

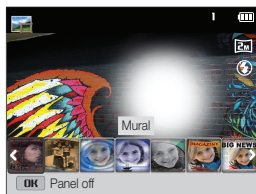
Using Magic modes

Capture a photo or record a video with various effects.

Using the Magic Frame mode

In Magic Frame Shot mode, you can apply various frame effects to your photos. The shape and the feel of the photos will change according to the frame you select.

- 1 On the Home screen, scroll to **<Magic>**.
- 2 Select .
- 3 Select a desired frame.



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



In Magic Frame mode, the resolution is automatically set to **2m**.

Using the Photo Filter mode

Apply various filter effects to your photos to create unique images.



Miniature



Vignetting



Fish-eye



Sketch

- 1 On the Home screen, scroll to **<Magic>**.
- 2 Select .
- 3 Select an effect.

Option	Description
Miniature	Apply a tilt-shift effect to make the subject appear in miniature.
Vignetting	Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras.
Ink Painting	Apply a watercolor painting effect.
Oil Painting	Apply an oil painting effect.
Cartoon	Apply a cartoon painting effect.
Cross Filter	Add lines that radiate outward from bright objects to imitate the visual effect of a cross filter.
Sketch	Apply a pen sketch effect.
Soft Focus	Hide facial imperfections or apply dreamy effects.
Fish-eye	Blacken the edges of the frame and distort objects to imitate the visual effect of a fisheye lens.
Old Film	Apply a vintage film effect.
Half Tone Dot	Apply a halftone effect.
Classic	Apply a black and white effect.
Retro	Apply a sepia tone effect.
Zooming Shot	Blur the edges of a photo to emphasize the subjects in the center.

4 Align your subject in the frame, and then half-press [Shutter] to focus.

5 Press [Shutter] to capture a photo.



Depending on the option you select, the resolution may change to **5m** or smaller automatically.

Using the Movie Filter mode

Apply various filter effects to your videos to create unique images.

1 On the Home screen, scroll to <Magic>.

2 Select .

3 Select an effect.

Option	Description
Miniature	Apply a tilt-shift effect to make the subject appear in miniature.
Vignetting	Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras.
Half Tone Dot	Apply a halftone effect.
Sketch	Apply a pen sketch effect.

Option	Description
Fish-eye	Distort close objects to imitate the visual effect of a fisheye lens.
Classic	Apply a black and white effect.
Retro	Apply a sepia tone effect.
Palette Effect 1	Create a vivid look with sharp contrast and strong color.
Palette Effect 2	Make scenes clean and clear.
Palette Effect 3	Apply a soft brown tone.
Palette Effect 4	Create a cold and monotone effect.

4 Press [Shutter] to start recording.

5 Press [Shutter] again to stop recording.

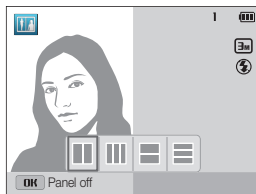


- If you select **Miniature**, the miniature recording time is also displayed and is shorter than the real recording time.
- If you select **Miniature**, you cannot record the video sound.
- Depending on the option you select, the recording speed may change to **1/5** and the recording resolution may change to **VGA** or smaller automatically.

Using the Split Shot mode

In Split Shot mode, you can capture several photos and arrange them with preset layouts.

- 1 On the Home screen, scroll to **<Magic>**.
- 2 Select .
- 3 Select a split style.
 - To adjust the sharpness of the dividing line, press **[MENU]**, and then select **Line Blur** → a desired value.
 - To apply a Smart Filter effect to part of the shot, press **[MENU]**, and then select **Smart Filter** → a desired option. You can apply different Smart Filter effects to each part of the shot.



- 4 Align your subject in the frame, and then half-press **[Shutter]** to focus.

- 5 Press **[Shutter]** to capture a photo.

- Repeat steps 4 and 5 to capture the rest of the photos.
- To recapture a photo, press .



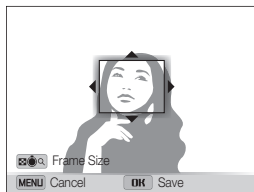
- In Split Shot mode, the resolution is automatically set to **3m** or smaller.
- In Split Shot mode, the available zoom range may be less than in other shooting modes.

Using the Motion Photo mode

In Motion Photo mode, you can capture and combine a series of photos, and then select an area to be animated to create a GIF animation. This mode is available only when you insert a memory card into the camera.

- 1 On the Home screen, scroll to **<Magic>**.
- 2 Select .
- 3 Align your subject in the frame, and then half-press **[Shutter]** to focus.
- 4 Press **[Shutter]** to capture the photo.
 - The camera captures multiple photos while the status lamp is blinking.
- 5 Press **[DISP/⏏/⚡/☺]** to scroll to an area to be animated.

- 6 Rotate **[Zoom]** to the left or right to reduce or enlarge the area.



- 7 Press **[OK]** to save the photo.
 - The camera saves an animated GIF and one JPG of the first scene from the GIF file. You cannot view the JPG file on your camera. To view it, connect your camera to a PC. (p. 101)



- In Motion Photo mode, the resolution is automatically set to **VGA**.
- Use a tripod to prevent your camera from shaking.
- In Motion Photo mode, it may take longer to save files.

Shooting options

Learn how to set the options in Shooting mode.

Selecting a resolution and quality	57	Adjusting brightness and color	68
Selecting a resolution	57	Adjusting the exposure manually (EV)	68
Selecting an image quality	58	Compensating for backlighting (ACB)	69
Using the timer	59	Changing the metering option	69
Shooting in the dark	60	Selecting a White Balance setting	70
Preventing red-eye	60	Using burst modes	72
Using the flash	60	Adjusting images	73
Adjusting the ISO sensitivity	62	Reducing the sound of the zoom	74
Changing the camera's focus	63	Available shooting options by shooting mode	75
Using macro	63		
Using tracking auto focus	64		
Adjusting the focus area	65		
Using Face Detection	66		
Detecting faces	66		
Capturing a smile shot	67		
Detecting eye blinking	67		

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.

