudy)










 (Tungsten)


1 In Shooting mode, select **Fn▲** → **AWB**.

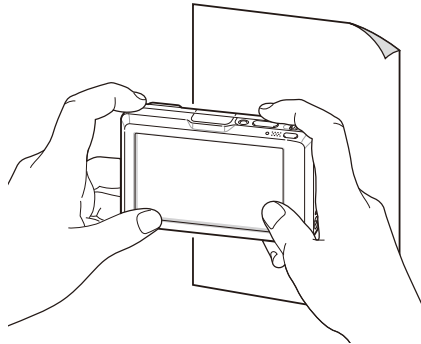
2 Select an option.



Icon	Description
	<b>Auto WB:</b> Use automatic settings depending on the lighting conditions.
	<b>Daylight:</b> Select when taking outdoor photos on a sunny day.
	<b>Cloudy:</b> Select when taking outdoor photos on a cloudy day or in shadows.
	<b>Fluorescent_H:</b> Select when shooting under a daylight fluorescent or three-way fluorescent light.
	<b>Fluorescent_L:</b> Select when shooting under white fluorescent light.
	<b>Tungsten:</b> Select when taking indoor photos under incandescent bulbs or halogen lamps.
	<b>Custom Set:</b> Use your pre-defined settings.

**Defining your own white balance**

- 1 In Shooting mode, select **Fn▲** → **AWB** → .
- 2 Aim the lens at a piece of white paper.




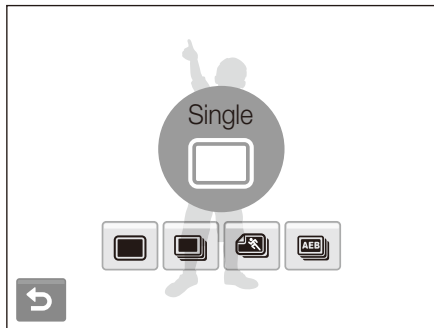
- 3 Press [**Shutter**].



# Using burst modes


It can be difficult to take photos of fast-moving subjects or capture natural facial expressions and gestures of your subjects in photos. In these cases, select one of the burst modes.




- 1 In Shooting mode, select **Fn▲** → **➤** → .
- 2 Select an option.



Option	Description
	<b>Single:</b> Take a single photo.
	<b>Continuous:</b> <ul style="list-style-type: none"> <li>• While you are pressing [<b>Shutter</b>], the camera takes photos continuously.</li> <li>• The maximum number of photos depends on the capacity of your memory card.</li> </ul>

Option	Description
	<b>Motion Capture:</b> <ul style="list-style-type: none"> <li>• While you are pressing [<b>Shutter</b>], the camera takes VGA photos (6 photos per second; maximum of 30 photos).</li> <li>• The camera automatically shows you the photos just taken and then saves them.</li> </ul>
	<b>AEB:</b> <ul style="list-style-type: none"> <li>• Take 3 photos with different exposures: normal, underexposed, and overexposed.</li> <li>• Use a tripod to prevent blurry photos.</li> </ul>

The options may differ depending on the shooting mode.

-  You can use the flash and timer and ACB only when you select **Single**.
- When you select **Motion Capture**, the resolution will be set to VGA and the ISO speed will be set to **Auto**.

# Improving your photos

Learn how to improve your photos by applying photo styles or colors, or make some adjustments.

## Applying photo styles SCENE

Apply different styles to your photos, such as Soft, Vivid, or Forest.



Soft

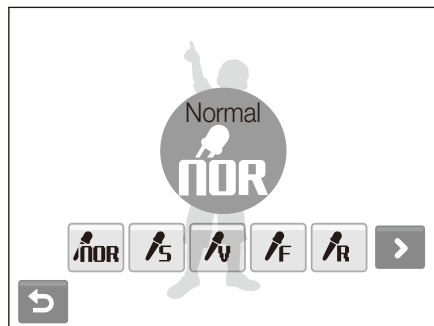


Vivid



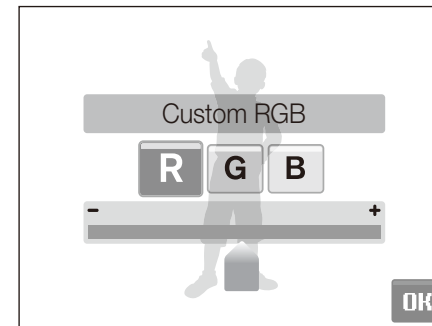
Forest

- 1 In Shooting mode, select **Fn▲** → **⏏**. (In some modes, **Fn▲** → **▶** (once or twice) → **⏏**.)
- 2 Select an option.
  - Select **RGB** to define your own RGB tone.



## Defining your own RGB tone





- 1 From the photos style options, select **RGB** → a color (R: Red, G: Green, B: Blue).
- 2 Select the amount of the selected color.

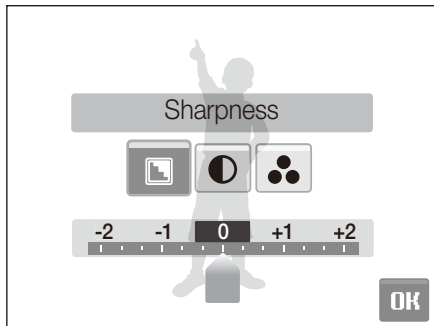


- 3 Select **OK**.

## Adjusting your photos

Adjust the sharpness, saturation, and contrast of your photos.

- 1 In Shooting mode, select **Fn▲** → **➤** twice → .
- 2 Select an adjustment option.
  - : Sharpness
  - : Contrast
  - : Saturation
- 3 Select a value to adjust the selected item.



Sharpness option	Description
-	Soften the edges on your photos (suitable for editing the photos on your computer).
+	Sharpen the edges to improve the clarity of your photos. This may also increase the noise on your photos.

Contrast option	Description
-	Decrease the color and brightness.
+	Increase the color and brightness.


Saturation option	Description
-	Decrease the saturation.
+	Increase the saturation.



Select **0** if you do not want to apply any effects. (suitable for printing)

# Taking a shot with location information

Learn to take shots with location information using the GPS (Global Positioning System). If a photo has the location information, you can check the city where it has been taken and upload it to a website supporting the map service, such as Google Maps.

- 1 In Shooting mode, select .
- 2 Select **On** for the GPS activation option.
- 3 Select a time for the GPS storage period.
  - If the camera fails to receive GPS signals, the last location information will be recorded onto the photos. However, if the camera still fails to receive GPS signals after the specified time, the location information will not be recorded onto the photos.
- 4 Select **On** for displaying GPS information.



To initiate the GPS satellite information, select **GPS Reset**.

- 5 Select .



- The Shooting mode will show the current city and country on the top right of the screen. However, the city and country will appear in English regardless of the display language.
- The camera will record the location information onto the photos.

## GPS icon status

Color	Description
Green	The camera is receiving GPS signals.
Red	The camera is not receiving GPS signals.
Yellow	The camera has not received GPS signals and the GPS storage period has expired.
Grey	The GPS feature is deactivated.

# Playback/Editing

Learn how to play back photos, videos, or voice memos and edit photos or videos. Also, learn how to connect your camera to your photo printer or TV.

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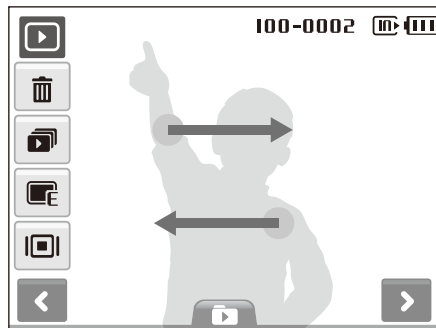
# Playing back


Learn actions to play back photos, videos, or voice memos, and managing files.

