SAMSUNG

User Manual

NV9

This user manual includes detailed usage instructions for your camera.
Please read this manual thoroughly.
Click a button below for more information.

Quick search

Contents

1 Basic functions

2 Extended functions

3 Shooting options

4 Playback/Editing

5 Multimedia

6 Appendix

Index

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.

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 0º C/32º F or above 40º C/104º 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 PC. 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 discolour 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 motorised 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.

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.

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Organization of the user manual

1 **Basic functions** 10
Learn about your camera's layout, icons, and basic functions for shooting, and how to transfer files to and from your computer.

2 **Extended functions** 27
Learn how to take a photo by selecting a mode and how to record a video or voice memo.

3 **Shooting Options** 36
Learn about the various options you can set in Shooting mode.

4 **Playback/Editing** 54
Learn how to play back photos, videos, or voice memos and edit photos or videos. You will also learn how to connect your camera to your photo printer or TV.

5 **Multimedia** 68
Learn to use Multimedia modes: MP3 mode, PMP mode, and Text Viewer mode.

6 **Appendix** 76
Refer to settings, error messages, specifications, and maintenance tips.

Indications used in this manual

Mode	Icon
Auto	AUTO
Program	P
Dual IS	DUAL
Photo Help Guide	
Beauty Shot	
Scene	SCENE
Movie	
Multimedia	

Shooting mode icons next to a title

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 Auto, Program, Beauty Shot, and some Scene modes

Icons used in this manual

Icon	Function
	Additional information
	Situations where you need to be careful
[ ]	Camera buttons; for example: [**Shutter**] (represents the Shutter button)
( )	Page number for reference
→	The order of options or menus you must select to perform a step; for example: Select → **Face Tone** (represents , followed by **Face Tone**)
*	Annotation

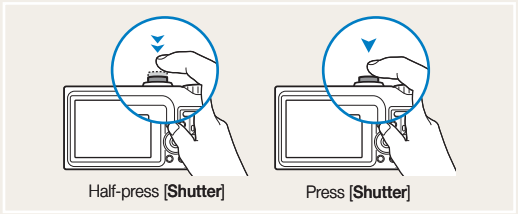
Abbreviations used in this manual

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

Expressions used in this manual

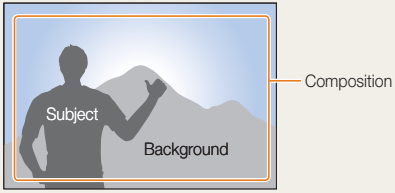
Pressing the shutter

- Half-press [**Shutter**]: press and hold the shutter half way down
- Press [**Shutter**]: press the shutter all the way down



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



Exposure (Brightness)

The amount of light that enters your camera is called exposure. By altering the exposure, your photos will be darker or lighter.

Normal exposure

Overexposure (too bright)

Quick search

Taking photos of people

- **SCENE** mode > Portrait, Children, Self Shot ▶ 28
- mode ▶ 30
- Red Eye, Red Eye Fix (to prevent or correct red-eye) ▶ 41
- Face Detection, Self Portrait, Smile Shot, Blink Detection ▶ 45 - 46

Taking photos at night or in the dark

- **SCENE** mode > Nightscene, Dawn, Firework ▶ 28
- Flash options ▶ 41
- ISO speed (to adjust sensitivity to light) ▶ 42

Taking action photos

- Continuous, Motion Capture ▶ 50

Taking photos of food, insects, or flowers

- **SCENE** mode > Close up, Food ▶ 28
- Macro, Auto Macro, Super Macro (to take close-up photos) ▶ 43
- WB (White balance; to change the colour tone) ▶ 48

Adjusting the exposure (brightness)

- ISO speed (to adjust the sensitivity to light) ▶ 42
- EV (to adjust exposure) ▶ 47
- ACB (to compensate for subjects against bright backgrounds) ▶ 47
- Metering ▶ 48
- AEB (to take three photos of the same scene with different exposures) ▶ 50

Applying a different effect

- Photo Style Selector (to apply a different tone) ▶ 51
- Color (to apply a different colour filter) ▶ 51
- Image Adjust (to adjust saturation, sharpness, or contrast) ▶ 52

Reducing camera shake

- Optical Image Stabilisation (OIS) ▶ 17
- DUAL mode ▶ 29

- Connecting the camera to your computer ▶ 21
- Deleting all files in the memory card ▶ 57
- Viewing files in a slide show ▶ 59
- Viewing files on a TV ▶ 66
- Using a multimedia mode (listen to MP3s, play videos, and view text files) ▶ 69
- Adjusting sound and volume ▶ 78
- Changing the language displayed on the screen ▶ 78
- Setting the date and time ▶ 78
- Adjusting the brightness of the display ▶ 78
- Formatting the memory card ▶ 79
- Troubleshooting ▶ 85

Contents

1. Basic functions 10
- Camera layout 11
- Icons 13
- Turning your camera on or off 14
- Mini dashboard 14
- Setting options 15
- Taking photos 16
- Zooming 16
- Reducing camera shake (OIS) 17
- Using the Photo Help Guide mode 18
- Changing the display type 19
- Transferring files (for Windows) 20
- Installing programs 20
- Connecting the camera to your PC 21
- Transferring files to your PC 22
- Transferring multimedia files to the camera 22
- Using Samsung Converter 24
- Using Samsung Master 25
- Transferring files (for Mac) 26
- Transferring files to your computer 26
- Transferring multimedia files to the camera 26

2. Extended functions 27
- Shooting modes 28
- AUTO Using the Auto mode 28
- SCENE Using the Scene mode 28
- DUAL Using the Dual IS mode 29
- Using the Beauty Shot mode 30
- P Using the Program mode 31
- Recording a video 32
- Tips for getting a clearer photo 33
- Recording voice memos 35
- Recording a voice memo 35
- Adding a voice memo to a photo 35

3. Shooting Options 36
- Selecting a resolution and quality 37
- Selecting a resolution 37
- Selecting a quality 38
- Using the timer 39
- Shooting in the dark 41
- Preventing red-eye (Red-eye) 41
- Using the flash 41
- Adjusting the ISO speed (ISO speed) 42
- Changing the camera's focus 43
- Using macro (Macro) 43
- Using auto focus (AF) 43
- Adjusting the focus area (AF area) 44
- Using face detection (Face detection) 45

Adjusting brightness and colour 47
Adjusting the exposure manually [EV] 47
Compensating for backlighting [ACB] 47
Changing the metering mode [Metering] 48
Selecting a light source (White balance) [WB] 48
Using burst modes 50
Improving your photos 51
Applying photo styles [Photo style] 51
Applying colour [Color effect] 51
Adjusting your photos 52

4. Playback/Editing 54
Playing back 55
Starting Playback mode 55
Viewing photos 58
Playing a video 60
Playing voice memos 60
Editing a photo 61
Resizing photos 61
Rotating a photo 61
Editing colour 61
Correcting exposure problems 62
Creating a print order [DPOF] 63
Setting a start image 65
Viewing files on a TV 66
Printing photos with a photo printer [PictBridge] 67

5. Multimedia 68
Using Multimedia mode 69
Using the MP3 mode 71
Playing music files 71
Using the PMP mode 73
Using the Text Viewer mode 74
Multimedia mode settings menu 75

6. Appendix 76
Camera settings menu 77
Accessing the settings menu 77
SOUND 78
DISPLAY 78
SETTINGS 79
Error messages 81
Camera maintenance 82
Cleaning your camera 82
About memory cards 83
About the battery 84
Before contacting a service centre 85
Camera specifications 87
Index 91

1. Basic functions

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

Camera layout 11

Icons 13

Turning your camera on or off 14
Mini dashboard 14

Setting options 15

Taking photos 16
Zooming 16
Reducing camera shake 17

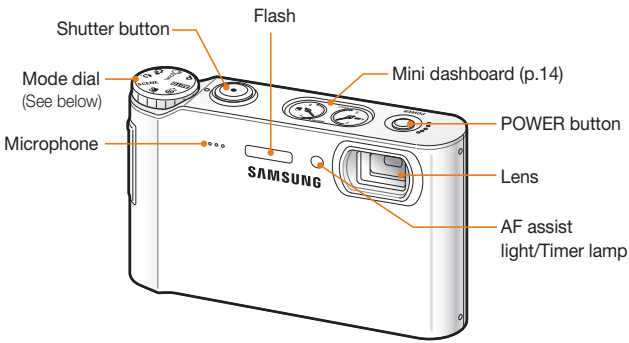
Using the Photo Help Guide mode 18

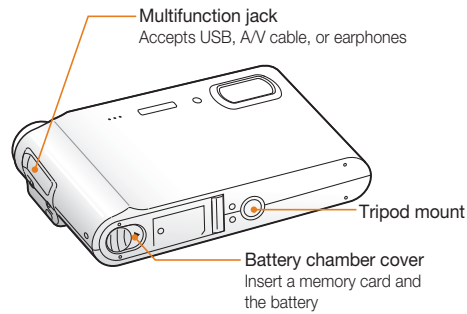
Changing the display type 19

Transferring files (for Windows) 20
Installing programs 20
Connecting the camera to your PC 21
Transferring files to your PC 22
Transferring multimedia files to the camera ... 22
Using Samsung Converter 24
Using Samsung Master 25

Transferring files (for Mac) 26
Transferring files to your computer 26
Transferring multimedia files to the camera ... 26

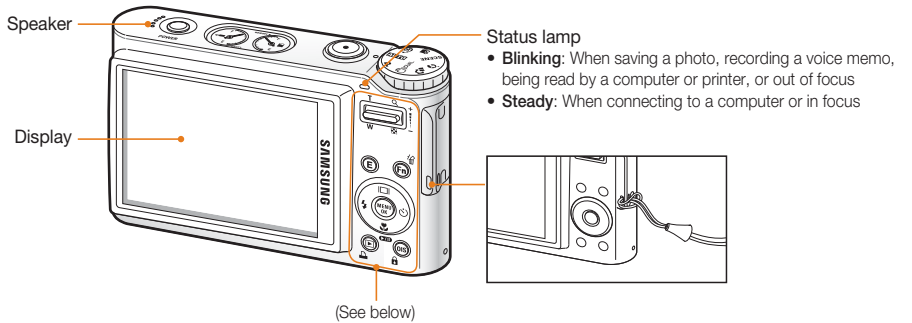
Camera layout





Icon	Mode	Description
AUTO	Auto	Take a photo quickly and easily with minimal settings
P	Program	Take a photo by setting options
DUAL	Dual IS	Take a photo with options suitable for reducing camera shake
	Photo Help Guide	Get shooting tips and practice shooting

Icon	Mode	Description
	Beauty Shot	Take a photo of a person with options to hide facial imperfections
SCENE	Scene	Take a photo with options for a preset scene
	Movie	Record a video
	Multimedia	Listen to MP3s, play videos, and view text files



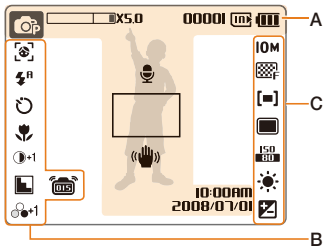
Button	Function
Zoom	• Zoom in or out in Shooting mode. • Zoom in on part of a photo or view files as thumbnails in Playback mode. • Adjust volume in Playback mode or Multimedia mode.
E	Apply effect on your file.
Fn	• Access options in Shooting mode. • Delete files in Playback mode.

Button	Function
Navigation (Left: , Right: , Up: , Down:)	
MENU/OK	• Access options or menus. • Confirm the highlighted option or menu.
	• Enter Playback mode. • Print files after connecting the camera to a PictBridge-compatible printer.
OIS	• Prevent camera shake in Shooting mode. • Lock the buttons in Multimedia mode.