Setting the photo resolution

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Photo Size**.
- 3 Select an option.

Icon	Description
	4608 X 3456: Print on A1 paper.
	4608 X 3072: Print on A1 paper in wide ratio (3:2).
	4608 X 2592: Print on A1 paper in panorama ratio (16:9) or play back on an HDTV.
	3648 X 2736: Print on A2 paper.
	2592 X 1944: Print on A4 paper.
	1984 X 1488: Print on A5 paper.
	1920 X 1080: Print on A5 paper in panorama ratio (16:9) or play back on an HDTV.
	1024 X 768: Attach to an email.

Setting the video resolution

- 1 In Video Shooting mode, press **[MENU]**.
- 2 Select **Movie Size**.
- 3 Select an option.

Icon	Description
	HD 1280 X 720: HD files to play back on an HDTV.
	VGA 640 X 480: SD files to play back on an analog TV.
	QVGA 320 X 240: Post on a web page.
	240 WEB For Sharing: Post on a website using the wireless network (30 seconds maximum).

Selecting an image quality

Set the photo and video quality settings. Higher image quality settings will result in larger file sizes.

Setting the photo quality

The camera compresses and saves the photos you capture in the JPEG format.

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Quality**.
- 3 Select an option.

Icon	Description
	Super Fine: Capture photos in super high quality.
	Fine: Capture photos in high quality.
	Normal: Capture photos in normal quality.

Setting the video quality

The camera compresses and saves the videos you record in MP4 (H.264) format.

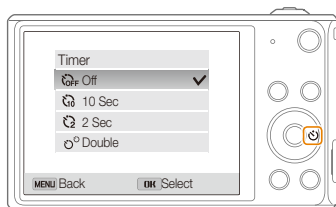
- 1 In Video Shooting mode, press **[MENU]**.
- 2 Select **Frame Rate**.
- 3 Select an option.

Icon	Description
	30 FPS: Record 30 frames per second.
	15 FPS: Record 15 frames per second.

Using the timer

Learn how to set the timer to delay shooting.

1 In Shooting mode, press [ⓘ].



2 Select an option.

Icon	Description
	Off: The timer is not active.
	10 Sec: Capture a photo after a 10-second delay.
	2 Sec: Capture a photo after a 2-second delay.
	Double: Capture one photo after a 10-second delay and another photo after a 2-second delay.

Available options may differ depending on the shooting conditions.

3 Press [Shutter] to start the timer.

- The AF-assist light/timer lamp blinks. The camera will automatically capture a photo after the specified time has elapsed.
- The front display will start a countdown before shooting.



- Press [Shutter] or [ⓘ] to cancel the timer.
- Depending on the Face Detection options you selected, the timer function may not be available.
- In some modes, you can also set the timer option by pressing [MENU], and then selecting **Timer**.

Shooting in the dark

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

Preventing red-eye

If the flash fires when you capture a photo of a person in the dark, a red glow may appear in the person's eyes. To prevent this, select **Red-eye** or **Red-eye Fix**. Refer to flash options in "Using the flash."



▲ Before correction

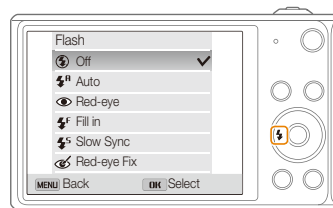


▲ After correction

Using the flash

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

1 In Shooting mode, press [⚡].



2 Select an option.

Icon	Description
	Off: - The flash will not fire. - The camera will display the shake warning (⚠) when you are shooting in low light.
	Auto: The camera will select a proper flash setting for the scene it detects in Smart Auto mode.
	Auto: The flash will fire automatically when the subject or background is dark.

Icon	Description
	Red-eye: - The flash will fire twice when the subject or background is dark to reduce the red-eye effect. - There is an interval between the 2 bursts of the flash. Do not move until the flash fires a second time.
	Fill in: - The flash always fires. - The camera automatically adjusts light intensity.
	Slow Sync: - The flash fires and the shutter stays open longer. - This option is recommended when you want to capture more ambient light to reveal more details in the background. - Use a tripod to prevent your photos from blurring. - The camera will display the shake warning «» when you are shooting in low light.
	Red-eye Fix: - The flash fires twice when the subject or background is dark. The camera corrects red-eyes through its advanced software analysis. - There is an interval between the 2 bursts of the flash. Do not move until the flash fires a second time.

Available options may differ depending on the shooting conditions.



- Flash options are not available if you set burst options or select **Blink Detection**.
- Make sure that your subjects are within the recommended distance from the flash. (p. 150)
- If light from the flash is reflected or there is a substantial amount of dust in the air, tiny spots may appear in your photo.
- In some modes, you can also set the flash option by pressing **[MENU]**, and then selecting **Flash**.

Adjusting the ISO sensitivity

The ISO sensitivity is the measure of a film's sensitivity to light as defined by the International Organization for Standardization (ISO). The higher ISO sensitivity you select, the more sensitive to light your camera becomes. Use a higher ISO sensitivity to capture better photos and reduce camera shake when not using the flash.

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **ISO**.
- 3 Select an option.
 - Select  to use an appropriate ISO sensitivity based on the brightness of the subject and lighting.



Higher ISO sensitivities may result in more image noise.

Changing the camera's focus

Learn how to adjust the camera's focus to suit the subject and the shooting conditions.

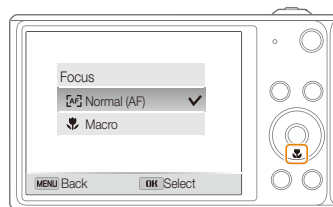
Using macro

Use macro to capture close-up photos of subjects, such as flowers or insects.



- Try to hold the camera firmly to prevent blurry photos.
- Turn off the flash if the distance to the subject is less than 15.7 in. (40 cm).