## Starting Playback mode

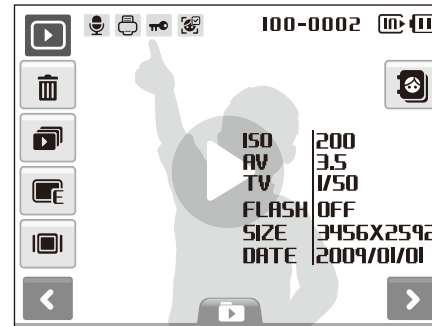
View photos or play videos and voice memos stored in your camera.





- 1 Press **[Playback]**.
  - The most recent file you have taken or recorded will be displayed.
  - If the camera is off, it will turn on.
- 2 Draw a horizontal bar left or right to scroll through files.
  - Select **◀** to view the previous file. Hold to view files quickly.
  - Select **▶** to view the next file. Hold to view files quickly.



 If you want to view files stored in the internal memory, remove your memory card.

### Display in Playback mode

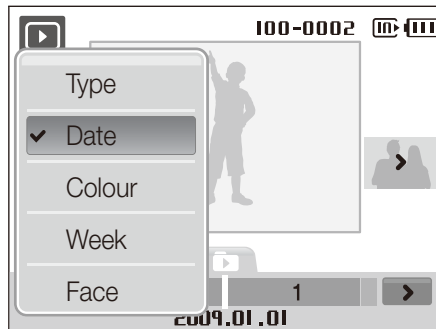


Icon	Description
	Photo includes a voice memo
	Video file
	Print order has been set (DPOF)
	Protected file
	Photo includes a registered face; Available only when you use a memory card
<b>100-0001</b>	Folder name – File name
	Register a face (p. 63); Available only when you use a memory card
	Delete files (p. 65)
	Play a slide show (p. 67)
	Edit photos (p. 70)
	Select a display type (p. 18)
	Play videos or voice memos (Video p. 68/Voice memo p. 69)

**Viewing files by category in Smart Album**

View and manage files by categories, such as date, file type, or week.






1 In Playback mode, select  → **DATE** → a category.



Option	Description
Type	View files by the file type.
Date	View files by the date they were saved.
Color	View files by the dominant color of the image.
Week	View files by the weekday they were saved.
Face	View files by recognized faces. (Up to 15 people)




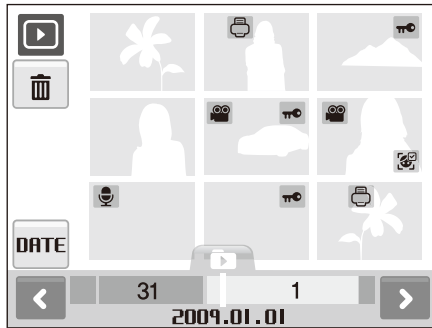
It may take some time for the camera to open Smart Album or to change the category and reorganize files.

- 2 Select a date, file type, weekday, color, or face.
  - You can also touch and hold  or  to scroll through dates, file types, weekdays, colors, or faces.
- 3 Select  or  to scroll through files.
- 4 Select  to return to the normal view.

### Viewing files as thumbnails

Scan thumbnails of files.

 In Playback mode, push **[Zoom]** down to display 9 or 16 thumbnails (push **[Zoom]** up to return to the previous mode).





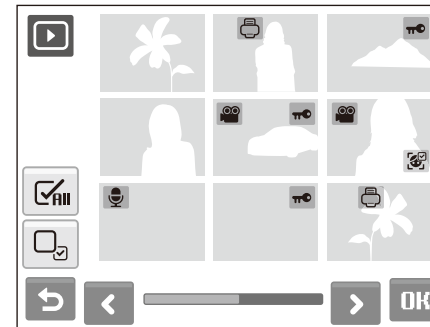
To	Do this
Scroll through files	Select <b>&lt;</b> or <b>&gt;</b> .
View a file	Select a thumbnail.
Delete files	Select  or drag a file to  . (p. 65)

### Protecting files

Protect your files from accidental deletion.

**To select and protect files,**

- 1 In Playback mode, press **[MENU]**.
- 2 Select **Protect** → **Select**.
- 3 Select files you want to protect.
  - Select  to select all files.
  - Select  to cancel your selection.



- 4 Select **OK**.


**To protect all files,**

- 1 In Playback mode, press **[MENU]**.
- 2 Select **Protect** → **All** → **Lock**.




**Deleting files**

Delete single files or all files at once. You cannot delete protected files.

**To delete a single file,**

- 1 In Playback mode, select a file → .
- 2 Select **Yes** to delete the file.

**To delete multiple files,**

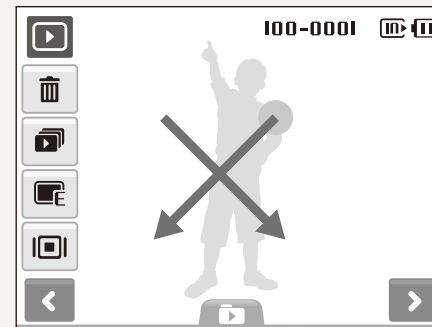
- 1 In Playback mode, select  → **Multiple Delete**.
- 2 Select files you want to delete.
  - Select  to select all files on the current screen.
  - Select  to cancel your selection.
- 3 Select **OK** → **Yes**.

**To delete all files,**

- 1 In Playback mode, press **[MENU]**.
- 2 Select **Delete** → **All** → **Yes**.

**Alternate way to delete a file**

While viewing a file in Playback mode, draw an X on the screen.



### Using the recycle bin

If you activate the recycle bin, files you delete will be sent to the recycle bin instead of being deleted permanently. This applies to single files or selected files only—if you choose to delete all files, those files will not be sent to the recycle bin.

#### To activate the recycle bin,

- 1 In Playback mode, press [MENU].
- 2 Select **Recycle Bin** → **On**.

#### To restore files from the recycle bin,

- 1 In Playback mode, press [MENU].
- 2 Select **Recycle Bin** → **Retrieve**.



- This function does not work for videos or voice memos.
- It may take longer to delete files when using the recycle bin function.
- If you format the internal memory, all files in the recycle folder will be deleted.
- The recycle bin will hold up to 10 MB of files. Once you exceed the 10 MB limit, the camera asks you whether to empty the recycle bin. Select **Yes** to empty the recycle bin or **No** to delete only the current file.

### Copying files to the memory card

You can copy files from the internal memory to a memory card.

- 1 In Playback mode, press [MENU].
- 2 Select ♥ → **Copy to Card**.
- 3 Select **Yes** to copy files.

### Viewing photos

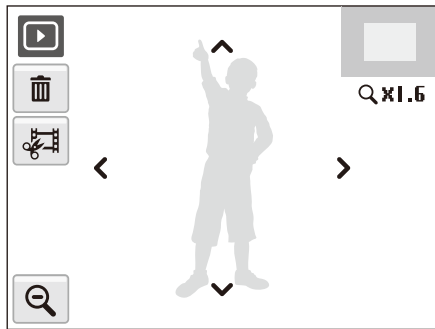
View a photo by zooming in on part of a photo or view photos as a slide show.

### Enlarging a photo



In Playback mode, push [Zoom] up to enlarge a photo (push [Zoom] down to reduce a photo).

The enlarged area and zoom ratio are indicated on the top of the screen. The maximum zoom ratio may vary depending on the resolution. Select arrows to move the enlarged area.

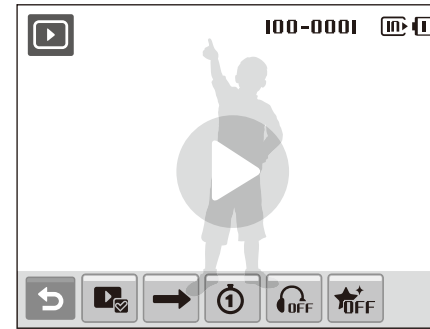


Icon	Description
	Delete the file.
	Crop the enlarged photo (it will be saved as a new file).
	Go back to the original view.