	In Shooting mode	While setting
[ ]	Change the flash option	Move left
[ ]	Change the timer option	Move right
[ ]	Change the display option	Move up
[ ]	Change the macro option	Move down

Icons

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



A. Information

Icon	Description
	Selected shooting mode
X5.0	Zoom ratio
00001	Available number of photos
00:00:06	Available recording time
	Internal memory
	Memory card inserted
	: Fully charged : Partially charged : Charging needed
	Voice memo
	Auto focus frame
	Camera shake
10:00AM 2008/07/01	Current date and time

B. Icons on the left

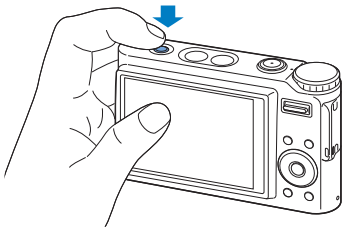
Icon	Description
	Face detection
	Photo style
AWB	Colour
	Flash
	Timer
	Auto focus
	Contrast
	Sharpness
	Voice Mute
	Saturation
	Optical Image Stabilisation (OIS)

C. Icons on the right

Icon	Description
10M	Photo resolution
640	Video resolution
	Photo quality
30	Frame rate
	Metering option
	Burst type
ISO 80	ISO speed
	White balance
	Exposure
LT	Long time shutter

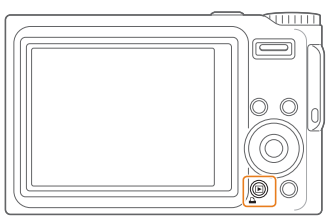
Turning your camera on or off

Press [**POWER**] to turn your camera on or off.



In Playback mode

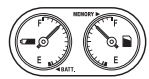
Press [▶] to view stored files.



Press and hold [▶] to mute camera sounds.

Mini dashboard

While the camera is turned on, Mini dashboard shows you the remaining capacity of the battery and memory card.



- When exposing the camera to a hot and humid environment, condensation can form on the gauges.
- If the hand of a gauge keeps spinning around, contact a service centre.
- The gauge and the battery and memory card icon on the display may show different capacities.

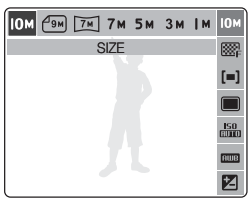
Setting options

You can set options by pressing [**E**], [**MENU/OK**], or [**Fn**] and using the navigation buttons ([ϟ], [⏲], [|□|], [❦]).

1 Press [**E**], [**MENU/OK**], or [**Fn**].

2 Use the navigation buttons to scroll to an option or menu.

- To move left or right, press [ϟ] or [⏲].
- To move up or down, press [|□|] or [❦].



3 Press [**MENU/OK**] to confirm the highlighted option or menu.

Going back to the previous menu

Press [**E**], [**Fn**], or [**MENU/OK**] again to go back to the previous menu.

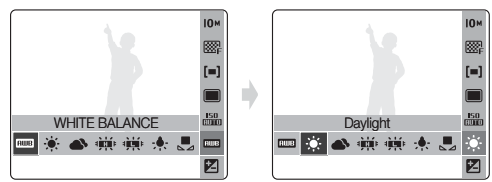
Press [**Shutter**] to return to Shooting mode.

E.g. Select a white balance option in the P mode

1 Rotate the mode dial to **P**.

2 Press [**Fn**].

3 Press [|□|] or [❦] and then [ϟ] or [⏲] to set the white balance.

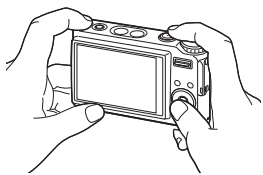


4 Press [**MENU/OK**].

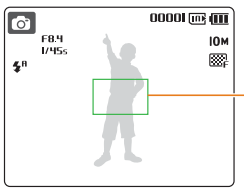
Taking photos

1 Rotate the mode dial to **AUTO**.

2 Align your subject in the frame.



3 Half-press [**Shutter**] to focus.



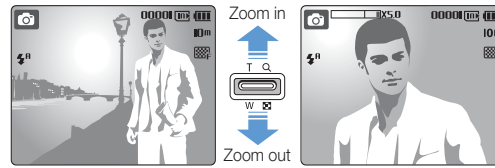
- **Green**: In focus
- **Red**: Out of focus

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

Zooming

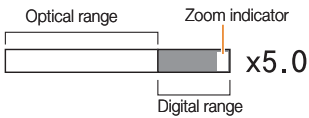
You can shoot close-up photos by adjusting the zoom. Your camera has a 5X optical zoom and 5X digital zoom. By using both, you can zoom in up to 25 times.

Push or push and hold [**Zoom**] up to zoom in on your subject. Push or push and hold [**Zoom**] down to zoom out.



Digital zoom

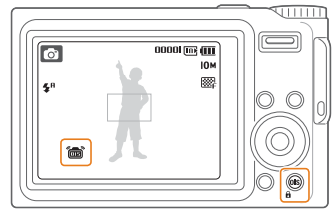
If the zoom indicator is in the digital range, your camera is using the digital zoom. The picture quality may deteriorate when you use the digital zoom.



- The digital zoom is not available when using DUAL, , , **SCENE** (in some scenes), and modes and when used with Face detection.
- It may take longer to save a photo when using the digital zoom.
- The focus area will be set to **Center AF** when using the digital zoom.

Reducing camera shake

Reduce camera shake optically by pressing [**OIS**] in Shooting mode. When you use the OIS function, the OIS icon is displayed.



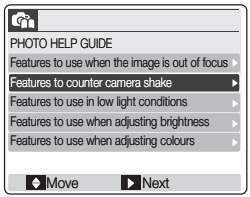
- OIS may not function properly when:
  - you move your camera to follow a moving subject
  - you use digital zoom
  - there is too much camera shake
  - the shutter speed is slow (e.g., when you select **Nightscene** in the **SCENE** mode)
  - the battery is low
  - you take a close-up shot
- If you use the OIS function with a tripod, your images may be blurred by the vibration of the OIS sensor. Deactivate the OIS function when you use a tripod.
- OIS is not available in the mode.

Using the Photo Help Guide mode

This mode provides various shooting tips. Learn to get better photos and videos.

1 Rotate the mode dial to .

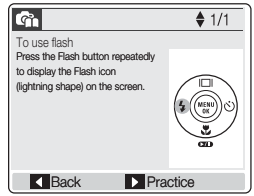
2 Press [▣] or [] to select a menu.



3 Press [] and select a submenu.

4 Press [] to view a topic.

- Press [▣] or [] to display the previous or next screen.

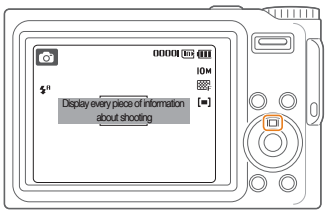


5 Press [] to practice.

- Press [] to go back to the previous menu.
- While practicing, you cannot set shooting options or menus.

Changing the display type

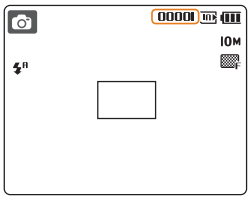
Press [I▢I] repeatedly to change the display type for Shooting and Playback modes.



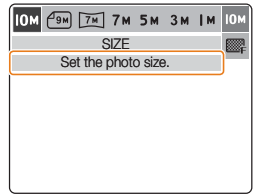
In Shooting mode

Press [I▢I] once or twice to:

- display all information about shooting
- hide information about shooting, except the available number of photos



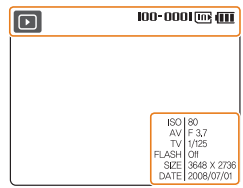
Press [I▢I] once or twice to display or hide the description for the selected shooting option.



In Playback mode

Press [I▢I] to:

- display information about the current photo
- hide information about the current file
- hide information about the current photo, except the shooting settings and captured date



Transferring files (for Windows)

Transfer photos, videos, voice memo that you stored on the camera to your PC or transfer multimedia files to the camera so that you can play or view them on the camera. Use the supplied USB cable after installing any programs you need from the CD.

Installing programs

Hardware and software requirements

Item	Requirements
CPU	Pentium III 500MHz or better (Pentium III 800MHz or better recommended)
RAM	256 MB or more (512 MB or more recommended)
OS	Windows 2000 / XP / Vista
Hard disk capacity	250 MB or more (1 GB or more recommended)
Others	• USB port • CD-ROM drive • 1024x768 pixels, 16-bit colour display compatible monitor (24-bit colour display recommended) • Microsoft Direct X 9.0 or later

- Using a self-assembled PC or a PC and OS that are not supported may void your warranty.
- For 64-bit Editions of Windows XP and Vista, the programs may not work properly.

Programs contained on the CD

Item	Requirements
Samsung Master	Edit photos and videos.
Samsung Converter*	Convert videos so that they can be played on the camera.
Adobe Reader	View the user manual.

* Files may not be converted if there is no proper codec. Install a multi-codec (full version of the latest K-Lite Codec recommended). Install Samsung Converter again after installing the multi-codec.
* Pentium IV or better is recommended to use the program.

1 Insert the installation CD in a CD-ROM drive.

2 When the setup screen is displayed, click **Samsung Digital Camera Installer** to start installation.

3 Select programs to install and follow the onscreen instructions.

4 Click **OK** to complete the installation.

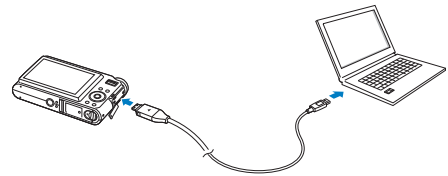
Connecting the camera to your PC

Once you connect your camera to your PC, the camera will be recognised as a removable disk.

The battery will be charged while the camera is connected to a PC with the USB cable.

1 Plug the USB cable into the camera and your PC.

You must plug the end of the cable with the indicator light (▲) 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.

3 Select **Computer** and press [**MENU/OK**].

Disconnecting the device (for Windows XP)

The way to disconnect the USB cable for Windows 2000/Vista is similar.

1 Wait until your PC stops reading from the camera.
- If the status lamp on your camera is blinking, wait until it is off.

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

3 Click the pop-up message.

4 Remove the USB cable.

Transferring files to your PC

1 Connect the camera to your PC. (see 'Connecting the camera to your PC')

2 On your PC, select **My Computer** → **Removable Disk** → **DCIM** → **100SSCAM**.

3 Select files and drag or save them to the PC.

Transferring multimedia files to the camera

Requirements

Your camera will support the following file types.

Multimedia mode	Supported type
MP3	• **File type**: MP3 (MPEG -1/2/2.5 Layer 3) • **Bit rate**: 48 ~ 320Kbps (including VBR)
PMP	**File type**: PMP SDC*
Text Viewer	• **File type**: TXT (smaller than 10 MB) • **Encoding type** - Windows: ANSI (Windows 98 or later), Unicode / Unicode (Big-Endian) / UTF-8 (Windows 2000 / XP) - Mac: ANSI, Unicode (UTF-16) • **Language****: English, Korean, French, German, Spanish, Italian, Chinese, Taiwanese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Bahasa, Polish, Hungarian, Czech, Turkish

* A file type that is converted with Samsung Converter (p. 24)
** Subject to change without prior notice

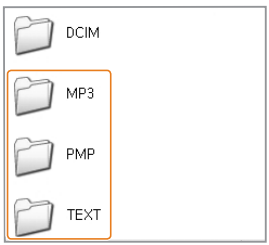
- Duplicating multimedia files may violate copyright laws.
- Without permission of the manufacturer, you cannot duplicate, modify and/or distribute any part or all MP3 or PMP files provided in the internal memory.

Transferring multimedia files to the camera

1 Connect the camera to your PC. (p. 21)

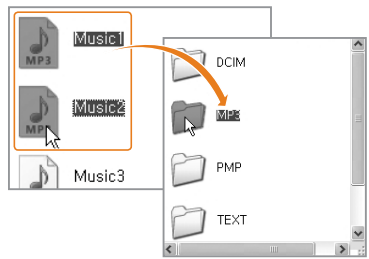
2 On your PC, select **My Computer** → **Removable Disk**.