1 In Shooting mode, press [🌸].



2 Select an option.

Icon	Description
	Normal (AF): Focus on a subject farther than 32 in. (80 cm) away. Farther than 98 in. (250 cm) away when you use the zoom.
	Macro: Focus on a subject that is 2–32 in. (5–80 cm) from the camera. 39–98 in. (100–250 cm) when you use the zoom.
	Auto Macro: • Focus on a subject farther than 2 in. (5 cm) away. Farther than 39 in. (100 cm) away when you use the zoom. • It is set automatically in some shooting modes.

Available options may differ depending on the shooting conditions.



In some modes, you can also set the focus option by pressing [MENU], and then selecting **Focus**.

Using tracking auto focus

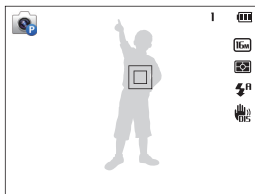
Tracking AF allows you to track and auto focus on your subject, even when you are moving.

1 In Shooting mode, press **[MENU]**.

2 Select **Focus Area** → **Tracking AF**.

3 Focus on the subject you want to track, and then press **[OK]**.

- A focus frame appears on the subject and follows the subject as you move the camera.



- The white frame means that your camera is tracking the subject.
- When you half-press **[Shutter]**, the green frame means that your subject is in focus.

4 Press **[Shutter]** to capture the photo.



- If you do not select a focus area, 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 excessively
 - the subject is backlit or you are shooting in a dark place
 - colors or patterns on the subject and the background are the same
 - the subject includes horizontal patterns, such as blinds
 - the camera shakes excessively
- When tracking a subject fails, 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 focus, the focus frame will change to a red single-line frame (□).
- If you use this function, you cannot set Face Detection options, Timer options, Burst options, and Intellizoom.

Adjusting the focus area

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

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Focus Area**.
- 3 Select an option.

Icon	Description
	Center AF: Focus on the center of the frame (suitable when subjects are located at or near the center).
	Multi AF: Focus on one or more of 9 possible areas.
	Tracking AF: Focus on and track the subject. (p. 68)

Available shooting options may differ depending on the shooting conditions.

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. Use **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.

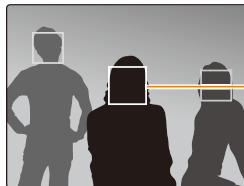


- When your camera detects a face, it tracks the detected face automatically.
- Face Detection may not be effective when:
 - the subject is far from the camera (The focus frame will appear orange for Smile Shot and Blink Detection.)
 - it is too bright or too dark
 - the subject is not facing the camera
 - the subject is wearing sunglasses or a mask
 - the subject's facial expression changes drastically
 - the subject is backlit or the lighting conditions are unstable
- Face Detection is not available when you set the Tracking AF.
- Depending on the shooting options you selected, available Face Detection options may differ.
- Depending on the Face Detection options you selected, the timer function may not be available.
- When you set Face Detection options, the AF area is automatically set to Multi AF.
- Depending on the Face Detection options you selected, Burst options may not be available.
- When you set Smart Face Recognition option and capture photos of detected faces, they will be registered in the face list.
- You can view registered faces in order of priority in Playback mode. (p. 86) Even though faces are registered successfully, they may not be classified in Playback mode.
- A face detected with Smart Face Recognition option may not appear in the face list or Smart Album.

Detecting faces

Your camera automatically detects up to 10 human faces in one scene.

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Face Detection** → **Normal**.



The face nearest the camera or nearest the center of the scene appears in a white focus frame and the rest of the faces appear in gray focus frames.



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

Capturing a smile shot

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

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Face Detection** → **Smile Shot**.
- 3 Compose your shot.
 - The camera automatically releases the shutter when it detects a smiling face.

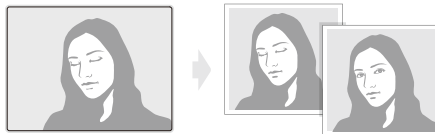


When your subject smiles broadly, your camera can detect the smile more easily.

Detecting eye blinking

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

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Face Detection** → **Blink Detection**.



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)



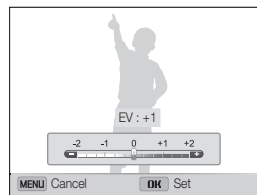
▲ Brighter (+)

1 In Shooting mode, press **[MENU]**.

2 Select **EV**.

3 Select a value to adjust the exposure.

- The photo will be brighter as the exposure value increases.



4 Press **[OK]** to save your settings.



- Once you adjust the exposure, the setting will be stored automatically. You may need to change the exposure value later to avoid overexposure or underexposure.
- If you cannot decide on an appropriate exposure, select the **AEB** (Auto Exposure Bracket) option. The camera will capture 3 consecutive photos, each with a different exposure: normal, underexposed, and overexposed. (p. 78)

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

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **ACB**.
- 3 Select an option.

Icon	Description
	Off: ACB (Auto Contrast Balance) is deactivated.
	On: ACB (Auto Contrast Balance) is activated.



- The ACB feature is always on in Smart Auto mode.
- The ACB feature is not available when you set Burst options.

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, press **[MENU]**.
- 2 Select **Metering**.
- 3 Select an option.

Icon	Description
	Multi: - Your camera divides the frame into several areas, and then measures the light intensity of each area. - Suitable for general photos.
	Spot: - Your camera measures only the light intensity at the very center of the frame. - If a subject is not in the center of the frame, your photo may be improperly exposed. - Suitable for a subject with backlighting.
	Center-weighted: - Your camera averages the meter reading of the entire frame with emphasis placed on the center. - Suitable for photos with subjects in the center of the frame.

Selecting a White Balance setting

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 a White Balance setting that is appropriate for the lighting conditions, such as Auto WB, Daylight, Cloudy, or Tungsten.



 Auto WB



 Daylight



 Cloudy



 Tungsten

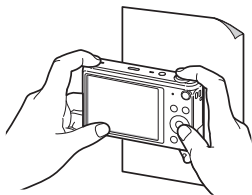
- 1 In Shooting mode, press [MENU].
- 2 Select **White Balance**.
- 3 Select an option.