### Starting a slide show

You can apply effects and audio to your slide show.

- 1 In Playback mode, select
- 2 Set a slide show effect.




Option	Description
	<b>Images:</b> Select files for your slide show.
	<b>Play Mode:</b> Select whether or not to loop the slide show.
	<b>Interval:</b> Set the interval between photos. <ul style="list-style-type: none"> <li>• This will be available when  is selected in the <b>Effect</b> menu.</li> <li>• When used with an effect option other than , the interval will be set to 1 sec.</li> </ul>
	<b>Music:</b> Select background audio.
	<b>Effect:</b> <ul style="list-style-type: none"> <li>• Select a transition effect.</li> <li>• Select  for no effects.</li> </ul>






- 3 Select to start the slide show.
  - Touch on the screen (except for option icons) to pause the slide show.
  - Select to switch to Playback mode.

## Playing a video






You can play a video, capture an image from a video, or crop a video.

- 1 In Playback mode, select a video → .
- 2 Use the following icons to control playback.



Icon	Description
	Scan backward.
	Pause or resume playback.
	Stop playback.
	Scan forward.
	Adjust volume or mute sound.


## Trimming a video during playback

- 1 Select  at the point where you want the new video to begin and select .
- 2 Select  to resume playback.
- 3 Select  at the point where you want the new video to end and select .
- 4 Select **Yes**.



- The original video should be at least 10 seconds long.
- The edited video will be saved as a new file.

**Capturing an image during playback**


- 1 Select **||** at the point where you want to save a still image.
- 2 Select .
- 3 Select **Yes**.








A captured image will have the same file size as the original video file and will be saved as a new file.

**Playing a voice memo**


**Playing a voice memo**

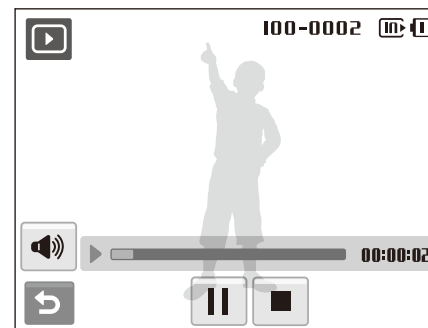
- 1 In Playback mode, select a voice memo → .
- 2 Use the following icons to control playback.






Icon	Description
	Scan backward.
	Pause or resume playback.
	Stop playback.
	Scan forward.
	Adjust volume or mute sound.

**Playing a voice memo added to a photo**

- 1 In Playback mode, select a photo that includes a voice memo → .
- 2 Use the following icons to control playback.




Icon	Description
	Pause or resume playback.
	Stop playback.
	Adjust volume or mute sound.





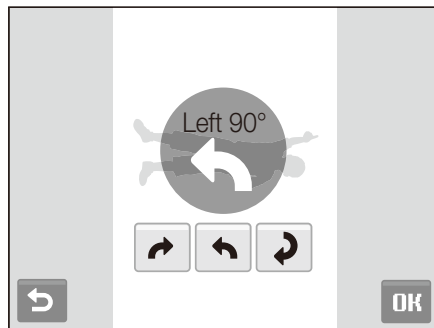
# Editing a photo

Perform photo editing tasks, such as rotating, resizing, eliminating red-eyes, and adjusting brightness, contrast, or saturation.

 Edited photos will be saved as new files.




## Rotating a photo

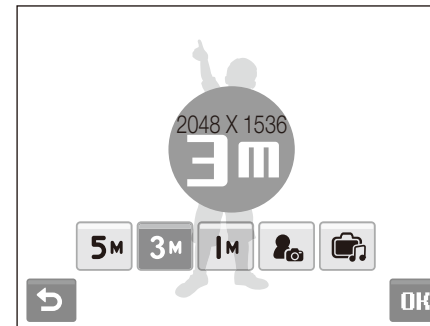
- 1 In Playback mode, select a photo → .
- 2 Select  → an option.



- 3 Select **OK**.

## Resizing photos

- 1 In Playback mode, select a photo → .
- 2 Select  → an option.
  - Select  to save the photo as a start image. (p. 88)



- 3 Select **OK**.

 Available options differ depending on the size of the selected photo.

## Editing color

Apply a different color tone to the photo, such as Soft, Vivid, or Forest.



Soft

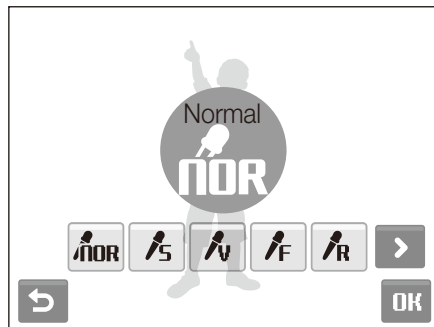


Vivid



Forest

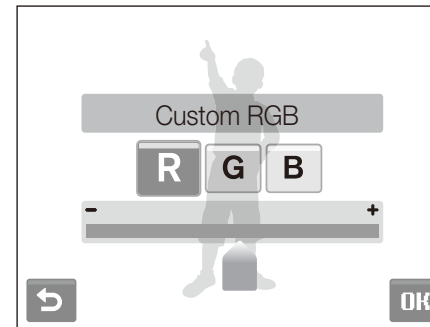
- 1 In Playback mode, select a photo → .
- 2 Select → an option.
  - Select to define your own RGB tone.



- 3 Select **OK**.

## Defining your own RGB tone



- 1 In Playback mode, select a photo → → .
- 2 Select → → a color (R: Red, G: Green, B: Blue).
- 3 Select the amount of the color.

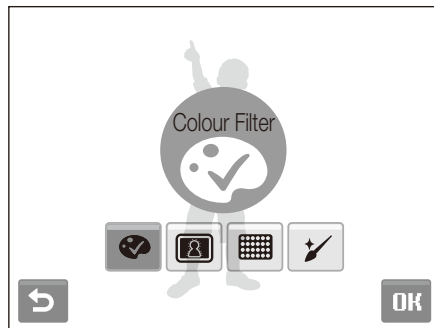





- 4 Select **OK**.

## Applying a special effect

Apply special effects to the photo, such as color filters or noise effects.

- 1 In Playback mode, select a photo → .
- 2 Select  → an option.








Option	Description
	<b>Colour Filter:</b> Change background colors to black and white to make the main subject stand out.
	<b>Elegant:</b> Apply effects to the photo to make it brighter and softer.
	<b>Add Noise:</b> Add noise to the photo to give it an aged look.

- 3 Select **OK**.




## Correcting exposure problems

Adjust ACB (Auto Contrast Balance), brightness, contrast, or saturation; or remove red-eye.

### Adjusting an image

- 1 In Playback mode, select a photo → .
- 2 Select  → an adjustment option.
  - : Brightness
  - : Contrast
  - : Saturation
- 3 Select a value to adjust the selected item.  
(-: less or +: more)
- 4 Select **OK**.

### Adjusting ACB (Auto Contrast Balance)

- 1 In Playback mode, select a photo → .
- 2 Select  → .
- 3 Select **OK**.



## Creating a print order (DPOF)

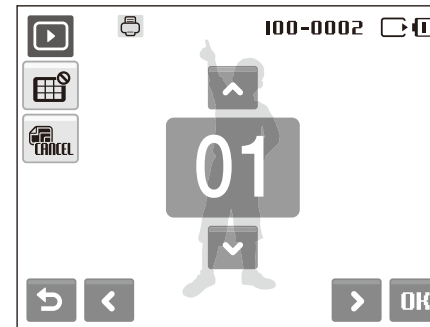
Select photos to be printed and set options, such as number of copies or paper size.







- The memory card can be taken to a print shop that supports DPOF (Digital Print Order Format) or you can print photos directly through a DPOF-compatible printer at home.
- Wide photos may print with the left and right edges cut off, so be aware of the dimensions of your photos.
- You cannot set the DPOF for the photos stored in the internal memory.