3 Create new folders named ‘MP3,’ ‘PMP,’ and ‘TEXT.’



4 Copy multimedia files to the corresponding folders.

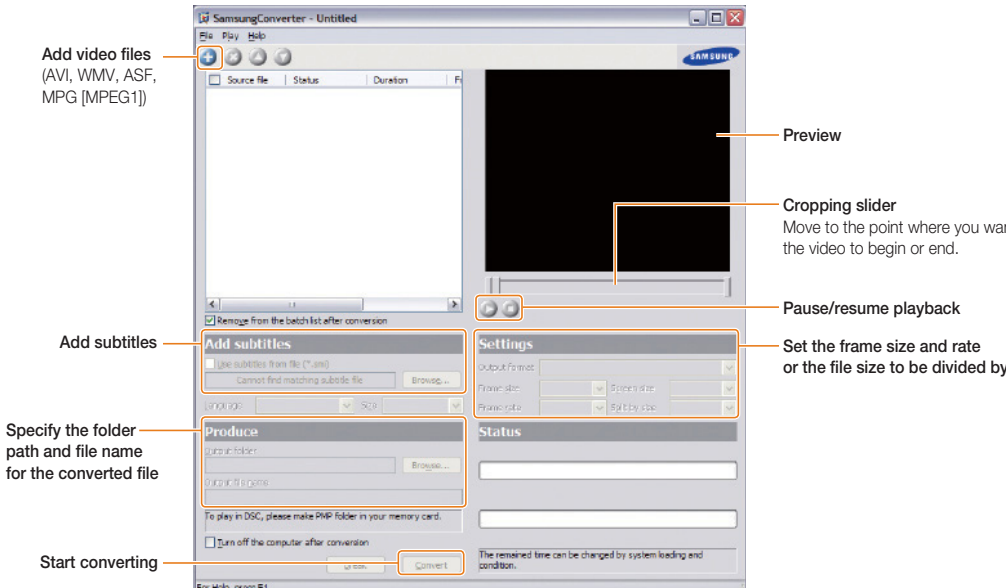
- MP3 files to MP3 folder
- SDC files to PMP folder
- TXT files to TEXT folder



- Multimedia files cannot be played or viewed if the folder names are incorrect.
- Subfolders nested directly within the MP3, PMP and TEXT folders can be created. Files saved in deeply-nested subfolders may not be played or viewed.
- You can save up to 200 files or 100 subfolders in each folder up to 200 total files and subfolders in combination.
- File names or folder names with more than 120 characters (60 characters for 2-byte languages, such as Chinese or Korean) will not appear on the playlist.

Using Samsung Converter

Convert videos so that they can be played on the camera. For details, see the Help menu.

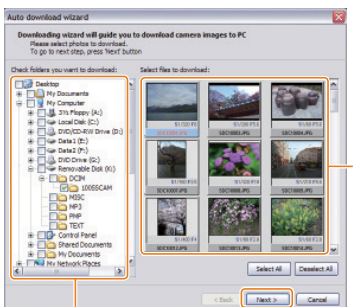


Using Samsung Master

You can download files or edit photos or videos stored on your PC. For details, see Help in the program.

Downloading files using Samsung Master

A window for downloading files automatically appears when the camera is connected. Select the files you want to download. Click **Next** and follow the onscreen instructions.



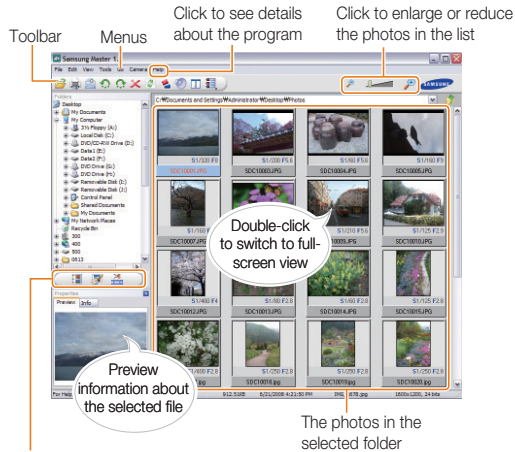
The thumbnails of files (Click files to download.)

Select a folder to save downloaded files

Click to download the selected files

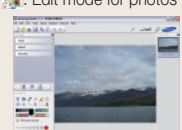
Using the Samsung Master Interface

View mode

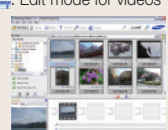


: View mode

: Edit mode for photos



: Edit mode for videos



Transferring files (for Mac)

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

- Mac OS X version 10.3 or later is supported.
- Supported file types and languages are the same as the Windows version. (p.22)
- To use PMP files, you must first convert the files using Samsung Converter on a Windows computer.

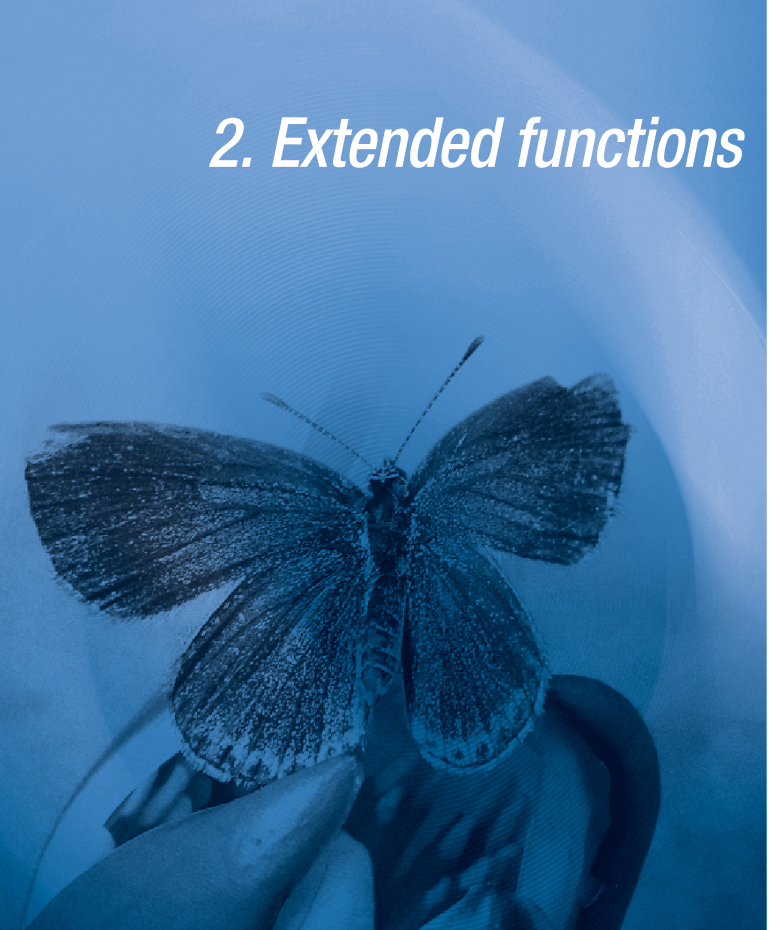
Transferring files to your computer

1. Connect your camera to a Macintosh computer with the USB cable.
2. Turn on your camera.
   - The computer recognises the camera automatically and a removable disk icon will be displayed.
3. Double-click the removable disk icon.
4. Transfer photos or videos to the computer.

Transferring multimedia files to the camera

1. Connect the camera to a Macintosh computer with the USB cable.
2. Turn on your camera.
   - The computer recognises the camera automatically and a removable disk icon will be displayed.
3. Double-click the removable disk icon.
4. Create new folders named ‘MP3,’ ‘PMP,’ and ‘TEXT.’
5. Transfer multimedia files to your computer.
   - MP3 files to MP3 folder
   - SDC files to PMP folder
   - TXT files to TEXT folder

2. Extended functions



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

Shooting modes 28
AUTO Using the Auto mode 28
SCENE Using the Scene mode 28
DUAL Using the Dual IS mode 29
Using the Beauty Shot mode 30
P Using the Program mode 31
Recording a video 32
Tips for getting a clearer photo 33
Recording voice memos 35
Recording a voice memo 35
Adding a voice memo to a photo 35

Shooting modes

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

AUTO Using the Auto mode

Take a photo quickly and easily with minimal settings.

1 Rotate the mode dial to **AUTO**.

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

3 Press [**Shutter**] to take the photo.

SCENE Using the Scene mode

Take a photo with options for a preset scene.

1 Rotate the mode dial to **SCENE**.

2 Press [**MENU/OK**].

3 Select → **Scene**.

4 Press [].

5 Press [] or [] to select a scene.

- If you select **Nightscene**, you can adjust the aperture value and shutter speed.

6 Press [**MENU/OK**].

7 Press [**Shutter**] to return to Shooting mode.

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

9 Press [**Shutter**] to take the photo.

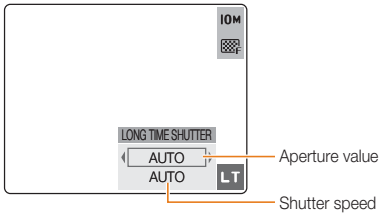
Adjusting the exposure

If you select **Nightscene**, 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 Press [**Fn**].

2 Press [] or [] to select **LT**.

3 Press [I◻I] or [🌷] to select an option.



4 Press [⚡] or [⏲] to select the aperture value or shutter speed.

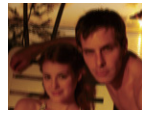
If you select **AUTO**, the aperture value or shutter speed will be adjusted automatically.

5 Press [**MENU/OK**].

It is a good idea to use a tripod to prevent your photos from blurring.

DUAL Using the Dual IS mode

Reduce camera shake and prevent blurred photos with Optical and Digital Image Stabilisation functions.


Before correction

After correction

1 Rotate the mode dial to DUAL.

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

3 Press [**Shutter**] to take the photo.

- Hold your camera still while '**Capturing!**' is displayed on the screen.

- The digital zoom will not work in this mode.
- The photo will be corrected optically only when taken with a light source that is brighter than fluorescent light.
- If your subject is moving rapidly, the photo may be blurry.
- Press [**OIS**] to reduce camera shake in different shooting modes.

Using the Beauty Shot mode

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

1 Rotate the mode dial to .

2 Adjust the brightness of the face and facial imperfection. (see 'Adjusting the brightness of the face' and 'Adjusting facial imperfections')

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

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

Adjusting the brightness of the face

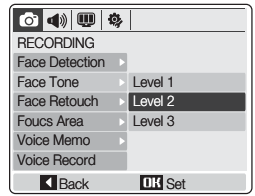
1 Press [**MENU/OK**].

2 Select → **Face Tone**.

3 Press [].

4 Press [] or [] to select a brightness level.

- As the number increases, the face appears brighter.



5 Press [**MENU/OK**].

6 Press [**Shutter**] to return to Shooting mode.

Adjusting facial imperfections

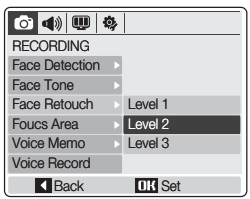
1 Press [**MENU/OK**].

2 Select → **Face Retouch**.

3 Press [].

4 Press [] or [] to select a retouch level.

- As the number increases, the face appears clearer.



5 Press [**MENU/OK**].

6 Press [**Shutter**] to return to Shooting mode.

P Using the Program mode

Take a photo by setting options.

1 Rotate the mode dial to **P**.

2 Set options.
(For a list of options, refer to Chapter 3 '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

1. Rotate the mode dial to .
2. Set a frame rate or sound option.
3. Set other options.
   (For options, refer to Chapter 3 'Shooting options.')
4. Press [**Shutter**].
5. Press [**Shutter**] again to stop recording.

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

Setting the frame rate

A frame rate is the number of frames per second. As the frame rate increases, action appears more natural, but the file size is increased.

1. Press [**Fn**].
2. Press [|□|] or [ ] to select **FRAME RATE**.
3. Press [ ] or [ ] to select a frame rate.
4. Press [**MENU/OK**].

Setting sound options

1. Press [**MENU/OK**].
2. Select → **Voice Mute**.
3. Press [ ].
4. Press [|□|] or [ ] to select an option.

Option	Description
Off	Record a video without sound.
Zoom Mute	Record a video without sound while zooming.
On	Record a video with sound.

5. Press [**MENU/OK**].
6. Press [**Shutter**] to return to Shooting mode.

Pausing while recording

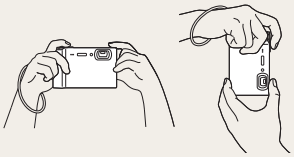
The camera allows you to pause temporarily while recording a video. With this function, you can record your favourite scenes as a single video.

Press [ ] to pause while recording.

- Press [ ] again to resume.

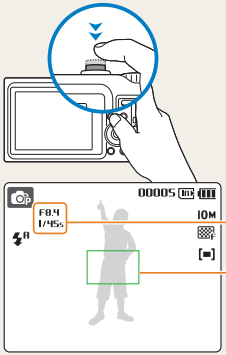
Tips for getting a clearer photo

Holding your camera correctly



Make sure nothing is blocking the lens.

Half-pressing the shutter button



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

The aperture value and shutter speed are automatically set.