Icon	Description
	Auto WB: Automatically set the White Balance based on the lighting conditions.
	Daylight: For outdoor photos on a sunny day.
	Cloudy: For outdoor photos on a cloudy day or in shadows.
	Fluorescent_H: For shooting under a daylight fluorescent or 3-way fluorescent light.
	Fluorescent_L: For shooting under white fluorescent light.
	Tungsten: For shooting indoor photos under incandescent bulbs or halogen lamps.
	Custom Set: To use White Balance settings that you define. (p. 77)

Defining your own White Balance

You can customize the White Balance by capturing a photo of a white surface, such as a piece of paper, under the lighting conditions in which you intend to capture a photo. The White Balance feature will help you to match the colors in your photo with the actual scene.

- 1 In Shooting mode, press **[MENU]**.
- 2 Select **White Balance** → **Custom Set**.
- 3 Aim the lens at a piece of white paper, and then press **[Shutter]**.



Using burst modes

It can be difficult to capture photos of fast-moving subjects or capture natural facial expressions and gestures of your subjects in photos. Also, it can be difficult to adjust the exposure correctly and select a proper light source. In these cases, select one of the burst modes.



- 1 In Shooting mode, press **[MENU]**.
- 2 Select **Drive**.
- 3 Select an option.

Icon	Description
	Single: Capture a single photo.
	Continuous: • While you are pressing [Shutter], the camera continuously captures photos. • The maximum number of photos depends on the capacity of your memory card.

Icon	Description
	Motion Capture: While you are pressing [Shutter] , the camera captures VGA photos (5 photos per second; maximum of 30 photos).
	AEB: • Capture 3 consecutive photos, each with a different exposure: normal, underexposed, and overexposed. • Use a tripod to prevent blurry photos.



- You can use the flash and timer only when you select **Single**.
- When you select **Motion Capture**, your camera will set the resolution to **VGA** and set the ISO sensitivity to **Auto**.
- Depending on the Face Detection option you selected, some Burst options may not be available.

Adjusting images

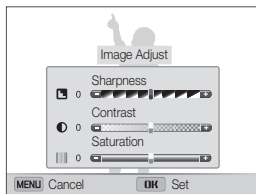
Adjust the sharpness, contrast, or saturation of your photos.

1 In Shooting mode, press **[MENU]**.

2 Select **Image Adjust**.

3 Select an option.

- Sharpness
- Contrast
- Saturation



4 Press **[⚡/☺]** to adjust each value.

Sharpness	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 in your photos.

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

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

5 Press **[OK]** to save your settings.



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

Reducing the sound of the zoom

When you use the zoom while recording videos, the camera can record the sound of the zoom. Use the Sound Alive function to reduce the zoom noise.

1 In Video Shooting mode, press **[MENU]**.

2 Select **Voice**.

3 Select an option.

Icon	Description
	Sound Alive On: Turn on the Sound Alive function to reduce the zoom noise.
	Sound Alive Off: Turn off the Sound Alive function. The camera can record the zoom noise.
	Mute: Do not record sounds.



- Do not block the microphone when you use the Sound Alive function.
- Recordings made with Sound Alive may differ from actual sounds.
- In Picture-in-Picture mode, you cannot set the Sound Alive options.

Available shooting options by shooting mode

For details about shooting options, refer to "Shooting options".

	Smart Auto	Program	Smart Movie	Movie	Scene	Live Panorama	Picture in Picture	Self Shot	Children	Jump Shot	Beauty Shot
Resolution	○	○	○	○	○	△	△	○	○	○	○
Quality	△	○	○	○	○	△	-	○	○	○	○
Timer	△	○	△	△	○	-	△	-	○	△	△
Flash	△	○	-	-	△	-	△	○	△	-	△
ISO sensitivity	-	○	-	-	-	-	-	-	-	-	-
Macro	△	○	△	○	△	-	-	△	-	-	△
Focus area	-	○	-	-	-	-	-	-	△	-	-
Face detection	△	○	-	-	△	-	-	△	△	-	△
EV	-	○	-	○	-	-	-	-	-	-	-
ACB	△	○	-	-	-	-	-	-	-	-	-
Metering	-	○	-	○	-	-	-	-	-	-	-
White balance	-	○	-	○	-	-	-	-	-	-	-
Drive	-	○	-	-	-	-	-	-	△	-	-
Image adjust	-	○	-	-	-	-	-	-	-	-	△
Sound Alive	-	-	○	○	-	-	-	-	-	-	-
Digital zoom	-	○	-	-	△	-	-	-	-	-	-
Intelli zoom	△	△	-	-	△	-	-	-	-	-	-
OIS	○	○	○	○	○	-	○	○	○	○	○

△: In these modes, some options are limited or a certain option is set by default. ○: The option is available in this mode.

Available shooting options by shooting mode

	Intelligent Portrait	Night Shot	Close-up Shot	Magic Frame	Funny Face	Photo Filter	Movie Filter	Split Shot	Artistic Brush	Motion Photo
Resolution	○	○	○	△	○	△	△	△	△	△
Quality	○	○	○	○	○	○	△	○	○	△
Timer	△	○	○	△	○	○	△	△	△	△
Flash	△	△	-	△	△	△	-	△	△	-
ISO sensitivity	-	-	-	-	-	-	-	-	-	-
Macro	△	-	△	-	-	-	△	-	-	△
Focus Area	-	-	-	-	-	-	-	-	-	-
Face detection	△	-	-	-	△	-	-	-	-	-
EV	-	-	-	-	-	-	-	-	-	-
ACB	-	-	-	-	-	-	-	-	-	-
Metering	-	-	-	-	-	-	-	-	-	-
White balance	-	-	-	-	-	-	-	-	-	-
Drive	-	-	-	-	-	-	-	-	-	-
Image adjust	-	-	-	-	-	△	-	△	△	-
Sound Alive	-	-	-	-	-	-	△	-	-	-
Digital zoom	-	-	-	-	-	-	-	-	-	-
Intelli zoom	-	-	-	-	-	-	-	-	-	-
OIS	○	○	○	-	○	○	○	○	○	○

△: In these modes, some options are limited or a certain option is set by default. ○: The option is available in this mode.