- 1 In Playback mode, press **[MENU]**.
- 2 Select  → **DPOF** → **Select**.
  - To print all files, select **All** and skip to step 5.

- 3 Select photos to print.
  - Select  to select all files.
  - Select  to cancel your selection.
- 4 Select **OK**.
- 5 Set DPOF options.



Option	Description
	Select whether to print the photos as thumbnails.
	Specify the size of the print.

- 6 Select  or  to set the number of copies.
- 7 Select **OK**.

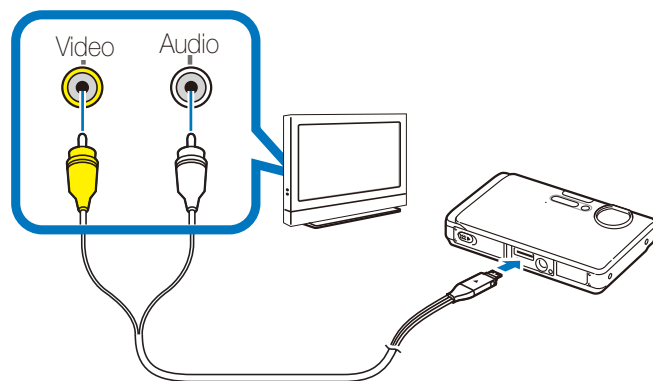


If you specify the print size, you can print photos only with DPOF 1.1-compatible printers.

# Viewing files on a TV (HDTV)

Play back photos or videos by connecting your camera to a TV using the provided A/V cable.

- 1 Select a video signal output according to your country or region. (p. 90)
- 2 Turn off your camera and TV.
- 3 Connect your camera to your TV using the A/V cable.



- 4 Turn on your TV and select the video output mode using the TV remote control.
- 5 Turn on your camera and press [**Playback**].

- 6 View photos or play videos using the touch screen on your camera.

- Locate the option you want on the TV screen and touch where the option is located on the camera screen. When a pointer appears on the option on the TV screen, select **OK** on the camera screen.

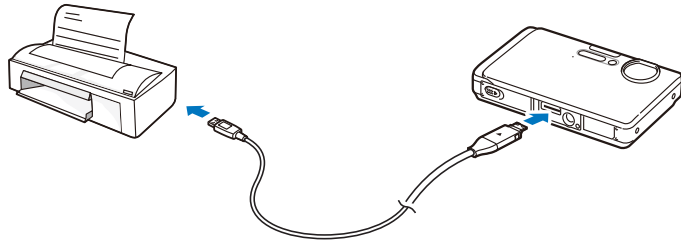


- On some TVs, digital noise may occur or part of an image may not appear.
- Images may not appear centered on the TV screen depending on your TV settings.
- You can capture photos or videos while the camera is connected to a TV.

# Printing photos with a photo printer (PictBridge)

Print photos with a PictBridge-compatible printer by connecting your camera directly to the printer.

- 1 With the printer on, connect your camera to the printer with the USB cable.




- 2 Turn on your camera.

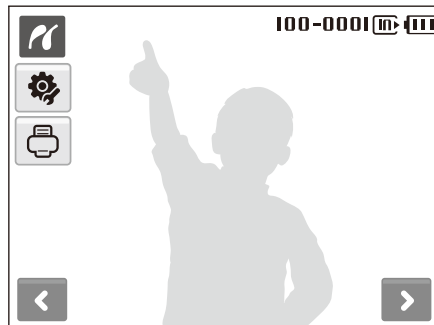
- The printer recognizes the camera automatically.



- If the camera fails to connect, a pop-up window will appear. Select **Printer**.
- If your printer has the mass storage feature, you must first set the USB mode to **Printer** in the settings menu. (p. 90)

- 3 Select  to print.



- Select  to set printing options. See “Configuring print settings” on page 76.



- 4 Select an option.

Option	Description
Current Photo	Print the currently selected photo. Skip to step 6.
Selected Photos	Print the photos you want.
All Photos	Print all photos. Skip to step 6.

- 5 Select  or  to scroll to a photo to print.

- 6 Select  or  to set the number of copies and select **OK**.








- If you selected to print the photos you want, repeat steps 5-6 for all photos to print.

- 7 Select **Yes** to confirm.

- Printing starts. Select **Cancel** to cancel printing.

### Configuring print settings



Option	Description
	<b>Size:</b> Specify the size of the print.
	<b>Layout:</b> Create thumbnail prints.
	<b>Type:</b> Select the type of paper.
	<b>Quality:</b> Set the printing quality.
	<b>Date:</b> Set to print the date.
	<b>File Name:</b> Set to print the name of the file.
	<b>Reset:</b> Reset the print options.



Some options are not supported by some printers.

# Wireless network/Bluetooth

Learn to use several functions using wireless local area networks (WLANs) and the Bluetooth feature. With the WLAN, you can upload and send photos and videos to websites or email addresses. You can also share photos with devices that support the Digital Living Network Alliance (DLNA) standard. With the Bluetooth feature, you can send your photos to other Samsung mobile phones or PDAs.

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# Connecting to a WLAN and configuring network settings

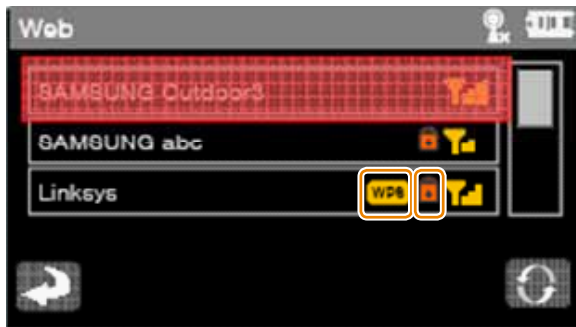
Learn to activate and connect to a wireless LAN via an access point (AP) when you are in a range of a WLAN. You can also configure network settings and learn how to enter text.





Your device uses a non-harmonised frequency and is intended for use in the following countries:

## Connecting to a WLAN automatically

- 1 In Shooting mode, select [Network] → .
- 2 Select **Access Point Setting**.
  - The camera will search for and display available WLAN connections.
- 3 Select a WLAN.



Icon	Description
	AD-HOC
	Security
WPS	WPS

- The camera will connect to the WLAN.
- If the network has the WPS profile, select **WPS** on the next screen.
- If the network requires a password, continue with the next step.

### 4 Select network profiles and options.

Option	Description
Authentication	Select a network authentication.
Encryption Type	Select an encryption type.

### 5 Select the password input field.

### 6 Enter a password and select **OK**.


### 7 Select **OK**.

- The camera will connect to the WLAN.



- For network profiles and a password, contact your network administrator or network service provider.
- When connecting to the network, you will be charged according to your contract with your network service provider.

## Connecting to a WLAN manually

- 1 In Shooting mode, select [Network] → .
- 2 Select **Access Point Setting**.
  - The camera will search for and display available WLAN connections.
- 3 Select a WLAN.
- 4 Select **IP Setting** and **Manual**.
- 5 Select the network profiles.



Option	Description
IP	Enter the static IP address.
Subnet Mask	Enter the subnet mask.
Gateway	Enter the gateway.

- 6 Enter values and select **OK**.
- 7 When you are finished, select **OK**.
  - The camera will connect to the WLAN.






For network profiles and a password, contact your network administrator or network service provider.

## Storing your information

- 1 In Shooting mode, select [Network] → .
- 2 Select **User Setting**.
- 3 Select the name input field and enter your name.
  - For information about entering text, refer to page xx.
- 4 When you are finished, select **OK**.
- 5 Select the email input field and enter your email address.
- 6 When you are finished, select **OK**.
- 7 Select .


## Storing email addresses

Store up to 10 email addresses in your camera. You can use them when you send your photos via email.