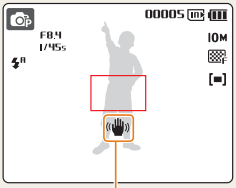
Focus frame

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

Reducing camera shake

- Press [**OIS**] to reduce camera shake optically. (p.17)
- Select the DUAL mode to reduce camera shake both optically and digitally. (p.29)

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.

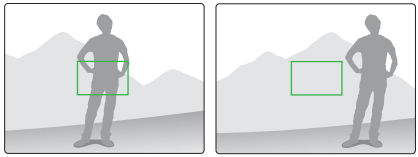
- Use a tripod or set the flash option to (Fill In). (p.41)
- Set ISO speed options. (p. 42)

Preventing your subject from being out of focus

- It is hard to get your subject in focus when:
  - there is little contrast between the subject and background (When your subject is wearing a colour of clothing that is similar to the background.)
  - the light source behind the subject is too bright
  - your subject is shiny
  - your subject includes horizontal patterns, such as blinds
  - the subject is not positioned in the centre 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**] completely to take your photo.



- When you take photos in low light

Turn the flash on. (p. 41)

- When subjects are moving fast

Use Continuous or Motion Capture. (p. 50)

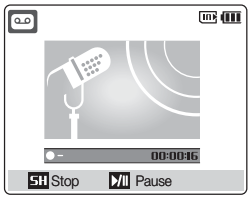
Recording voice memos

Record a voice memo that you can play back at any time or 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 (except), press [**MENU/OK**].
2. Select → **Voice Record**.
3. Press [**MENU/OK**].
4. Press [**Shutter**] to record.

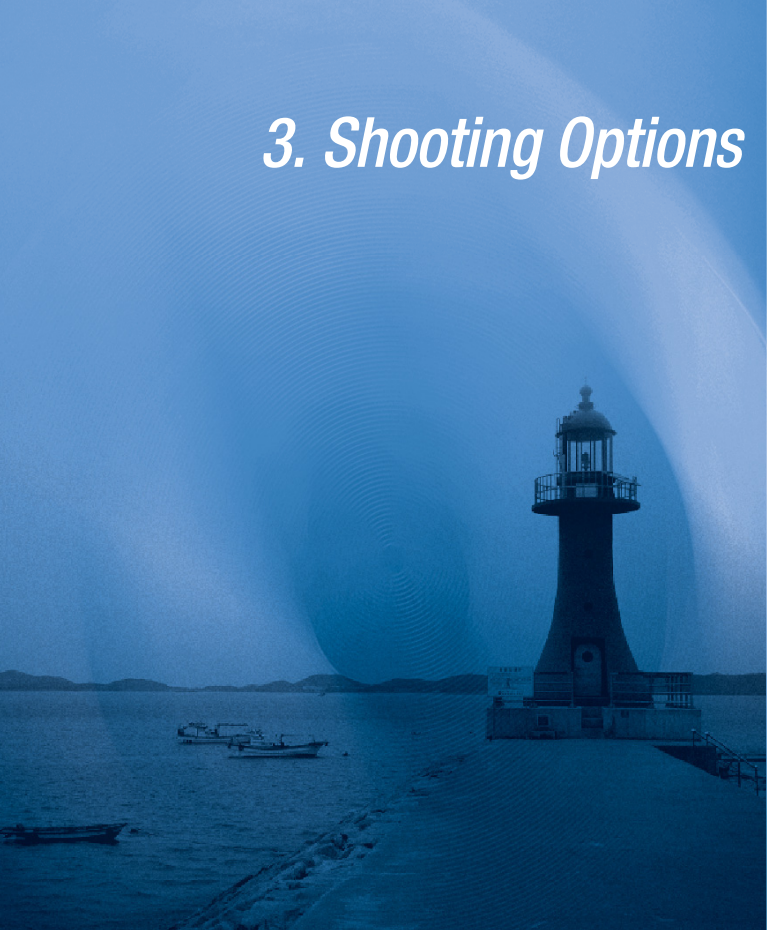


- Press [] to pause or resume recording.
- You can record a voice memo up to 10 hours.

5. Press [**Shutter**] to stop.
6. Press [**MENU/OK**] to switch to Shooting mode.

Adding a voice memo to a photo

1. In Shooting mode (except), press [**MENU/OK**].
2. Select → **Voice Memo**.
3. Press [].
4. Press [] or [] to select **On**.
5. Press [**MENU/OK**].
6. Press [**Shutter**] to return to Shooting mode.
7. Align your subject in the frame and take a photo.
   - You will begin recording a voice memo right after taking the photo.
8. Record a short voice memo (10 seconds maximum).
   - Press [**Shutter**] to stop recording a voice memo.



3. Shooting Options

Learn about the various options you can set in Shooting mode.

Selecting a resolution and quality 37
Selecting a resolution 37
Selecting a quality 38

Using the timer 39

Shooting in the dark 41
Preventing red-eye 41
Using the flash 41
Adjusting the ISO speed 42

Changing the camera's focus 43
Using macro 43
Using auto focus 43
Adjusting the focus area 44

Using face detection 45

Adjusting brightness and colour 47
Adjusting the exposure manually 47
Compensating for backlighting 47
Changing the metering mode 48
Selecting a light source (White balance) 48

Using burst modes 50

Improving your photos 51
Applying photo styles 51
Applying colour 51
Adjusting your photos 52

Selecting a resolution and quality

Selecting a resolution

As you increase the resolution, your photo or video has more pixels in it, 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 (except for), press [**Fn**].
2. Press [] or [] to select **SIZE**.
3. Press [] or [] to select an option.

Option		Description
10M	3648x2736	Print on A2 paper.
9M	3648x2432	Print on A2 paper in wide ratio (3:2).
7M	3584x2016	Print on A3 paper in panorama ratio (16:9).
7M	3072x2304	Print on A3 paper.
5M	2592x1944	Print on A4 paper.
3M	2048x1536	Print on A5 paper.
1M	1024x768	Attach to an email.

4. Press [**MENU/OK**] or [**Fn**].

When recording a video:

1. In the mode, press [**Fn**].
2. Press [] or [] to select **SIZE**.
3. Press [] or [] to select an option.

Option		Description
640	640x480	Play back on a TV.
320	320x240	Post on a web page.

4. Press [**MENU/OK**] or [**Fn**].

Selecting a quality AUTO P DUAL SCENE

Photos you take are compressed and saved in a JPG format. The higher quality you select, the better photos you will get, but the file size will also increase.

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

2 Press [|□|] or [🌷] to select **QUALITY**.

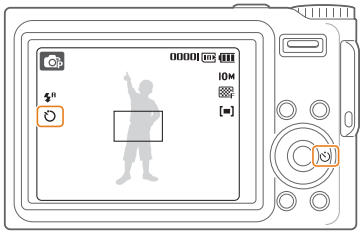
3 Press [⚡] or [⏲] to select an option.

Option	Description
Super Fine	Super fine quality
Fine	Fine quality
Normal	Normal quality

4 Press [**MENU/OK**] or [**Fn**].

Using the timer AUTO P DUAL SCENE

1 In Shooting mode, press [⏲] repeatedly to change the timer option.

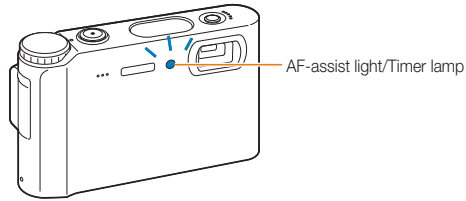


Option	Description
⏲ (10 Sec)	Take a photo in 10 seconds.
⏲25 (2 Sec)	Take a photo in 2 seconds.
⏲ (Double)	Take a photo in 10 seconds and take another in 2 seconds.
((⏲)) (Motion Timer)	Detect your movement and then take a photo.

To turn off the timer, press [⏲] repeatedly until no timer icon is displayed.

2 Press [**Shutter**] to start the timer.

- The AF-assist light/Timer lamp blinks. The camera will automatically take a photo after the specified time.



- Press [⏲] to cancel the timer.
- When **Smile Shot** or **Blink Detection** is set, the timer is not available.

Using Motion Timer

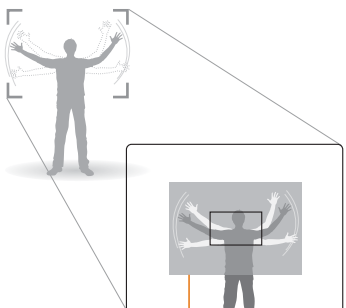
1 Press [⏲] repeatedly until (⏲) is displayed.

2 Press [**Shutter**].

3 Stand within 3 m from the camera within 6 seconds after pressing [**Shutter**].

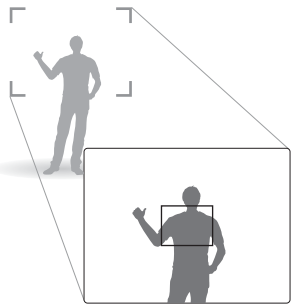
4 Make a motion, such as waving your arms, to activate the timer.

- The AF-assist light/Timer lamp will start to blink rapidly when the camera detects you.



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.



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

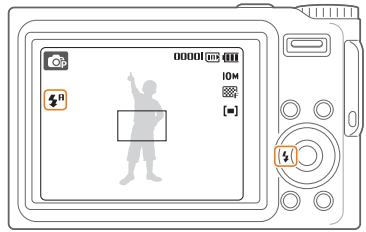
Preventing red-eye AUTO P SCENE

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 AUTO P SCENE

Use the flash when taking photos in the dark.

In Shooting mode, press [⚡] repeatedly to change the flash option.



Option	Description
(Auto)	The flash fires when the subject or background is dark.
(Red Eye)*	• The flash fires when the subject or background is dark. • The camera reduces red-eye.
(Fill In)	• The flash always fires. • Light intensity is adjusted automatically.

Option	Description
(Slow Sync)	• The flash fires and the shutter stays open longer. • Select this in the evening or in the dark. • It is a good idea to use a tripod to prevent your photos from blurring.
(Off)	• The flash will not fire. • Camera shake warning is displayed in the dark.
(Red Eye Fix)*	• The flash fires when the subject or background is dark. • The camera corrects red-eye through its advanced software analysis.

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. 87)
- If there is reflected light or much dust in the air, tiny spots may appear on your photo.

Adjusting the ISO speed P

ISO speed is the measure of a film's sensitivity to light as defined by the International Organisation for Standardisation (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.

1. In Shooting mode, press [**Fn**].
2. Press [] or [] to select **ISO**.
3. Press [] or [] to select an ISO speed option.
4. Press [**MENU/OK**] or [**Fn**].

- The higher ISO speed you select, the more image noise you may get.
- When **Motion Capture** is set, ISO speed will be set to **Auto**.
- When you set the ISO speed to 3200, the resolution will be set to **3M**.

Changing the camera's focus

Using macro

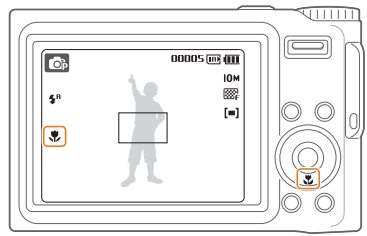
Use macro to take close-up photos of subjects, such as flowers or insects.

- Try to hold the camera very still to prevent blurry photos.
- Turn the flash off 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.

In Shooting mode, press [ ] repeatedly to change the focus distance option.



Option	Description
(Auto Macro)	Focus on a subject farther than 8 cm (farther than 50 cm, while using zoom).
(Macro)	Focus on a subject between 8 to 80 cm (between 50 and 80 cm, while using zoom).
(Super Macro)	Focus on a subject between 3 to 8 cm.

- To focus on a subject farther than 80 cm, press [ ] repeatedly until no focus distance icon is displayed.
- The options may differ depending on the shooting mode.

Adjusting the focus area AUTO P DUAL SCENE

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

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

2 Select → **Focus Area**.

3 Press [].

4 Press [] or [] to select an option.

Option	Description
Center AF	Focus on the centre (suitable when subjects are located in the centre).
Multi AF	Focus on one or more of nine possible areas.

5 Press [**MENU/OK**].

Using face detection

AUTO P DUAL SCENE

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 conveniently by using Blink Detection to detect closed eyes or Smile Shot to capture a smiling face.

1. In Shooting mode, press [**MENU/OK**].
2. Select → **Face Detection**.
3. Press [].
4. Press [] or [] to select an option.