Playback/Editing

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

Viewing photos or videos in Playback

mode	78
Starting Playback mode	78
Viewing photos	82
Playing a video	85
Editing a photo	87
Resizing photos	87
Cropping portraits automatically	87
Rotating a photo	88
Applying Smart Filter effects	88
Adjusting your photos	89
Viewing files on a TV	91

Transferring files to your Windows

computer	92
Transferring files with Intelli-studio	93
Transferring files by connecting the camera as a removable disk	95
Disconnecting the camera (for Windows XP)	96
Transferring files to your Mac computer ...	97

Viewing photos or videos in Playback mode

Learn how to play back photos or videos and how to manage files.

Starting Playback mode

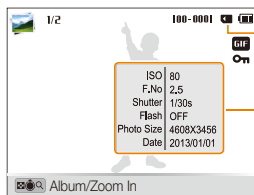
View photos or play videos stored in your camera.

- 1 Press [▶].
 - The most recent file will be displayed.
 - If the camera is off, it will turn on and display the most recent file.
- 2 Press [⚡/😊] to scroll through files.
 - Press and hold [⚡/😊] to scroll through files quickly.



- If you want to view files stored in the internal memory, remove your memory card.
- You may not be able to edit or play back files that were captured with other cameras, due to unsupported sizes (image size, etc) or codecs. Use a computer or another device to edit or play back these files.

Photo file information



Memory in use

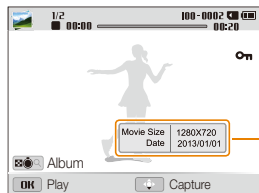
File Information

Icon	Description
1/2	Current file/Total files
100-0001	Folder name-File name
GIF	GIF file
🔒	Protected file



To display file information on the screen, press [DISP].

Video file information



File Information

Icon	Description
1/2	Current file/Total files
100-0002	Folder name-File name
00:00	Current playback time
00:20	Video length
On	Protected file

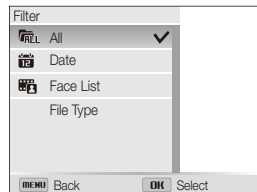


To display file information on the screen, press [DISP].

Viewing files by category in Smart Album

View files by category, such as date, face, or file type.

- 1 In Playback mode, rotate [Zoom] to the left.
 - You can also access Smart Album by scrolling to <Album> on the Home screen, and then selecting .
- 2 Press [MENU].
- 3 Select **Filter** → a category.



Icon	Description
	All: View files normally.
	Date: View files by the date they were saved.
	Face List: View files by recognized faces and favorite faces. (Up to 20 people)
	File Type: View files by the file type.

- 4 Scroll to a desired list, and then press **[OK]** to open the list.
- 5 Scroll to a desired file, and then press **[OK]** to view the file.
- 6 Rotate **[Zoom]** to the left to return to the previous view.



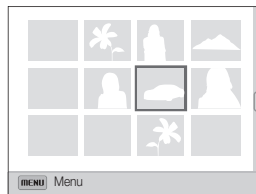
It may take some time for the camera to open Smart Album, change the category, or reorganize files.

Viewing files as thumbnails

Scan thumbnails of files.



In Playback mode, rotate **[Zoom]** to the left to view thumbnails (12 at a time). Rotate **[Zoom]** to the left once more to display more thumbnails (24 at a time). Rotate **[Zoom]** to the right to return to the previous view.



- You can also view files as thumbnails by scrolling to **<Album>** on the Home screen, and then selecting .

Press **[DISP/🌸/🔋/🕒]** to scroll through files.

Protecting files

Protect your files from accidental deletion.

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



You cannot delete or rotate a protected file.

Deleting files

Select files to delete in Playback mode.

Deleting a single file

You can select one file, and then delete it.

- 1 In Playback mode, select a file, and then press [].
- 2 When the pop-up message appears, select **Yes**.



You can also delete files in Playback mode by pressing **[MENU]**, and then selecting **Delete** → **Delete** → **Yes**.

Deleting multiple files

You can select multiple files, and then delete them at once.

- 1 In Playback mode, press [].
 - When in thumbnails view, press **[MENU]**, select **Delete** → **Select**, and then skip to step 3, or press [], select **Select**, and then skip to step 3.
- 2 When the pop-up message appears, select **Multiple Delete**.
- 3 Scroll to each file you want to delete, and then press **[OK]**.
 - Press **[OK]** again to cancel your selection.
- 4 Press [].
- 5 When the pop-up message appears, select **Yes**.

Deleting all files

You can select all files, and then delete them at once.

- 1 In Playback mode, press **[MENU]**.
 - When in thumbnails view, press **[MENU]**, select **Delete** → **Delete All**, and then skip to step 3, or press , select **Delete All**, and then skip to step 3.
- 2 Select **Delete** → **Delete All**.
- 3 When the pop-up message appears, select **Yes**.
 - All unprotected files are deleted.

Copying files to a memory card

Copy files from the internal memory to a memory card.

- 1 In Playback mode, press **[MENU]**.
- 2 Select **Copy to Card**.

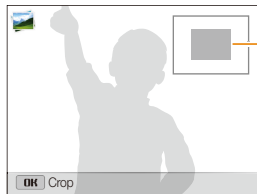
Viewing photos

Enlarge part of a photo or view photos as a slide show.

Enlarging a photo



In Playback mode, rotate **[Zoom]** to the right to enlarge a portion of the photo. Rotate **[Zoom]** to the left to zoom out.



Enlarged area

To	Description
Move the enlarged area	Press [DISP/📏/⚡/🕒] .
Trim the enlarged photo	Press [OK] , and then select Yes . (The trimmed photo will be saved as a new file. The original photo is retained in its original form.)



When you view photos that were captured by another camera, the zoom ratio may differ.

Viewing panoramic photos

View photos captured in Live Panorama mode.

1 In Playback mode, press **[⚡/🕒]** to scroll to a desired panoramic photo.

- The entire panoramic photo appears on the screen.