- 1 In Shooting mode, select [Network] → .
- 2 Select **Email Address**.
- 3 Select .
- 4 Select the name input field and enter a name.
  - For information about entering text, refer to page xx.
- 5 When you are finished, select **OK**.
- 6 Select the email input field and enter an email address.
- 7 When you are finished, select **OK**.
- 8 Select .


## Setting the file size to share

Set the file size you will share with other DLNA devices. You can select either the original size or a limit of 2MB.

- 1 In Shooting mode, select [Network] → .
- 2 Select **DLNA Image Size**.
- 3 Select a size.

## Checking information

Check the Mac address and serial number of your camera to register it with the Samsung website.

- 1 In Shooting mode, select [Network] → .
- 2 Select **Device Information**.

## Entering text

To enter text when storing your information or email addresses, select the appropriate letters, symbols, and numbers.

When you are finished, select **OK**.




Icon	Description
↑	Enter small letters.
■	Enter numbers and symbols.
■	Enter a space.
■	Delete the last letter.
■	Store the displayed text.

# Using photo or video sharing websites







## Accessing a website

Upload your photos to photo sharing websites, such as Zoom-in, Flickr, Picasa, and Facebook. You can also upload your videos to video sharing websites, such as YouTube.

- 1 In Shooting mode, select [Network] → .
  - The camera automatically connects to the last WLAN connection.
  - If the camera has not connected to the WLAN, it automatically searches for available WLAN connections. For details, refer to page xx.
- 2 Select a website.
- 3 Enter your login ID and password, and select **Login**.

Icons on a website



Icon	Description
	Home
	Previous page
	Next page
	Stop
	Refresh
	Close

## Uploading photos

- 1 Select .
- 2 Drag photos to the selection area and select **Add**.





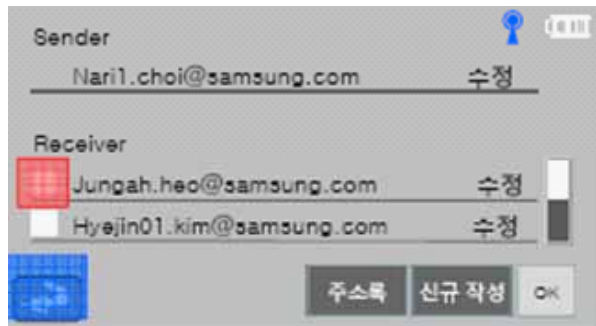
The number of photos you can upload may differ depending on the selected website.


- 3 Select an album and enter a title, and then select **Upload**.

# Sending photos via email

---

- 1 In Shooting mode, select [Network] → .
  - The camera automatically connects to the last WLAN connection.
  - If the camera has not connected to the WLAN, it automatically searches for available WLAN connections. For details, refer to page xx.
- 2 Select .
  - For information about storing email addresses, refer to page xx.



- The email address you entered in the user setting appears. (Refer to page xx.)
- If you have sent photos via email, the recent recipient addresses appear.
- To enter an email address manually, select .


- 3 Select email addresses and select **OK**.
- 4 Drag photos to the selection area and select **Send**.
  - The photos will be sent to the selected email addresses.

# Sending photos to the DLNA devices

DLNA is an international technology standard for sharing media files between networked devices in your home. With this technology, you can view your photos on a widescreen TV or another device, and send or receive photos to or from cameras of the same model.

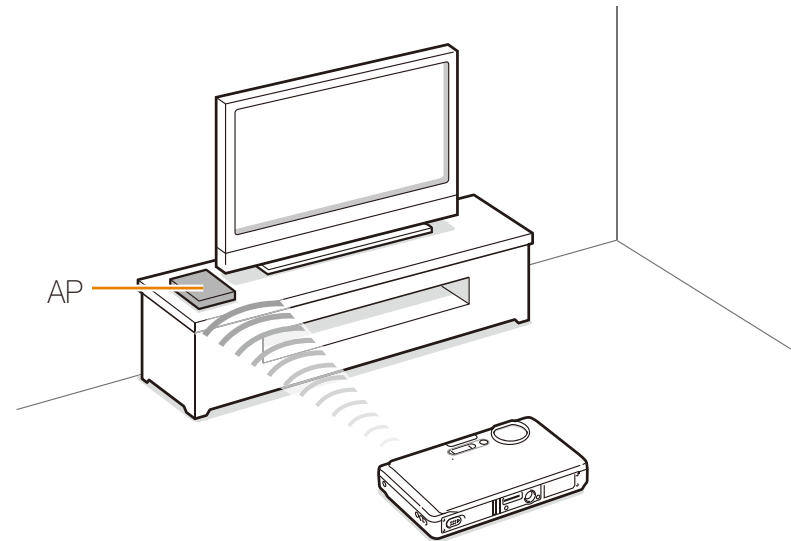
## Viewing photos on a TV screen

View your photos on a TV that supports the DLNA standard.

- 1 In Shooting mode, select [Network] → .
  - The camera automatically connects to the last WLAN connection.
  - If the camera has not connected to the WLAN, it automatically searches for the available WLAN connections. For details, refer to page xx.
- 2 Select **All** or **Selected**.
- 3 If you selected **Selected**, select the photos you want to view on the TV screen.
  - The photos will be shared with the TV.


- 4 On the TV, search for the camera and browse the shared photos.

- Your camera's name is what you entered in the user setting. (Refer to page xx.)
- For information about searching for the camera and browsing the photos on the TV, refer to the TV user manual.





## Viewing photos on another device


- 1 In Shooting mode, select [Network] → .
  - The camera automatically connects to the last WLAN connection.
  - If the camera has not connected to the WLAN, it automatically searches for the available WLAN connections. For details, refer to page xx.
- 2 Select a device that will play the photos.
- 3 Drag a photo to the selection area.




- The photos will appear on the device's screen.
- To view other photos, drag them to the selection area on your camera.

## Sending photos to another camera

Send your photos to another camera of the same model.


- 1 In Shooting mode, select [Network] → .
- 2 Select **Send**.
  - The camera generates a password and displays it on the screen while waiting for a connection with the receiving camera.
- 3 On the receiving camera, select the name of the sending camera.
  - The sending camera's name is what you entered in the user setting. (Refer to page xx.)
- 4 Enter the password (4 digits) on the receiving camera.
  - The selection area automatically appears on the sending camera.
- 5 Drag photos to the selection area.
  - The photos will be sent to the receiving camera.

## Receiving photos from another camera

- 1 In Shooting mode, select [Network] → .
- 2 Select **Receive**.
- 3 Select the name of the sending camera.
- 4 Enter the sending camera's password and select **OK**.
  - When the sending camera transmits photos, they will appear on the receiving camera.

# Sending photos via Bluetooth

Bluetooth is a wireless protocol for exchanging data over short distances. With Bluetooth, you can quickly send photos to other Samsung mobile phones or PDAs.

- 1 In Shooting mode, select [Network] → .
- 2 Select **Yes**.
  - The camera will search for and display Bluetooth-enabled devices.
  - If you have searched for the Bluetooth-enabled devices, a list of Bluetooth-enabled devices appears. Select **Research** to search again.
- 3 Select a Bluetooth-enabled device.
- 4 Enter a password (4~6 digits) and select **OK**.
- 5 Drag photos to the selection area.



- The photos will be sent to the selected device.
- The photo size will be resized to 640x480 (VGA).

# Appendixes

Refer to settings, error messages, specifications, and maintenance tips.

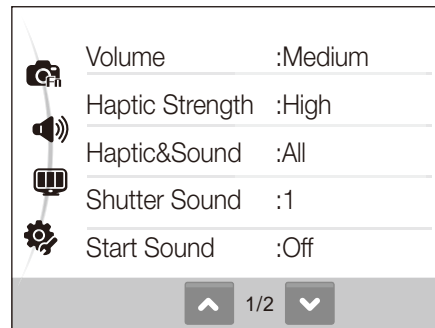
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# Settings menu

Learn about various options to configure your camera's settings.