Option	Description
Face Detection	Your camera automatically detects human faces (up to ten human faces). The closest face appears in a white focus frame and the rest of the faces appear in gray focus frames. • The closer you are to the subject, the quicker your camera will detect faces. • If your camera fails to detect a face, it will focus in the centre.
Self Portrait	Take photos of yourself. The focus distance will be set to close-up, and your camera will emit a beep. When you hear a quick beep, press [**Shutter**] to take a photo. To turn the beep on or off, select **Self Portrait** in the sound settings. (p. 78)
Smile 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.

Option	Description
Blink Detection	If your camera detects closed eyes, it will take two photos in succession. • Hold your camera still while '**Capturing!**' is displayed on the screen. • When '**Picture taken with eyes closed**' message appears, take another photo.

The options may differ depending on the shooting mode.

5 Press [**MENU/OK**].

- Press [**Shutter**] to return to Shooting mode.

- 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
- Face detection is not available when using a photo style, colour, staturation, or the digital zoom.
- When **Smile Shot** or **Blink Detection** is set, the timer is not available.
- When you use the face detection option, the focus area will be set to **Center AF**.

Adjusting brightness and colour

Adjusting the exposure manually P DUAL

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

Brighter (+)

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

2 Press [|□|] or [🌷] to select ±.

3 Press [⚡] or [⏲] to adjust the exposure.

4 Press [**MENU/OK**] or [**Fn**].

- Once you adjust the exposure, the setting will remain the same. You may need to change the exposure value 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, overexposed. (p. 50)

Compensating for backlighting P

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/OK**].

2 Select 📷 → **ACB**.

3 Press [⏲].

4 Press [|□|] or [🌷] to select **On**.
- To deactivate, select **Off**.

5 Press [**MENU/OK**].

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

Changing the metering mode P DUAL

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 [**Fn**].

2 Press [I◻I] or [✿] to select **METERING**.

3 Press [ϟ] or [⏲] to select an option.

Option	Description
[▪] Multi	• Your camera divides the scene into several areas, and then measures the light intensity of each area. • Suitable for general photos.
[•] Spot	• Your camera measures only the light intensity of the very centre of the frame. • If a subject is not in the centre of the scene, your photo may come out too bright or dark. • Suitable for a subject with backlighting.
[⊡] Center Weighted	• Your camera averages the meter reading of the entire frame with emphasis placed on the centre. • Suitable for photos with subjects in the centre of the frame.

4 Press [**MENU/OK**] or [**Fn**].

Selecting a light source (White balance) P DUAL

The colour of your photo depends on the type and quality of the light source. If you want the colour of your photo to be the same as what you see, 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, press [**Fn**].

2 Press [I◻I] or [✿] to select **WHITE BALANCE**.

3 Press [ ] or [ ] to select an option.

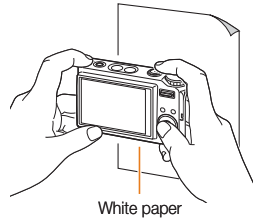
Option	Description
AWB Auto WB	Use automatic settings depending on the lighting conditions.
Daylight	Select when taking outdoor photos on a sunny day.
Cloudy	Select when taking outdoor photos on a cloudy day or in shadows.
Fluorescent_H	Select when shooting under a daylight fluorescent or three-way fluorescent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

4 Press [**MENU/OK**] or [**Fn**].

Defining your own white balance setting

1 Select from the white balance options.

2 Aim the camera lens at a piece of white paper.



3 Press [**Shutter**].

Using burst modes P SCENE

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, press [**Fn**].

2 Press [I□I] or [] to select **DRIVE**.

3 Press [] or [] to select an option.

Option	Description
Single	Take a single photo.
Continuous	• While [**Shutter**] is fully pressed down, the camera takes photos continuously. • The maximum number of photos depends on the capacity of your memory card.
Motion Capture	• While [**Shutter**] is fully pressed down, the camera takes VGA photos (5 photos per second; maximum of 30 photos). • The camera automatically shows you the photos just taken and then saves them.
AEB	• Take three photos with different exposures: normal, underexposed, and overexposed. • It is best to use a tripod because it takes some time to save photos taken with AEB.

The options you can select vary depending on the shooting mode.

4 Press [**MENU/OK**] or [**Fn**].

- You cannot set the **ACB** option or use the flash and timer unless 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

Applying photo styles AUTO P

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

Soft

Vivid

Forest

1 In Shooting mode, press [E].

2 Press [⚡], [⏲], [|□|], or [🌷] to select **NOR**.

3 Press [⚡] or [⏲] to select an option.

4 Press [MENU/OK] or [E].

Applying colour P SCENE

Apply different effects to your photos, such as B/W, Sepia, or Blue.

B/W

Sepia

Blue

1 In Shooting mode, press [E].

2 Select **NOR** → 🎨.

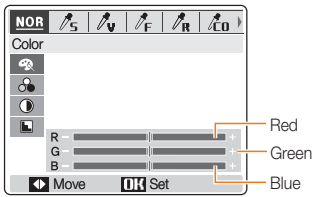
3 Press [⚡] or [⏲] to select an option.
- Select C to define your own RGB tone.

4 Press [MENU/OK] or [E].

Defining your own RGB tone

1 Select from the effect options.

2 Press [I◻I] or [✿] to select a colour.



3 Press [ϟ] or [⏲] to adjust the amount of the selected colour. (-: less or +: more)

4 Press [MENU/OK] or [E].

- Select **NOR** if you want to use face detection options.
- If you select a photo style (except for **NOR**), this feature is not available.

Adjusting your photos P

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

1 In Shooting mode, press [E].

2 Select **NOR**.

3 Press [I◻I] or [✿] to select an adjustment option:
- : Saturation
- : Contrast
- : Sharpness

4 Press [ϟ] or [⏲] to adjust saturation, contrast, or sharpness.

Saturation options

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

Contrast options

Option	Description
-	Decrease the colour and brightness.
+	Increase the colour and brightness.

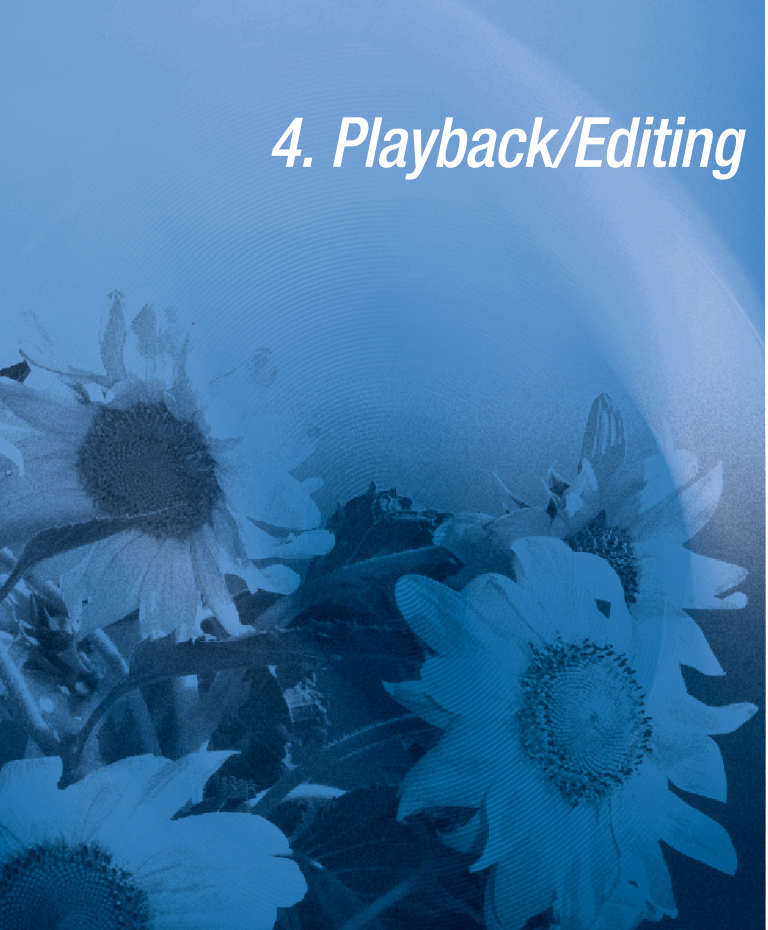
Sharpness options

Option	Description
-	Soften the edges on your photos. This option is suitable for editing the photos on your PC.
+	Sharpen the edges to improve the clarity of your photos. This may also increase the noise on your photos.

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

5 Press [**MENU/OK**] or [**E**].

If you select a photo style (except for **NOR**), this feature is not available.



4. Playback/Editing

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

Playing back 55
Starting Playback mode 55
Viewing photos 58
Playing a video 60
Playing voice memos 60
Editing a photo 61
Resizing photos 61
Rotating a photo 61
Editing colour 61
Correcting exposure problems 62
Creating a print order 63
Setting a start image 65
Viewing files on a TV 66
Printing photos with a photo printer 67

Playing back

Starting Playback mode

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

1 In Playback mode, press [▶].

- The most recent file you have taken or recorded will be displayed.
- If the camera is off, it will turn on.

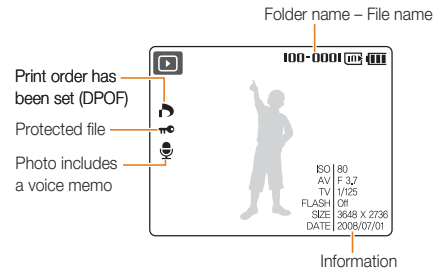
2 Press [ϟ] or [⏲] to scroll through files.

- Press and hold to view files quickly.

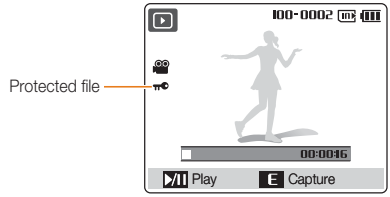
If you want to view files stored in the internal memory, remove your memory card.

Display in Playback mode

For photos



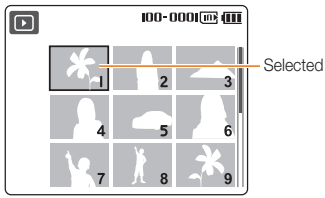
For videos



Viewing files as thumbnails

Scan through files using thumbnails.

In Playback mode, push [**Zoom**] down to start the thumbnail view (push [**Zoom**] up to cancel the thumbnail view).

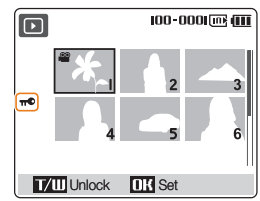


To	Do this
Scan through files	Press [◧], [✋], [ϟ], or [⏲].
Delete the selected file	Press [**Fn**] and select **Yes**.

Protecting files

Protect your files from accidental deletion.

1. In Playback mode, press [**MENU/OK**].
2. Select ▶ → **Protect**.
3. Press [⏲].
4. Select **Select** and press [**MENU/OK**].
   - To protect all files, select **All** → **Lock** and skip to step 6.
5. Select the file you want to protect and push up or down [**Zoom**].
   - 🔑 will appear on the left.
   - Push [**Zoom**] up or down again to cancel.



6. Press [**MENU/OK**].

Deleting files

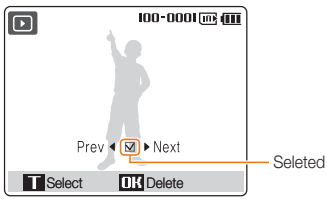
Delete single files or all files at once. You cannot delete protected files.

To delete a single file:

1. In Playback mode, press [**Fn**].
2. Press [|□|] or [🌷] to select **Yes**.
3. Press [**MENU/OK**].

To delete selected files:

1. In Playback mode, press [**Fn**].
2. Push [**Zoom**] up to select the current file.
3. Press [⚡] or [⏲] and push [**Zoom**] up again to select other files.



4. Press [**MENU/OK**] and select **Yes**.
5. Press [**MENU/OK**].

To delete all files:

1. In Playback mode, press [**MENU/OK**].
2. Select ▶ → **Delete**.
3. Press [⏲].
4. Select **All**, and press [**MENU/OK**].
   - To delete selected files, select **Select**.
5. Select **Yes** and press [**MENU/OK**].

Restoring photos from the recycle bin

If you activate the recycle bin, files you delete will be sent to the recycle bin instead of being deleted permanently. (p. 79) 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. The recycle bin will hold up to 10 MB of files. Once you exceed the 10 MB limit, files will be automatically deleted (the oldest file in the recycle bin will be deleted first).