2 Press **[OK]**.

- The camera automatically scrolls through the photo from left to right for a horizontal panoramic photo and from top to bottom for a vertical panoramic photo. The camera then switches to Playback mode.
- While playing back a panoramic photo, press **[OK]** to pause or resume.
- After you have paused the playback of a panoramic photo, press **[DISP/📏/⚡/🕒]** to move the photo horizontally or vertically, depending on the direction you moved when capturing the photo.

3 Press **[MENU]** to return to Playback mode.



The camera automatically scrolls through the panoramic photo only if the longest side of the photo is two or more times longer than the shortest side.

Viewing animated photos

View animated GIF files repeatedly that were captured in Motion Photo mode or Jump Shot mode.

- 1 In Playback mode, press [**⚡/🔄**] to scroll to a desired GIF file.
- 2 Press [**OK**].
 - The GIF file plays back repeatedly.
- 3 Press [**OK**] to return to Playback mode.

Playing a slide show

Apply effects and audio to a slide show of your photos. The slide show function does not work for videos and GIF files.

- 1 In Playback mode, press [**MENU**].
- 2 Select **Slide Show Options**.
- 3 Select a slide show effect option.
 - Skip to step 4 to start a slide show with no effects.

* Default

Option	Description
Play Mode	Set whether or not to repeat the slide show. (One Play* , Repeat)
Interval	• Set the interval between photos. (1 sec*, 3 sec, 5 sec, 10 sec) • You must set the Effect option to Off to set the interval.
Music	Set background audio.
Effect	• Set a scene change effect between photos. (Off, Calm*, Shine, Relax, Lively, Sweet) • Select Off to cancel effects. • When you use the Effect option, the interval between photos will be set to 1 second.

4 Press **[MENU]**.

5 Select **Start Slide Show**.

6 View the slide show.

- Press **[OK]** to pause the slide show.
- Press **[OK]** again to resume the slide show.



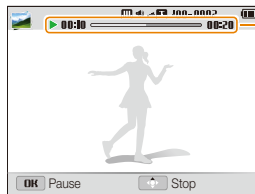
- Press **[OK]**, and then press **[F/☺]** to stop the slide show and return to Playback mode.
- Rotate **[Zoom]** to the left or right to adjust the volume level.

Playing a video

In Playback mode, you can view a video, and then capture or trim parts of the playing video. You can save the captured or trimmed segments as new files.

1 In Playback mode, select a video, and then press **[OK]**.

2 View the video.



Current playback time/
Video length

To	Description
Scan backward	Press [⏮] . Each time you press [⏮] , you change the scan speed in this order: 2X, 4X, 8X.
Pause or resume playback	Press [OK] .
Scan forward	Press [⏭] . Each time you press [⏭] , you change the scan speed in this order: 2X, 4X, 8X.
Adjust the volume level	Rotate [Zoom] to the left or right.

Trimming a video

- 1 In Playback mode, select a video, and then press **[MENU]**.
- 2 Select **Trim Movie**.
- 3 Press **[OK]** to start playing the video.
- 4 Press **[OK]** → **[⏮]** at the point where you want the trimming to begin.
- 5 Press **[OK]** to resume playing the video.
- 6 Press **[OK]** → **[⏭]** at the point where you want the trimming to end.
- 7 Press **[⏮]** to trim.
- 8 When the pop-up message appears, select **Yes**.



- The original video should be at least 10 seconds long.
- The camera will save the edited video as a new file and leave the original video intact.

Capturing an image from video

- 1 While viewing a video, press **[OK]** at the point where you want to capture an image.
- 2 Press **[⏮]**.



- The resolution of the captured image will be the same as the original video.
- The captured image is saved as a new file.

Editing a photo

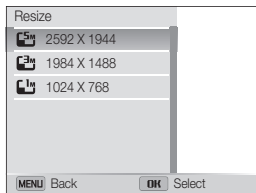
Learn how to edit photos.

- The camera will save edited photos as new files.
- When you edit photos, the camera will automatically convert them to a lower resolution. Photos that you rotate or resize manually are not automatically converted to a lower resolution.

Resizing photos

Change the size of a photo and save it as a new file.

- 1 In Playback mode, select a photo, and then press **[MENU]**.
- 2 Select **Resize**.
- 3 Select an option.



- Available resize options differ depending on the original size of the photo.
- You may not be able to resize photos created with the Intelligent Portrait feature.

Cropping portraits automatically

Extract and save close-up portraits from landscape shots.

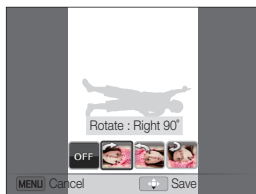
- 1 In Playback mode, select a photo, and then press **[MENU]**.
- 2 Select **Intelligent Portrait**.
 - The camera detects the face of a subject, crops the photo around the face, and then saves 2 cropped photos under consecutive file names.



- The Intelligent Portrait feature will not function if:
 - no face is detected
 - more than 2 faces are detected
 - the detected facial area is larger than a certain ratio

Rotating a photo

- 1 On the Home screen, scroll to <Album>.
- 2 Select .
- 3 Rotate [Zoom] to the left, and then select a photo.
- 4 Select **Rotate** → an option.
- 5 Press  to save.



- The camera will overwrite the original file.
- In Playback mode, press [MENU], and then select **Rotate** to rotate a photo.

Applying Smart Filter effects

Apply special effects to your photos.

- 1 On the Home screen, scroll to <Album>.
- 2 Select .
- 3 Rotate [Zoom] to the left, and then select a photo.
- 4 Select **Smart Filter** → an option.



Option	Description
Normal	No effect
Miniature	Apply a tilt-shift effect to make the subject appear in miniature.
Vignetting	Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras.

Option	Description
Ink Painting	Apply a watercolor painting effect.
Oil Painting	Apply an oil painting effect.
Cartoon	Apply a cartoon painting effect.
Cross Filter	Add lines that radiate outward from bright objects to imitate the visual effect of a cross filter.
Sketch	Apply a pen sketch effect.
Soft Focus	Hide facial imperfections or apply dreamy effects.
Fish-eye	Distort close objects to imitate the visual effect of a fisheye lens.
Old Film	Apply a vintage film effect.
Half Tone Dot	Apply a halftone effect.
Classic	Apply a black and white effect.
Retro	Apply a sepia tone effect.
Zooming Shot	Blur the edges of a photo to emphasize the subjects in the center.