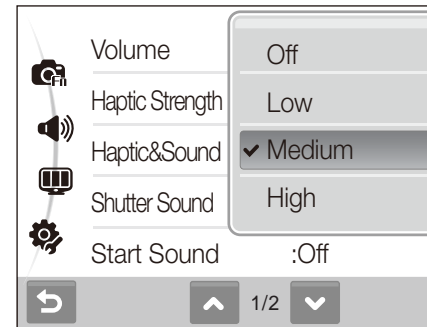
## Accessing the settings menu

- 1 In Shooting or Playback mode, press [MENU].
- 2 Select a menu.



Icon	Description
	<b>Sound settings:</b> Set various camera sounds and volume. (p. 88)
	<b>Display settings:</b> Customize the display settings, such as language and brightness. (p. 88)
	<b>Camera settings:</b> Change the settings for the camera system, such as memory format, default file name, and USB mode. (p. 89)


- 3 Select an option and save your settings.



- 4 Select  to return to the previous screen.



## Sound settings

\* Default

Item	Description
Volume	Adjust the volume of any sound. ( <b>Off, Low, Medium*</b> , <b>High</b> )
Haptic Strength	Select a level of the vibration when you touch on the screen. ( <b>Low, Medium, High*</b> )  In low temperatures, the vibration level may feel lower than your actual setting. It is not a malfunction.
Haptic&Sound	Select whether the camera will vibrate or sound when you touch on the screen. ( <b>Off, Haptic, Sound, All*</b> )
Shutter Sound	Select a sound to be emitted when pressing the shutter button. ( <b>Off, 1*</b> , <b>2, 3</b> )
Start Sound	Select a sound to be emitted when turning on your camera. ( <b>Off*</b> , <b>1, 2, 3</b> )
AF Sound	Set to emit a sound to be emitted when half-pressing the shutter button. ( <b>Off, On*</b> )


## Display settings

\* Default


Item	Description
Language	Select a language for the display text.
Function Description	Display a brief description of an option or menu. ( <b>Off, On*</b> )
Start Image	Set a start image to display when the camera turns on. <ul style="list-style-type: none"> <li>• <b>Off*</b>: Display no start image.</li> <li>• <b>Logo</b>: Display a default image stored in the internal memory.</li> <li>• <b>User Image</b>: Display the image you want. (p. 70)  <ul style="list-style-type: none"> <li>• Only one start image will be saved in the internal memory.</li> <li>• If you select a new photo as a start image or reset your camera, the current image will be deleted.</li> <li>• A wide image or image in 3:2 ratio cannot be set as a start image.</li> </ul> </li> </ul>
Display Brightness	Adjust the brightness of the screen. ( <b>Auto*</b> , <b>Dark, Normal, Bright</b> )  <b>Normal</b> is fixed in Playback mode even if <b>Auto</b> is selected.
Quick View	Set the duration for reviewing a captured image or video before returning to Shooting mode. ( <b>Off, 0.5 sec*</b> , <b>1 sec, 3 sec</b> )
Power Save	If you perform no operations for 30 seconds, the camera automatically switches to Power save mode (press any button to deactivate the Power save mode). ( <b>Off*</b> , <b>On</b> )

## Camera settings

\* Default



Item	Description
Format	<p>Format the internal memory and the memory card (all files-including the protected files-will be deleted). <b>(No, Yes)</b></p> <p> If you use a memory card used with cameras from different manufacturers or a memory card reader, or one formatted on a computer, your camera may read the card incorrectly. Format the card before using it.</p>
Reset	<p>Reset menus and shooting options (date and time, language, and video output settings will not be reset). <b>(No, Yes)</b></p>
Date&Time	<p>Set the date and time and select a date format. <b>(yyyy/mm/dd, mm/dd/yyyy, dd/mm/yyyy, Off*)</b></p>
Time Zone	<p>Select a region and set the daylight-saving time (DST).</p>

\* Default

Item	Description
File No.	<p>Specify how to name files.</p> <ul style="list-style-type: none"> <li>• <b>Reset:</b> Set the file number to start from 0001 when inserting a new memory card, formatting a memory card, or deleting all files.</li> <li>• <b>Series*:</b> Set the file number to follow the previous file number when inserting a new memory card, formatting a memory card, or deleting all files.</li> </ul> <p> <ul style="list-style-type: none"> <li>• The default name of the first folder is 100SSCAM and the default name of the first file is SDC10001.</li> <li>• The file number increases one by one from SDC10001 to SDC19999.</li> <li>• The folder number increases one by one from 100SSCAM to 999SSCAM.</li> <li>• The maximum number of files that can be stored in one folder is 9999.</li> <li>• The camera defines file names according to the Digital rule for Camera File system (DCF) standard. If you change the names of files intentionally, the camera may not play back the files.</li> </ul> </p>

## Settings menu

\* Default

Item	Description
Imprint	<p>Set whether to display the date and time on your photos when printing. (<b>Off*</b>, <b>Date</b>, <b>Date &amp; Time</b>)</p>  <ul style="list-style-type: none"> <li>The date and time will be displayed on the bottom-right corner of the photo in yellow.</li> <li>The date and time may not be printed on some printer models.</li> <li>If you select <b>T</b> in the <b>SCENE</b> mode, the date and time will not be displayed.</li> </ul>
Auto Power Off	<p>Set the camera to automatically turn off when you are not using it. (<b>Off</b>, <b>1 min</b>, <b>3 min*</b>, <b>5 min</b>, <b>10 min</b>)</p>  <ul style="list-style-type: none"> <li>Your settings will not change after replacing the battery.</li> <li>The camera will not automatically turn off when: <ul style="list-style-type: none"> <li>it is connected to a computer or printer</li> <li>you are playing a slide show or videos</li> <li>you are recording a voice memo</li> </ul> </li> </ul>
AF Lamp	<p>Set an assistant light to help you focus in dark places. (<b>Off</b>, <b>On*</b>)</p>

\* Default

Item	Description
Video Out	<p>Set the video signal output according to your region.</p> <ul style="list-style-type: none"> <li><b>NTSC*</b>: USA, Canada, Japan, Korea, Taiwan, Mexico.</li> <li><b>PAL</b> (supports only BDGHI): Australia, Austria, Belgium, China, Denmark, Finland, Germany, England, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway.</li> </ul>
USB	<p>Set the function to use via a USB connection with a computer or printer.</p> <ul style="list-style-type: none"> <li><b>Auto*</b>: Set your camera to select a USB mode automatically.</li> <li><b>Computer</b>: Connect your camera to a computer for transferring files.</li> <li><b>Printer</b>: Connect your camera to a printer for printing files.</li> </ul>



# Error messages

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When the following error messages appear, try these remedies.

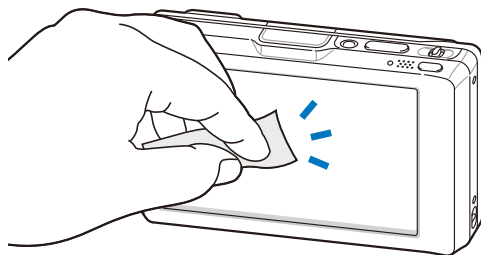
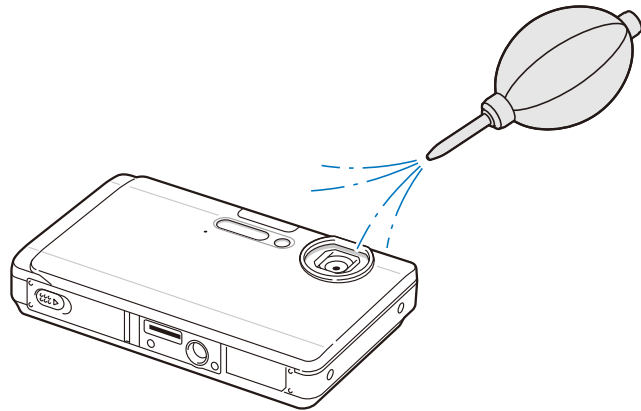
Error message	Suggested remedies
Card Error	<ul style="list-style-type: none"><li>• Turn off your camera and then turn it on again.</li><li>• Remove your memory card and insert it again.</li><li>• Format your memory card. (p. 89)</li></ul>
DCF Full Error	File names do not match the DCF standard. Transfer the files on the memory card to your computer and format the card. (p. 89)
File Error	Delete the damaged file or contact a service center.
Low Battery	Insert a charged battery or recharge the battery.
Low Light	Turn on the flash. (p. 45)
Memory Full	Delete unnecessary files or insert a new memory card.
No Image File	Take photos or insert a memory card that has some photos.