1. In Playback mode, press [**MENU/OK**].

2 Select ⚙ → **Recycle Bin** and press [⏲].

3 Select **Recycle Folder** and press [**MENU/OK**].

- The restoration starts.

- 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 or memory card, all files in the recycle folder will be deleted.

Copying files to a memory card

You can copy files saved in the internal memory to a memory card.

1 In Playback mode, press [**MENU/OK**].

2 Select ▶ → **Copy To Card** and press [⏲].

3 Select **Yes** and press [**MENU/OK**].

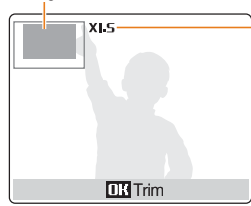
Viewing photos

Zoom in on part of a photo or view photos in a slide show.

Enlarging a photo

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

Enlarged area



Zoom ratio (The maximum zoom ratio may vary depending on the resolution.)

To	Do this
Move the enlarged area	Press [ϟ], [⏲], [▣], or [✿].
Crop the enlarged photo	Press [**MENU/OK**] (it will be saved as a new file).

Starting a slide show

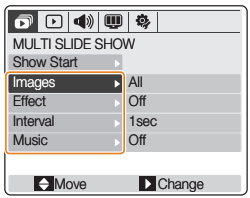
You can apply effects and audio to your slide show.

1 In Playback mode, press [**MENU/OK**].

2 Select .

3 Select a slide show effect option and press [].

- Skip to step 5 to start a slide show with no effect.



Option	Description
Images	Set the photos you want to view as a slide show. • **All**: View all photos in a slide show. • **Date**: View photos captured on a specific date in a slide show. • **Select**: View selected photos in a slide show.
Effect	• Select a transition effect. • Select **Off** for no effect.
Interval	• Set the interval between photos. • This is available when **Off**, **Basic**, or **Classic** is selected in the Effect option. • When used with Effect options other than **Off**, **Basic**, or **Classic**, the interval will be set to 1 sec.
Music	• Select a background audio. • Select **My Music** to use the MP3s stored in the memory card or internal memory as a background audio.

4 Set the slide show effect and press [**MENU/OK**].

5 Select **Show Start** and press [].

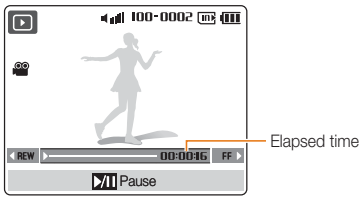
6 Select **Play** and press [**MENU/OK**].

- To loop the slide show, select **Repeat Play** and press [**MENU/OK**].
- Press [] to pause or resume the slide show.

Playing a video

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

1 In Playback mode, select a video and press [▼].



2 Use the following buttons to control playback.

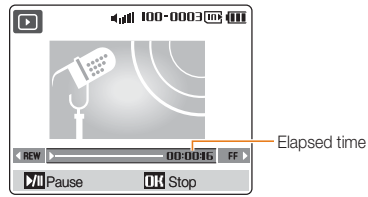
Press	To
[**Zoom**] up or down	Adjust volume.
[◀]	Skip backward.
[▶]	Skip forward.
[▼]	Pause or resume playback.
[**E**]	Capture an image.

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

Playing voice memos

Playing a voice memo

1 In Playback mode, select a voice memo and press [▼].



2 Use the following buttons to control playback.

Press	To
[**Zoom**] up or down	Adjust volume.
[◀]	Skip backward.
[▶]	Skip forward.
[▼]	Pause or resume playback.
[**MENU/OK**]	Stop.

Playing a voice memo added to a photo

In Playback mode, select a photo including a voice memo and press [▼].

- Press [▼] to pause or resume playback.

Editing a photo

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

Resizing photos

You can reduce the size of a photo and save it as a new file or set a photo as a start image which will be displayed when the camera is switched on.

1 In Playback mode, select a photo and press [**E**].

2 Select .

3 Press [I□I] or [ ] to select a resolution.
- To save as a start image, select . (p.65)
- To save as a skin of the MP3 player, select . (p.75)

4 Press [**MENU/OK**].

Rotating a photo

1 In Playback mode, select a photo and press [**E**].

2 Select .

3 Press [I□I] or [ ] to select a rotation or reverse option.

4 Press [**MENU/OK**].

Editing colour

Apply a different colour tone to the photo, such as B/W, Sepia, or Blue and save it as a new file.

B/W

Sepia

Blue

1 In Playback mode, select a photo and press [**E**].

2 Select .

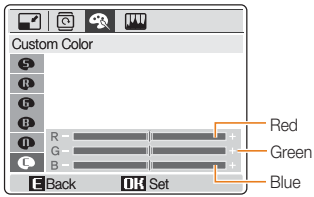
3 Press [I□I] or [ ] to select a colour tone.
- Select to define your own RGB tone. (see 'Defining your own RGB tone')

4 Press [**MENU/OK**].

Defining your own RGB tone

1 Select from the colour options.

2 Press [] or [] to select a colour.



3 Press [] or [] to adjust the amount of the selected colour.

4 Press [**MENU/OK**].

Correcting exposure problems

Adjust ACB (Auto Contrast Balance), brightness, contrast, or saturation; remove red-eye; or hide facial imperfections. Edited photos will be saved as new files.

Adjusting ACB (Auto Contrast Balance)

1 In Playback mode, select a photo and press [**E**].

2 Select → .

3 Press [**MENU/OK**].

Removing red-eye

1 In Playback mode, select a photo and press [**E**].

2 Select → .

3 Press [**MENU/OK**].

Hiding facial imperfections

1 In Playback mode, select a photo and press [**E**].

2 Select → .

3 Press [ ] or [ ] to adjust a level.
- As the number increases, the face becomes clearer.

4 Press [**MENU/OK**].

Adjusting brightness/contrast/saturation

1 In Playback mode, select a photo and press [**E**].

2 Select .

3 Press [ ] or [ ] to select an adjustment option.
- : Brightness
- : Contrast
- : Saturation

4 Press [ ] or [ ] to adjust a level. (-: less or +: more)

5 Press [**MENU/OK**].

Creating a print order

Define which photos to be printed and information about the 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 out photos directly through a PictBridge-compatible printer at home.
- The wide photos may print with the left and right edges cut off, so check whether or not they are wide images when ordering prints.
- You cannot set a DPOF for the photos stored in the internal memory.

1 In Playback mode, select a photo and press [**MENU/OK**].

2 Select → **DPOF**.

3 Press [ ].

4 Select DPOF options and press [ ].

Option	Description
Standard	Select photos to be printed. • **Select**: print the current photo only. • **All Pics**: print all photos in the memory card.
Index*	Select whether to print the photos as thumbnails.

Option	Description
Size	Specify the size of the print. • **Select**: specify the print size for the selected photo. • **All Pics**: specify the print size for all photos.

* You can print multiple photos with DPOF on one sheet.

5 Press [I□I] or [✿] to select an option.

6 Press [**MENU/OK**].

You can print specific-sized photos only with DPOF 1.1-compatible printers.

Setting a start image

Set a start image to be displayed when the camera is turned on.

1. In Playback mode, select a photo and press [**E**].
2. Select → .
3. Press [**MENU/OK**].
4. Press [**MENU/OK**] again.
5. Select → **Start Image**.
6. Press [].
7. Press [] or [] to select the start image you have set.
8. Press [**MENU/OK**].

- Only one start image will be saved in the internal memory.
- If you select a new photo as a start image or reset your camera, the current image will be deleted.
- A wide image or image in 3:2 ratio cannot be set as a start image.

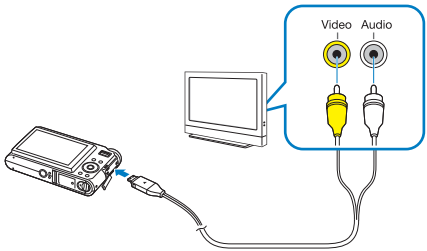
Viewing files on a TV

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. 80)

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 [▶].

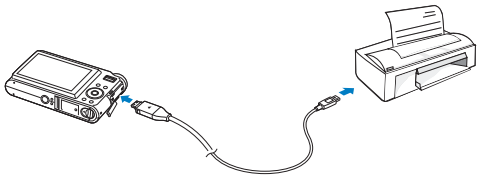
6 View photos or play videos using the buttons on your camera.

- Digital noise may occur or part of an image may not appear on some TVs.
- The images may not appear centered on the TV screen depending on your TV settings.
- You can capture a photo or video while the camera is connected to a TV.

Printing photos with a photo printer

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

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



2 Press [**POWER**] or [▶] to turn on your camera.

3 Select **Printer** and press [**MENU/OK**].

4 Press [ϟ] or [⏲] to select a photo.

- Press [**MENU/OK**] to print all photos or set print options.

Option	Description
Images	Select whether to print the current photo or all photos.
Size	Specify the size of the print.
Layout	Create thumbnail prints.
Type	Select a type of paper.
Quality	Set the printing quality.
Date Print	Set to print the date.
File Name	Set to print the name of the file.
Reset	Reset the print settings.

Some options are not supported by some printers.

5 Press [▶] to print.

- Press [ϟ] to cancel printing.

5. Multimedia

Learn to use Multimedia modes: MP3 mode, PMP mode, and Text Viewer mode.

Using Multimedia mode 69

Using the MP3 mode 71

Playing music files 71

Using the PMP mode 73

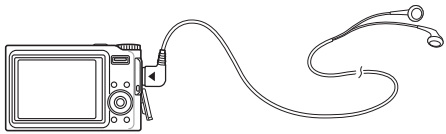
Using the Text Viewer mode 74

Multimedia mode settings menu 75

Using Multimedia mode

In Multimedia mode, you can listen to MP3s, play videos, or view text files.
Before using Multimedia mode, you should transfer files to your camera or memory card. (p. 20)

1 Plug the supplied earphones into the Multifunction jack (optional).



2 Rotate the mode dial to .

3 Press [ ] or [ ] to select a mode.
- : MP3
- : PMP
- : TextViewer

4 Press [**MENU/OK**].

5 Select **Open** to select a file to play.
- Select **Resume** to open the last file played in the MP3 mode or resume the last video or text file.

6 Press [ ] or [ ] to select a file to play.

7 Press [**MENU/OK**].

- Files will be listed by date they were saved.
- File names in unsupported languages will appear as "_ _ _ _ _ _."
- If there are more than 100 files in the folder or several large files, it may take longer to access a mode.
- Power save mode will not be active during playback except when viewing text files with **AUTO SCROLL** or **MP3 BGM** off.
- The camera will enter Power save mode when you perform no operations for 15 seconds in the MP3 mode.

Locking the buttons

You can lock the buttons to prevent any unwanted camera operations during playback. Press and hold [**OIS**] to lock or unlock the buttons.

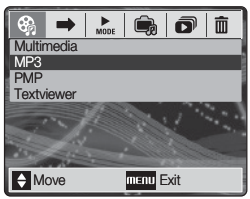
- Even though you lock the buttons, you can still operate [**POWER**] and use the USB cable.
- Press any button to turn on the screen in Power save mode.

Switching to another Multimedia mode

1 Press [**MENU/OK**] while a video or MP3 file is being played or text file is being viewed.

2 Select .

3 Press [I□I] or [] to select a mode.



4 Press [**MENU/OK**].

Deleting multimedia files

1 Press [▶] while video or MP3 file is being played or text file is being viewed.

2 Press [I□I] or [] to select a file.

3 Press [**Fn**].

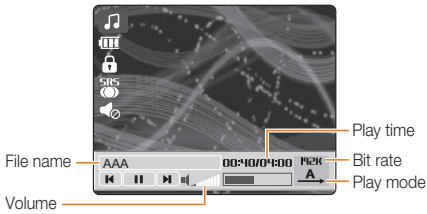
4 Select **Yes** and press [**MENU/OK**].

You can also delete all files of the selected mode. (p.75)

Using the MP3 mode

Playing music files

1 Access the MP3 mode and play a file. (p. 69)



Icon	Description
	MP3 mode
	Remaining battery capacity
	Buttons locked
	Equaliser type
	Muted

2 Use the following buttons to control playback.

Press	To
[**Zoom**] up or down	Adjust volume
[**E**]	Change the equaliser type
[ ]	Mute or unmute sound
[ ]	Skip backward
[ ]	Skip forward
[**MENU/OK**]	Change the MP3 mode settings
[ ]	Pause or resume playback
[ ]	• Open the playlist • Return to the player screen

About VBR

Variable Bit Rate (VBR) is an encoding method that keeps music at a stable quality level by adjusting the compression rate according to the complexity of the encoded audio.