5 Press [📌] to save.

Adjusting your photos

Learn how to adjust the brightness, contrast, or saturation or how to correct the red-eye effect. If the center of a photo is dark, you can adjust it to be brighter. The camera will save an edited photo as a new file, but may convert it to a lower resolution.



- You can adjust brightness, contrast, and saturation and apply Smart Filter effects at the same time.
- You cannot apply the ACB, Face Retouch, and Red-eye Fix effects at the same time.

Adjusting brightness, contrast, or saturation

- 1 On the Home screen, scroll to <Album>.
- 2 Select .
- 3 Rotate [Zoom] to the left, and then select a photo.
- 4 Select an adjusting option.

Icon	Description
	Brightness
	Contrast
	Saturation

5 Press [] to adjust the option.

6 Press [OK].

7 Press [] to save.

Adjusting dark subjects (ACB)

1 On the Home screen, scroll to <Album>.

2 Select .

3 Rotate [Zoom] to the left, and then select a photo.

4 Select **ACB**.

5 Press [] to save.

Retouching faces

1 On the Home screen, scroll to <Album>.

2 Select .

3 Rotate [Zoom] to the left, and then select a photo.

4 Select **Face Retouch**.

5 Press [] to adjust the option.

- As the number increases, the skin tone becomes brighter and smoother.

6 Press [] to save.

Removing red-eye

1 On the Home screen, scroll to <Album>.

2 Select .

3 Rotate [Zoom] to the left, and then select a photo.

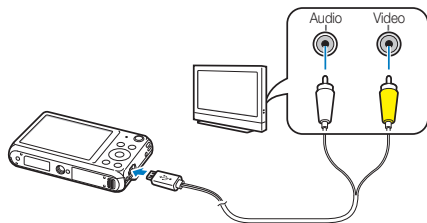
4 Select **Red-eye Fix**.

5 Press [] to save.

Viewing files on a TV

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

- 1 On the Home screen, scroll to **<Basic>**.
- 2 Select .
- 3 Select **Connectivity** → **Video Out**.
- 4 Select the video signal output for your country or region.
(p. 131)
- 5 Turn off your camera and TV.
- 6 Connect your camera to your TV with the A/V cable.



- 7 Turn on your TV, and then select the A/V video source with the TV remote control.
- 8 Turn on your camera.
 - The camera automatically enters into Playback mode when you connect it to a TV.
- 9 View photos or play videos using the camera buttons.



- Depending on the TV model, you may see some digital noise or part of an image may not appear.
- Images may not be centered on the TV screen depending on your TV settings.

Transferring files to your Windows computer

Transfer files to your Windows computer, edit them with Intelli-studio, and upload them to the web.

Requirements

Item	Requirements
CPU	Intel® Pentium®4 3.2 GHz or higher/ AMD Athlon™ FX 2.6 GHz or higher
RAM	Minimum 512 MB RAM (1 GB or more recommended)
OS*	Windows XP SP2, Windows Vista, or Windows 7
Hard disk capacity	250 MB or more (1 GB and above recommended)
Others	• CD-ROM drive • 1024 X 768 pixels, 16-bit color display compatible monitor (1280 X 1024 pixels, 32-bit color display recommended) • USB 2.0 port • nVIDIA Geforce 7600GT or higher/ ATI X1600 series or higher • Microsoft DirectX 9.0c or higher

* A 32-bit version of Intelli-studio will be installed—even on 64-bit editions of Windows XP, Windows Vista, and Windows 7.



- The requirements are recommendation only. Intelli-studio may not work properly even when the computer meets the requirements, depending on the condition of your computer.
- If your computer does not meet the requirements, videos may not play correctly or it may take longer to edit videos.
- Install DirectX 9.0c or later before you use Intelli-studio.
- Your computer must be running Windows XP, Windows Vista, or Windows 7 for you to connect the camera as a removable disk.



The manufacturer is not responsible for any damage that results from using unqualified computers such as a computer you assembled yourself.

Transferring files with Intelli-studio

You can download Intelli-studio from the linked webpage and install it on your computer. When you connect the camera to a computer with Intelli-studio installed, the program will launch automatically.

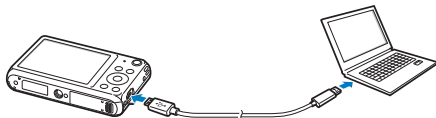


The battery will charge while the camera is connected to a computer with the USB cable.

- 1 On the Home screen, scroll to <Basic>.
- 2 Select .
- 3 Select **Connectivity** → **PC Software** → **On**.
- 4 Turn off the camera.
- 5 Connect the camera to your computer with the USB cable.



You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.



6 Turn on the camera.

- When the Intelli-studio installation pop-up appears on the computer screen, follow the on-screen instructions to complete the installation.
- Once the Intelli-studio is installed on your computer, the computer recognizes the camera and launches the Intelli-studio automatically.



If you set the USB option to **Select Mode**, select **Computer** in the pop-up window.

7 Select a destination folder on your computer, and then select **Yes**.

- New files stored on the camera will automatically transfer to the selected folder.
- If your camera has no new files, the pop-up window for saving new files will not appear.



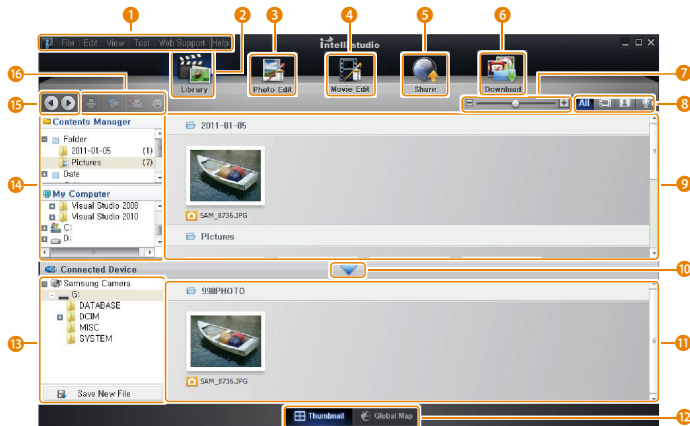
For Windows Vista and Windows 7, select **Run iLinker.exe** from the Auto Play window to start Intelli-studio. If **Run iLinker.exe** does not appear on the computer, click  → **Computer** → **Intelli-studio**, and then follow the on-screen instructions to complete the Intelli-studio installation.