# Camera maintenance

## Cleaning your camera

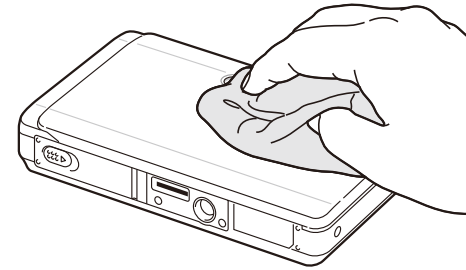
### Camera lens and touch screen

Use a blower brush to remove dust and wipe the lens gently with a soft cloth. If any dust remains, apply lens cleaning liquid to a piece of cleaning paper and wipe gently.



### Camera body

Wipe gently with a soft, dry cloth.



- Never use benzene, thinners, or alcohol to clean the device. These solutions can damage the camera or cause it to malfunction.
- Make sure to close the lens cover before cleaning.

## About memory cards

### Memory cards you can use

You can use SD (Secure Digital) memory cards.

### Memory card capacity

The memory capacity may differ depending on shooting scenes or shooting conditions. These capacities are based on a 1 GB SD card:

	Size	Super fine	Fine	Normal	30 FPS	20 FPS	15 FPS
P h o t o s	<b>9M</b>	194	376	546	-	-	-
	<b>8M</b>	221	426	611	-	-	-
	<b>7M</b>	264	510	744	-	-	-
	<b>5M</b>	343	637	870	-	-	-
	<b>3M</b>	532	895	1,211	-	-	-
	<b>1M</b>	1,716	2,059	2,376	-	-	-
* V i d e o s	<b>800</b>	-	-	-	-	Approx. 30' 9"	-
	<b>640</b>	-	-	-	Approx. 35' 54"	-	Approx. 69' 52"
	<b>320</b>	-	-	-	Approx. 47' 24"	-	Approx. 92' 12"

\* The recordable time may vary if you use the zoom.


## About the battery

Use only Samsung-approved batteries.

### Battery specifications

Mode	SLB-0937
Type	Lithium-ion battery
Cell capacity	900 mAh
Voltage	3.7 V
Charging time (when the camera is switched off)	Approx. 150 min

**Battery life**

Average time / Number of photos		Test conditions (when the battery is fully charged)
<b>Photos</b>	Approx. 130 min/ Approx. 260	<p>This is measured under the following conditions: in the  mode, 9M resolution, Fine quality.</p> <ol style="list-style-type: none"> <li>1. Set the flash option to <b>Fill in</b>, take a single shot, and zoom in or out.</li> <li>2. Set the flash option to <b>Off</b>, take a single shot, and zoom in or out.</li> <li>3. Perform steps 1 and 2 for 30 seconds and repeat for 5 minutes. Then turn off the camera for 1 minute.</li> <li>4. Repeat steps 1 to 3.</li> </ol>
<b>Videos</b>	Approx. 130 min	Record videos at 800 x 592 resolution and 20 fps.

- The figures above are measured by Samsung's standards and may differ depending on actual usage.
- Several videos were recorded in succession to determine the total recording time.

**Notes about charging the battery**

- If the indicator light is off, make sure that the battery is inserted correctly.
- Turn off your camera when charging.
- Turn on your camera after charging the battery for more than 10 minutes.
- Using the flash or recording videos depletes the battery quickly. Charge the battery until the indicator light turns green.
- If the indicator light blinks in red or does not illuminate, reconnect the cable, or remove the battery and insert it again.
- If you charge the battery when it is warm, the indicator light may turn orange. Charging will start when the battery cools down.



**Notes about charging with a computer connected**

- Use only the provided USB cable.
- The battery may not be charged when:
  - you use a USB hub
  - other USB devices are connected to your computer
  - you connect the cable to the port on the front side of your computer
  - the USB port of your computer does not support the power output standard (5 V, 500 mA)

# Before contacting a service center

If you are having trouble with your camera, try these troubleshooting procedures before contacting a service center. If you have attempted the troubleshooting solution and are still having problems with your device, contact your local dealer or service center.

Situation	Suggested remedies
Cannot turn on the camera	<ul style="list-style-type: none"> <li>• Make sure that the battery is inserted.</li> <li>• Make sure that the battery is inserted correctly.</li> <li>• Charge the battery.</li> </ul>
The power turns off suddenly	<ul style="list-style-type: none"> <li>• Charge the battery.</li> <li>• Your camera may be in Power save mode. (p. 88)</li> <li>• The camera may turn off to prevent the memory card from being damaged due to an impact. Turn on your camera again.</li> </ul>
The camera is losing battery power quickly	<ul style="list-style-type: none"> <li>• The battery may lose power more quickly in low temperatures (below 0° C). Keep the battery warm by putting it into your pocket.</li> <li>• Using the flash or recording videos depletes the battery quickly. Recharge if needed.</li> <li>• Batteries are consumable parts that must be replaced over time. Get a new battery if the battery life is diminishing quickly.</li> </ul>

Situation	Suggested remedies
Cannot take photos	<ul style="list-style-type: none"> <li>• There is no space on the memory card. Delete unnecessary files or insert a new card.</li> <li>• Format the memory card. (p. 89)</li> <li>• The memory card is defective. Get a new memory card.</li> <li>• Make sure that the camera is switched on.</li> <li>• Charge the battery.</li> <li>• Make sure that the battery is inserted correctly.</li> </ul>
The camera freezes	Remove the battery and insert it again.
The flash does not work	<ul style="list-style-type: none"> <li>• The flash option may be set to <b>Off</b>. (p. 45)</li> <li>• You cannot use the flash in the , , or some <b>SCENE</b> modes.</li> </ul>
The flash fires unexpectedly	The flash may fire due to static electricity. This is not a malfunction of the camera.
The date and time are incorrect	Set the date and time in the display settings menu.
The touch screen or buttons do not work	Remove the battery and insert it again.

Situation	Suggested remedies
<b>The memory card has an error</b>	The memory card has not been reset. Format the card. (p. 89)
<b>Cannot play back files</b>	If you change the name of a file, your camera may not play the file (the name of the file should meet the DCF standard). If you encounter this situation, play back files on your computer.
<b>The photo is blurry</b>	<ul style="list-style-type: none"> <li>• Make sure that the focus option you set is suitable for close-up shots. (p. 47)</li> <li>• Make sure that the subject is within range of the flash. (p. 98)</li> <li>• Make sure that the lens is clean. If not, clean the lens. (p. 92)</li> </ul>
<b>The colors in the photo do not match the actual scene</b>	An incorrect white balance can create unrealistic color. Select the proper white balance option to suit the light source. (p. 56)
<b>The photo is too bright</b>	<ul style="list-style-type: none"> <li>• Your photo is overexposed. Adjust the exposure value. (p. 53)</li> <li>• Turn off the flash. (p. 45)</li> </ul>

Situation	Suggested remedies
<b>The TV does not display your photos</b>	<ul style="list-style-type: none"> <li>• Make sure that the camera is correctly connected to the external monitor with the A/V cable.</li> <li>• Make sure that your memory card contains photos.</li> </ul>
<b>Your computer does not recognize your camera</b>	<ul style="list-style-type: none"> <li>• Make sure that the USB cable is connected correctly.</li> <li>• Make sure that your camera is switched on.</li> <li>• Make sure that you are using a supported operating system.</li> </ul>
<b>Your computer disconnects the camera while transferring files</b>	The file transmission may be interrupted by static electricity. Disconnect the USB cable and connect it again.