Taking photos while listening to music

(Available when using a memory card)

1 Press [**Shutter**] during playback.

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

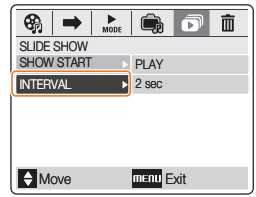
3 Press [**Shutter**] to take a photo.
- Press [**E**] to switch to the player screen.

- You cannot set shooting options while listening to music.
- Photos will be taken with the following settings.
  - Resolution: 3M
  - Quality: Fine
  - Flash: (Auto)
  - Focus: (Auto Macro)
- Your MP3 player will not function normally when taking photos.

Starting a slide show while listening to music

1 Press [**MENU/OK**] during playback.

2 Select → **INTERVAL**.



3 Press [].

4 Select an interval between photos and press [**MENU/OK**] or [].

5 Press [] or [] to select **SHOW START**.

6 Press [].

7 Select an option.
- **PLAY**: Play a slide show and return to the player screen.
- **REPEAT PLAY**: Loop the slide show.

8 Press [**MENU/OK**].
- The slide show will begin.
- Press [**E**] to return to the play screen.

Using the PMP mode

1 Access the PMP mode and play a file. (p. 69)

Icon	Description
	PMP mode
	Remaining battery capacity
	Buttons locked
×2	Scanning speed
SRS	Equaliser type
	Muted

2 Use the following buttons to control playback.

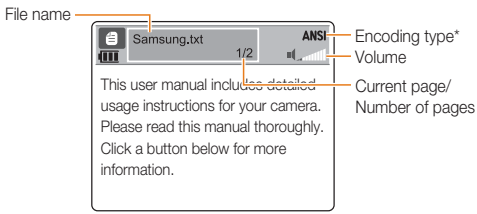
Press	To
[**Zoom**] up or down	Adjust volume
[ ]	Mute or unmute sound
[ ]	• Skip backward • Scan backward* (while playing)
[ ]	• Skip forward • Scan forward* (while playing)
[**MENU/OK**]	Change the PMP mode settings
[ ]	Stop or resume playback
[ ]	• Open the playlist • Return to the player screen

* You can scan a file quickly to the point that you want to play. (p. 75)

- All buttons except for [**POWER**] will not work in the first and last 2 seconds of the playback.
- Convert subtitle files (.smi) using Samsung Converter to display subtitles. (p. 24)
- Some videos may be paused during playback and resumed automatically. It is not a malfunction.

Using the Text Viewer mode

1 Access the Text Viewer mode and view a file. (p.69)



Icon	Description
	Textviewer mode
	Remaining battery capacity

* The encoding type will be displayed as **ANSI** or **UNI**.

- **ANSI (American National Standards Institute) type**: you have to set the language to match that of the text file. (p. 75)
- **UNI (Unicode) type**: you do not have to set the language to match that of text file.

2 Use the following buttons to control playback.

Press	To
[◀◻▶]	• Go to the previous page • Skip 10 pages (press and hold)
[✿]	• Go to the next page • Skip 10 pages (press and hold)
[MENU/OK]	Change the Textviewer mode settings
[▶]	• Open the file list • Return to the text viewer screen

- If text is displayed incorrectly, save it as an ANSI file using a text editor on your computer (such as Notepad for Windows).
- Some characters or symbols may not be displayed correctly.
- Text files that are improperly encoded may be corrupted.
- A file that is bigger than 10 MB may take longer to open or may not open. Divide large files into multiple, smaller files for faster access.

Multimedia mode settings menu

1 Press [**MENU/OK**] while an MP3 file or a video is being played or a text file is being viewed.

2 Press [⚡] or [⏲] to select a menu.

3 Press [|□|] or [🌷] to select an option.

4 Press [**MENU/OK**].

* Default

Menu	Available mode	Description
		Switch to another Multimedia mode. (p.70)
		Set to start the last music file played or resume a video or text file. (**OFF***, **ON**)
MODE		Set to repeat playback or play files randomly. • **PLAY ALL***: Play all files in the current folder once. • **REPEAT ONE**: Repeat the current file. • **REPEAT ALL**: Repeat all files in the current folder. • **SHUFFLE**: Play files in the current folder in random order.
		Select a skin for the player screen. • **Default 1***, **Default 2**: Display a default image stored in the internal memory. • **User Skin 1**, **User Skin 2** : Display an image saved as a **Start Image** or **MP3 Skin** in the edit menu. (p.61)

* Default

Menu	Available mode	Description
		Start a slide show while listening to an MP3. (p. 72)
TIME		Set the length of time to skip when scanning backward or forward. (**Normal***, **30 sec**, **1 min**, **3 min**, **5 min**, **10 min**)
		Show or hide the playback controls. • **5 sec***: Hide the playback controls after no operations for 5 seconds. • **ON**: Show the playback controls at all times. • **OFF**: Hide the playback control. The subtitles will be displayed regardless of the setting.
		Set AUTO SCROLL—a delay before scrolling to the next line of text. (**OFF***, **1.1 sec**, **1.4 sec**, **1.7 sec**, **2.0 sec**, **2.3 sec**)
		Play MP3 BGM—music while viewing text files. • **OFF***: Do not play music. • **ON**: Play the last MP3 file played.
		Select a language to match that of the text file.
		Delete all files of a selected Multimedia mode. (**No***, **Yes**)

6. Appendix

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

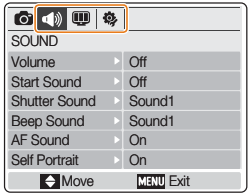
Camera settings menu 77
Accessing the settings menu 77
SOUND 78
DISPLAY 78
SETTINGS 79
Error messages 81
Camera maintenance 82
Cleaning your camera 82
About memory cards 83
About the battery 84
Before contacting a service centre 85
Camera specifications 87
Index 91

Camera settings menu

Accessing the settings menu

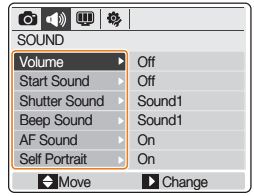
1 In Shooting or Playback mode, press [**MENU/OK**].

2 Press [ ] or [ ] to select a menu.



Icon	Description
	Adjust volume or set beep, shutter, start, AF or self-portrait sound. (p. 78)
	Select an onscreen language, set the date and time, set a start image, adjust the brightness of the screen, or set the duration for playing back files or display save time. (p. 78)
	Format the internal memory and memory card, reset to the default setting, turn the recycle bin on or off, specify file names, set whether to display the shooting date, set power save time, select a video output, or turn the AF-assist light/Timer lamp on or off. (p. 79)

3 Press [ ] or [ ] to select a submenu.



4 Press [ ].

5 Press [ ] or [ ] to select an option.

6 Press [**MENU/OK**].

SOUND

* Default

Item	Description
Volume	Adjust the volume of any sound. (**Off**, **Low**, **Medium***, **High**)
Start Sound	Select a sound to be emitted when turning on your camera. (**Off***, **Sound1**, **Sound2**, **Sound3**)
Shutter Sound	Select a sound to be emitted when pressing the shutter button. (**Off**, **Sound1***, **Sound2**, **Sound3**)
Beep Sound	Select a sound to be emitted when pressing the buttons or switching modes. (**Off**, **Sound1***, **Sound2**, **Sound3**)
AF Sound	Set to emit a sound when half-pressing the shutter button. (**Off**, **On***)
Self Portrait	Set to emit a sound when the camera detects your face. (**Off**, **On***)

DISPLAY

* Default

Item	Description
Language	Select a language for the display text.
Date&Time	Select a region, set the time and date, and set the date format. (**yyyy/mm/dd**, **Off***, **dd/mm/yyyy**, **mm/dd/yyyy**) Select a city to set the local time when using the camera in a different country.
Start Image	Set a start image to be displayed when the camera is switched on. • **Off***: Display no start image. • **Logo**: Display a default image stored in the internal memory. • **User Image**: Display an image saved as **Start Image** in the edit menu (p. 65)
Display Bright	• Adjust the brightness of the screen. (**Auto**, **Dark**, **Normal***, **Bright**) • **Normal** is fixed in Playback mode even if **Auto** is selected.
Quick View	Set the duration for reviewing a captured image or video before returning to Shooting mode. (**Off**, **0.5sec***, **1sec**, **3sec**)
Display Save	If you perform no operations for 30 seconds, the camera switches to Power save mode automatically (press any button to deactivate Power save mode). (**Off***, **On**)

SETTINGS

* Default

Item	Description
Format	Format the internal memory and the memory card (all files—including the protected files—will be deleted). (**No***, **Yes**) When you use a memory card used with cameras from different manufecturers or a memory card reader, or one formatted on a computer, your camera may read the card incorrectly. Format the card before using it.
Reset	Reset menus and shooting options (date and time, language, and video output settings will not be reset). (**No***, **Yes**)
Recycle Bin	Set the recycle bin option or restore deleted files. (**Off***, **On**, **Recycle Folder**) • Select **Recycle Folder** to restore files.

* Default

Item	Description
File	Specify how to name files. • **Reset**: Set the file number to start from 0001 when inserting a new memory card, formatting a memory card, or deleting all files. • **Series***: Set the file number to follow the previous file number when inserting a new memory card, formatting a memory card, or deleting all files. • The default name of the first folder is 100SSCAM and the default name of the first file is SDC10001. • The file number increases one by one from SDC10001 to SDC19999. • The folder number increases one by one from 100SSCAM to 999SSCAM. • The maximum number of files that can be stored in one folder is 9999. • 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.
Imprint	Set whether to display date and time on the photos when printing. (**Off***, **Date**, **Date&Time**) • The date and time will be displayed at the bottom-right corner of the photo in yellow. • The date and time may not be printed on some printer models. • If you select **Text** in the **SCENE** mode, the date and time will not be displayed.

* Default

Item	Description
Power Off	Turn off your device when not being used. (**Off**, **1min**, **3min***, **5min**, **10min**) • Your settings will not change after changing the battery. • This will not function when: - the camera is connected to a PC or printer - you play a slide show or videos - you record a voice memo
Video Out	Set the video signal output according to the TV colour system of the connected video equipment. • **NTSC***: USA, Canada, Japan, Korea, Taiwan, Mexico, etc. • **PAL** (supports only BDGHI): Australia, Austria, Belgium, China, Denmark, Finland, Germany, England, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway, etc.
AF Lamp	Set an assistant light to help you focus in dark places. (**Off**, **On***)

Error messages

When the following error messages appear, try these remedies.

Error message	Suggested remedies
Card Error!	• Turn off your camera and turn it on again. • Remove your memory card and insert it again. • Format your memory card. (p. 79)
Low Battery!	Insert a recharged battery or recharge the battery.
No Image!	Take photos or insert a memory card that has some photos.
Low Light!	Turn the flash on. (p. 41)
File Error!	Delete the damaged file or contact a service centre.
Memory Full!	Delete unnecessary files or insert a new memory card.

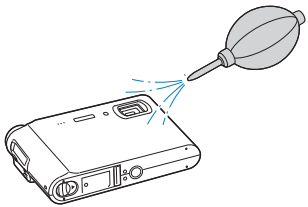
Error message	Suggested remedies
Card Locked!	Unlock the memory card.
DCF Full Error	File names do not match the DCF standard. Transfer the files on the memory card to your PC and format the card. (p. 79)

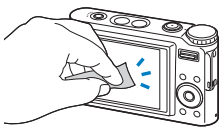
Camera maintenance

Cleaning your camera

Camera lens and display

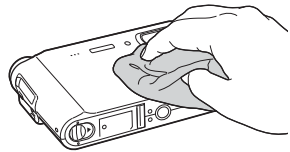
Use a blower brush to remove dust and wipe the lens gently with a soft cloth. If any dust remains, apply lens cleaning liquid to a piece of cleaning paper and wipe gently.





Camera body

Wipe gently with a soft, dry cloth.

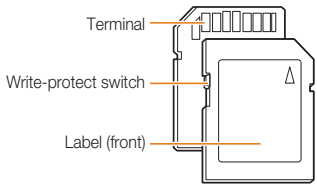


- Never use benzene, thinners, or alcohol to clean the device. These may cause damage or malfunctions.
- Do not press the lens cover or use a blower brush on the cover.