Using Intelli-studio

Intelli-studio allows you to play back and edit files. For details, select **Help** → **Help** from the program toolbar.



- You can update the firmware of your camera by selecting **Web Support** → **Upgrade firmware for the connected device** from the program toolbar.
- You can download short animations for use in Children mode.
- You cannot edit files directly on the camera. Transfer files to a folder on your computer before editing.
- Intelli-studio supports the following formats:
 - Videos: MP4 (Video: H.264, Audio: AAC), WMV (WMV 7/8/9), AVI (MJPEG)
 - Photos: JPG, GIF, BMP, PNG, TIFF



No.	Description
1	Open menus.
2	Display files in the selected folder.
3	Switch to the Photo edit mode.
4	Switch to the Video edit mode.
5	Switch to the Sharing mode (to send files by email or upload files to websites, such as Flickr or YouTube).
6	Download short animations for use in Children mode.
7	Enlarge or reduce the thumbnails in the list.
8	Select a file type.
9	View files in the selected folder on your computer.
10	Show or hide files on the connected camera.
11	View files in the selected folder on the camera.
12	View files as thumbnails or on a map.
13	Browse folders stored on the camera.
14	Browse folders stored on your computer.
15	Move to the previous or next folder.
16	Print files, view files on a map, store files in My Folder, or register faces.

Transferring files by connecting the camera as a removable disk

Connect the camera to your computer as a removable disk.

- 1 On the Home screen, scroll to **<Basic>**.
- 2 Select .
- 3 Select **Connectivity** → **PC Software** → **Off**.
- 4 Turn off the camera.
- 5 Connect the camera to your computer with the USB cable.



You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.



6 Turn on the camera.

- The computer recognizes the camera automatically.



If you set the USB option to **Select Mode**, select **Computer** in the pop-up window.

7 On your computer, select **My Computer** → **Removable Disk** → **DCIM** → **100PHOTO**.

8 Drag or save files to your computer.

Disconnecting the camera (for Windows XP)

With Windows Vista and Windows 7, the methods for disconnecting the camera are similar.

1 Verify that the status lamp is not blinking.

- The status lamp blinks when transferring files. Wait until it stops.

2 Click on the tool bar at the bottom right of your computer screen.



3 Click the pop-up message.

4 Click the message box that indicates the camera can be removed safely.

5 Remove the USB cable.



The camera may not disconnect safely while Intelli-studio is running. End the program before disconnecting the camera.

Transferring files to your Mac computer

When you connect the camera to a Macintosh computer, the computer will automatically recognize the device. You can transfer files directly from the camera to the computer without installing any programs.

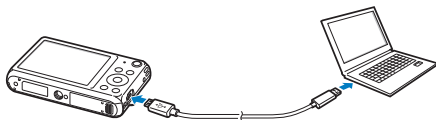


Mac OS 10.4 or later is supported.

- 1 Connect your camera to a Macintosh computer with the USB cable.



You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.



- 2 Turn on the camera.

- The computer recognizes the camera automatically and displays a removable disk icon.



If you set the USB option to **Select Mode**, select **Computer** in the pop-up window.

- 3 Double-click the removable disk icon.
- 4 Drag or save files to your computer.

Wireless network

Learn to connect to wireless local area networks (WLANs) and use functions.

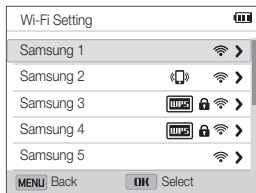
Connecting to a WLAN and configuring network settings	99
Connecting to a WLAN	99
Using the login browser	100
Network connection tips	101
Entering text	102
Sending photos or videos to a smart phone	103
Using a smart phone as a remote shutter release	104
Using photo or video sharing websites	106
Accessing a website	106
Uploading photos or videos	106
Sending photos or videos via email	108
Changing email settings	108
Sending photos or videos via email	109
Using Auto Backup to send photos or videos	111
Installing the program for Auto Backup on your PC	111
Sending photos or videos to a PC	111
Viewing photos or videos on a TV	
Link-enabled TV	113
Sending photos using Wi-Fi Direct	115
About the Wake on LAN (WOL) feature	116

Connecting to a WLAN and configuring network settings

Learn to connect via an access point (AP) when you are in a range of a WLAN. You can also configure network settings.

Connecting to a WLAN

- 1 On the Home screen, scroll to <Wi-Fi>.
- 2 Select , , , , or .
- 3 Press [MENU], and then select **Wi-Fi Setting**.
 - In some modes, press [MENU] or follow the on-screen instructions until the Wi-Fi Setting screen appears.
 - The camera automatically searches for available AP devices.
- 4 Select an AP.



Icon	Description
	Ad hoc AP
	Secured AP
	WPS AP
	Signal strength
	Press [OK] to open network setting options.

- When you select a secured AP, a pop-up window appears. Enter the required passwords to connect to the WLAN. For information about entering text, refer to "Entering text". (p. 111)
- When a login page appears, refer to "Using the login browser". (p. 109)
- When you select an unsecured AP, the camera will connect to the WLAN.
- If you select a WPS profile supported AP, select **WPS PIN**, and then enter a PIN on the AP device. You can also connect to a WPS profile supported AP by selecting **WPS PBC** on the camera, and then pushing the **WPS** button on the AP device.

- Select **WPS PBC** to connect to a WPS AP.
- Select **Refresh** to refresh connectable APs.
- Select **Add wireless network** to add an AP manually.