# Camera specifications

Image sensor	
Type	1/2.3" CCD
Effective pixels	Approx. 12.2 mega-pixels
Total pixels	Approx. 12.4 mega-pixels
Lens	
Focal length	Schneider - KREUZNACH 5X Inner Zoom f = 6.3 - 31.5 mm (35 mm film equivalent: 35 - 175 mm)
F-stop range	F3.6 (W) - F4.8 (T)
Digital zoom	<ul style="list-style-type: none"> <li>Still image mode: 1.0X - 5.0X</li> <li>Play mode: 1.0X - 10.8X (depending on image size)</li> </ul>
Display	
Type	3.5" TFT VGA
Feature	Full touch screen panel
Focusing	
Type	TTL auto focus (Multi AF, Center AF, Face Recognition AF, Face Detection AF, Smart Touch AF, One touch Shooting)

		Wide (W)	Tele (T)
Range	Normal	80 cm - infinity	
	Macro	10 cm - 80 cm	50 cm - 80 cm
	Auto Macro	10 cm - infinity	50 cm - infinity
	Super Macro	1 cm - 10 cm	-

## Shutter speed

- Auto: 1/8 - 1/2,000 sec.
- Program: 1 - 1/2,000 sec.
- Night: 18 - 1/2,000 sec.
- Firework: 4 sec.

## Exposure

Control	Program AE
Metering	Multi, Spot, Center-weighted
Compensation	±2EV (1/3EV steps)
ISO equivalent	Auto, 80, 100, 200, 400, 800, 1600, 3200, 6400

## Flash

Mode	Off, Auto, Red-eye, Fill in, Slow Sync, Red-eye Fix
Range	<ul style="list-style-type: none"> <li>• Wide: 0.2 m - 4.6 m (ISO Auto)</li> <li>• Tele: 0.5 m - 2.3 m (ISO Auto)</li> </ul>
Recharging time	Approx. 4 sec.









## Camera specifications

Shake reduction	
Dual IS [Optical Image Stabilisation (OIS) + Digital Image Stabilisation (DIS)]	
Effect	
Shooting mode	<ul style="list-style-type: none"> <li>Photo Style Selector: Normal, Soft, Vivid, Forest, Retro, Cool, Calm, Classic, Negative, Custom RGB</li> <li>Image Adjust: Sharpness, Contrast, Saturation</li> </ul>
White Balance	
Auto WB, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom Set	
Shooting	
Photos	<ul style="list-style-type: none"> <li>Modes: Smart Auto (Portrait, Night Portrait, Backlight Portrait, Backlight, Landscape, White, Motion, Tripod, Night, Macro, Macro Text, Blue Sky, Sunset Sky, Natural Portrait, Natural Green), Auto, Program, DUAL IS, Movie, Scene (Night, Portrait, Children, Landscape, Text, Close Up, Sunset, Dawn, Backlight, Firework, Beach &amp; Snow, Frame Guide, Beauty Shot)</li> <li>Drive: Single, Continuous, Motion Capture, AEB</li> <li>Timer: 2 sec, 10 sec, Double, Motion Timer</li> </ul>

Videos	<ul style="list-style-type: none"> <li>Format: MPEG-4 with audio (Max recording time: 2 hours)</li> <li>Size: 1280 x 720 (30 FPS, 15 FPS) High Quality, 1280 x 720 (30 FPS, 15 FPS) Standard Quality, 640 x 480 (30 FPS, 15 FPS), 320 x 240 (60 FPS, 30 FPS, 15 FPS)</li> <li>5X Optical zoom with sound recording</li> <li>Frame rate: 60 FPS, 30 FPS, 15 FPS</li> <li>Photo style selector, White balance</li> <li>Video editing (embedded): Pause during recording, Still image capture, Time trimming</li> </ul>
Playback	
Type	Single image, Thumbnails, Multi slide show, Movie clip, Smart Album
Edit	Resize, Rotate, Photo Style Selector, Image Adjust
Effect	<ul style="list-style-type: none"> <li>Photo Style Selector: Normal, Soft, Vivid, Forest, Retro, Cool, Calm, Classic, Negative, Custom RGB</li> <li>Image Adjust: ACB, Brightness, Contrast, Saturation</li> <li>Funny Face: Face Retouch, Red-eye Fix, Snow, Mosaic, Highlight</li> </ul>
Voice recording	
<ul style="list-style-type: none"> <li>Voice Recording (Max. 10 hours )</li> <li>Voice Memo in a photo (Max. 10 sec.)</li> </ul>	



## Camera specifications

Media	<ul style="list-style-type: none"> <li>Internal memory: Approx. 200 MB</li> <li>External memory (Optional): Micro SD card (up to 2 GB guaranteed)</li> </ul>				
File format	<ul style="list-style-type: none"> <li>Photo: JPEG (DCF), EXIF 2.21, DPOF 1.1, PictBridge 1.0</li> <li>Video: H.264 (MPEG-4.AVC)</li> <li>Audio: WAV</li> </ul>				
Image size	For 1GB SD				
			Super fine	Fine	Normal
		4000 x 3000	142	274	389
		3984 x 2656	162	302	426
		3968 x 2232	195	355	509
		3264 x 2448	204	361	518
		2592 x 1944	327	547	764
		2048 x 1536	514	774	1028
		1920 x 1080	840	1104	1387
		1024 x 768	1420	1612	1807
<p>These figures are measured under Samsung's standard conditions and may vary depending on shooting conditions and camera settings.</p>					

### Wireless network

Wi-Fi	IEEE 802.11 b/g
DLNA	DSC to DSC, DSC to TV, DSC to phone
GPS	Internal GPS module
Bluetooth	<ul style="list-style-type: none"> <li>Version: 2.0</li> <li>Operating range: Up to 10 metres</li> <li>QD ID: B0XXXXX</li> </ul>

### Interface

Digital output connector	USB 2.0 high speed
Audio output	Mono
Video output	<ul style="list-style-type: none"> <li>AV: NTSC, PAL (selectable)</li> <li>HDMI 1.2: NTSC, PAL (Selectable)</li> </ul>
DC power input connector	34 pin, 4.2V

### Power source

Rechargeable battery	Lithium-ion battery (SLB-11A, 1,130 mAh)
AC adapter	Power adapter (SAC-48), USB cable (CB34U05)
HDMI cable	SCC-HD2

The power source may differ depending on your region.

## Camera specifications

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### Dimensions (W x H x D)

98 x 59 x 17.2 mm

### Weight

124.2 g (without battery and memory card)

### Operating temperature

0 - 40° C

### Operating humidity

5 - 85 %

### Software

Multi stage

---

Specifications are subject to change without prior notice.

# FCC notice

- **NOTE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

- **CAUTION:**

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

- **Declaration of Conformity**

Trade Name : Samsung Electronics America, Inc.  
Model No. : Samsung CL65  
Responsible Party : Samsung Electronics America, Inc.  
Address : 105 Challenger Road Ridgefield Park NJ  
Telephone No. : 1-800-SAMSUNG (726-7864)

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

**<RF Exposure Statement>**

**" This device is for handheld operation only. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."**



**Samsung Eco-mark**

It is Samsung's own symbol mark is used to effectively communicate Samsung's environmental friendly product activities to the consumers. The mark represents Samsung's continuous effort on development of environmental conscious products.

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Please refer to the warranty that came with your product or visit our website <http://www.samsung.com> for after-sales service or inquiries.



The CE Mark is a Directive conformity mark of the European Community (EC)