About memory cards

Memory cards you can use

You can use SD (Secure Digital), SDHC (Secure Digital High Capacity), or MMC (MultiMedia Card) memory cards.



You can prevent files from being deleted by using a write-protect switch on the SD or SDHC card. Slide the switch down to lock or slide it up to unlock. Unlock the card when shooting.

Memory card capacity

The memory capacity may differ depending on shooting conditions. For 1 GB SD card:

	Size	Super fine	Fine	Normal	30FPS	15FPS
Photos	10M	188	357	412	-	-
	9M	206	391	557	-	-
	7M	248	469	638	-	-
	7M	262	483	645	-	-
	5M	344	638	872	-	-
	3M	533	897	1214	-	-
	1M	1720	2064	2381	-	-
* Video	640	-	-	-	Approx. 7' 58"	Approx. 15' 13"
	320	-	-	-	Approx. 28' 39"	Approx. 52' 50"

* The recordable time may vary if you use the zoom. You can record videos of up to 4GB or 2 hours each.

About the battery

Use only Samsung-approved batteries.

Battery specifications

Mode	SLB-10A
Type	Lithium-ion battery
Cell capacity	1050 mAh
Voltage	3.7 V
Charging time (when the camera is switched off)	Approx. 150 min

Battery life

Average time		Test conditions (when the battery is fully charged)
Photos	Approx. 120 min (Approx. 240 photos)	Take photos under the following conditions: in the AUTO mode, 10M resolution, Fine quality, OIS on. 1. Set the flash option to ϟ (Fill In), take a single shot, and zoom in or out. 2. Set the flash option to ⊗ (Off), take a single shot, and zoom in or out. 3. Perform steps 1 and 2 for 30 seconds and repeat for 5 minutes. Then turn off the camera for 1 minute. 4. Repeat steps 1 to 3.
Videos	Approx. 120 min	Record videos at 640x480 resolution and 30 fps.
MP3	Approx. 310 min	Play files with the screen turned off.
PMP	Approx. 230 min	Play files with normal playback.

The figures above are measured by Samsung's standards and may differ depending on usage.

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 flash or recording videos uses up the battery quickly. Charge the battery until the indicator light turns green.
- If the indicator light blinks in red or is off, 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 the provided USB cable only.
- 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 centre

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

Situation	Suggested remedies
Cannot turn on the camera	• Make sure that a battery is inserted. • Make sure the battery is inserted correctly. • Charge the battery.
The power turns off suddenly	• Charge the battery. • Your camera may be in Power save mode. (p. 80) • The camera may turn off to prevent the memory card from being damaged due to an impact. Turn on your camera again.
The camera is losing battery power quickly	• The battery may lose power more quickly in low temperatures (below 0° C). Keep the battery warm by putting it into your pocket. • Using the flash or recording videos depletes the battery quickly. Recharge if needed. • Batteries are consumable parts that must be replaced over time. Get a new battery if the battery life is diminishing quickly.

Situation	Suggested remedies
Cannot take photos	• There is no space on the memory card. Delete unnecessary files or insert a new card. • Format the memory card. (p. 79) • The memory card is defective. Get a new memory card. • The memory card is locked. Unlock the card. (p. 81) • Make sure the camera is switched on. • Charge the battery. • Make sure the battery is inserted correctly.
The camera freezes	Remove the battery and insert it again.
The flash does not work	• The flash option may be set to (Off). (p. 41) • You cannot use the flash in the DUAL, , or some of **SCENE** modes.
The camera fires the flash suddenly	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.

Situation	Suggested remedies
The buttons on the camera do not work	Remove the battery and insert it again.
The memory card has an error	The memory card has not been reset. Format the card. (p. 79)
Cannot play back files	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.
The photo is blurry	• Make sure the focus option you set is suitable for close-up shots. (p. 43) • Make sure that the subject is within range of the flash. (p.87) • Make sure the camera lens is clean. If not, clean the lens. (p. 82)
The colours in the photo do not match the actual scene	An incorrect white balance can create unrealistic colour. Select the proper white balance option to suit the light source. (p. 48)
The photo is too bright	• Your photo is overexposed. Adjust the exposure value. (p. 47) • Turn the flash off. (p. 41)

Situation	Suggested remedies
The TV does not display your photos	• Make sure the camera is correctly connected to the external monitor with the A/V cable. • Make sure your memory card contains photos.
Your computer does not recognise your camera	• Make sure that the USB cable is connected correctly. • Make sure your camera is switched on. • Make sure you are using a supported operating system.
Your computer disconnects the camera while transferring files	The file transmission may be interrupted by static electricity. Disconnect the USB cable and connect it again.

Camera specifications

Image sensor	Type	1/2.33" (Approx.1.09 cm) CCD
	Effective pixels	Approx. 10.2 mega-pixels
	Total pixels	Approx. 10.3 mega-pixels
Lens	Focal length	SAMSUNG lens 5X Inner Zoom f = 6.8 - 34 mm (35 mm film equivalent: 38 - 190 mm)
	F-stop range	F3.7 (W) - F4.9 (T)
	Digital zoom	• Still Image mode: 1.0X - 5.0X • Play mode: 1.0X - 11.4X (depending on image size)
LCD monitor		2.7" (Approx. 6.86 cm) colour TFT LCD (Approx. 230,000 pixels)
Focusing	Type	TTL auto focus (Center AF, Multi AF, Face Detection AF)
	Range	Wide (W) / Tele (T) Normal: 80 cm~Infinity Auto Macro: 8 cm - Infinity / 50 cm - Infinity Macro: 8 cm - 80 cm / 50 cm - 80 cm Super Macro: 3 cm - 8 cm / -
Shutter speed		• Auto: 1 - 1/1,500 sec. • Nightscene: 16 - 1/1,500 sec. • Continuous, AEB: 1/4 - 1/1,500 sec.

Exposure	Control	Program AE
	Metering	Multi, Spot, Center Weighted, Face Detection AE
	Compensation	±2EV (1/3EV steps)
	ISO Equivalent	Auto, 80, 100, 200, 400, 800, 1600, 3200* * 3M or lower
Flash	Mode	Auto, Red Eye, Fill in, Slow Sync, Off, Red Eye Fix
	Range	Wide: 0.3 m - 3.4 m (ISO Auto), Tele: 0.5 m - 2.5 m (ISO Auto)
	Recharging time	Approx. 5 sec.
Shake reduction		Dual IS [Optical Image Stabilisation (OIS)+ Digital Image Stabilisation (DIS)]
Effect	Shooting mode	• Photo style: Normal, Soft, Vivid, Forest, Retro, Cool, Calm, Classic • Colour effect: Normal, B/W, Sepia, Red, Green, Blue, Negative, Custom Color • Image adjust: Sharpness, Saturation, Contrast
	Playback mode	• Image edit: Resize, Rotate, Trimming • Colour effect: B/W, Sepia, Red, Green, Blue, Negative, Custom Color • Image adjust: ACB, Red Eye Fix, Face Retouch, Brightness, Contrast, Saturation
White Balance		Auto WB, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Measure : SH

Voice recording		Voice Record (Max. 10 hours)
		Voice Memo in Still Image (Max. 10 sec)
Shooting	Photos	• Modes: Auto, Program, Dual IS, Photo Help Guide, Beauty Shot, Scene (Nightscene, Portrait, Children, Landscape, Close up, Text, Sunset, Dawn, Backlight, Firework, Beach&Snow, Self Shot, Food, Café) • Continuous: Single, Continuous, Motion Capture, AEB • Timer: 10 sec, 2 sec, Double, Motion Timer
	Videos	• With audio or without audio • Size: 640x480, 320x240 • Frame rate: 30 FPS, 15 FPS • 5X Optical Zoom with sound • Video Editing (embedded): Pause during recording, Still Image Capture Available recording time depends on the memory capacity (Max. 2 hours for a video).
Storage	Media	• Internal memory: Approx. 10 MB flash memory • External memory (Optional) - SD card (up to 4 GB guaranteed) - SDHC card (up to 8 GB guaranteed) - MMC Plus (up to 2 GB guaranteed) Internal memory capacity may not match these specifications.
	File format	• Still image: JPEG (DCF), EXIF 2.21, DPOF 1.1, PictBridge 1.0 • Video: AVI (MJPEG) • Audio: WAV

Storage	Image size	For 1 GB SD

		Super fine	Fine	Normal
10M	3648x2736	188	357	412
9M	3648x2432	206	391	557
7M	3584x2016	248	469	638
7M	3072x2304	262	483	645
5M	2592x1944	344	638	872
3M	2048x1536	533	897	1214
1M	1024x768	1720	2064	2381

These figures are measured under Samsung's standard conditions and may vary depending on shooting conditions and camera settings.

MP3	Output	• Frequency: 20 Hz - 20 KHz • Earphone port: 20 Pin port (Stereo type) • Earphone output: Maximum Volume Left 40 mW + right 40 mW (16Ω) • Noise ratio: 88 dB with 20 KHz LPF
	File	• File format: MP3 (MPEG-1/2/2.5 Layer 3) • Bit rate: 48 - 320 kbps (Including VBR)
	Sound Effect	Normal, Live, Classic, Jazz, Rock, Dance, SRS
	Play Mode	• PLAY ALL, REPEAT ONE, REPEAT ALL, SHUFFLE • Skipping in Play, Auto Skipping • Slide show: On / Off (Selectable) • MP3 & Capturing (Capture in the Auto mode. Resolution is set to 3M. Available when using a memory card.) • Auto reload function (Remember both the last played file and frame) • User images can be the skin of the MP3 playback.

PMP	PMP Decoder	• Movie: Xvid MPEG4 (Using Samsung Converter) • Audio: MPEG Layer 2 (Using Samsung Converter)
	Play Mode	• Fast Forward / Rewind (Max. 32x) • Seek (Max. 32x), Skip • Auto skip after one file played • Auto reload function (Remember last played frame) • Full screen (Using Samsung Converter)
	Subtitle	Supports SMI file (Using Samsung Converter)
Text Viewer	File	Extension name: TXT (smaller than 10 MB)
	File format	• Windows: ANSI (Windows 98 or later), Unicode / Unicode (Big-Endian) / UTF-8 (Windows 2000 / XP) • Mac: ANSI, Unicode (UTF-16)
	Function	• Auto Scroll (1.1 sec - 2.3 sec) • Skip by 1 page / 10 pages • Auto reload function (Remember last page) • Support MP3 BGM while viewing text file
	Language	• English, Korean, French, German, Spanish, Italian, Chinese, Taiwanese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Bahasa, Polish, Hungarian, Czech, Turkish. • Supported languages are subject to change without prior notice

Interface	Digital output	Connector: USB 2.0 (20 pin)
	Audio output	Mono
	Video output	AV: NTSC, PAL (selectable)
	DC power input connector	20 pin
Power source	Rechargeable battery	Lithium-ion battery SLB-10A (1050 mAh)
	AC adapter	Power adapter (SAC-47), USB cable (SUC-C3)
	The power source may differ depending on your region.	
Dimensions (W x H x D)		95 x 59.9 x 18.8 mm (without projection part)
Weight		139.4 g (without battery and memory card)
Operating temperature		0 - 40 ℃
Operating humidity		5 - 85 %
Software		Samsung Converter, Samsung Master, Adobe Reader

Specifications are subject to change without prior notice.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

The rechargeable battery incorporated in this product is not user replaceable. For information on its replacement, please contact your service provider.

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.

Index

A

ACB 47, 62

Adjusting
Contrast
in Playback mode 63
in Shooting mode 52
Saturation
in Playback mode 63
in Shooting mode 52
Sharpness 52

Adobe Reader 20

AF-assist light 11

AF lamp 80

AF sound 78

Aperture value 28

Auto Contrast Balance 47, 62

Auto mode 28

B

Battery
Charging 84
Life 84
Specifications 84

Battery gauge 14

Beauty Shot mode 30

Blink Detection 46

Brightness
Display 78
Photo 63

Burst
Auto Exposure Bracket (AEB) 50
Continuous 50
Motion capture 50

C

Camera shake 17

Capturing an image 60

Cleaning
Camera body 82
Display 82
Lens 82

Colour effects 51, 61

D

Date and time 78

Deleting files
in Multimedia mode 70
in Playback mode 57

Digital image stabilisation 29

Digital zoom 17

Disconnecting the device 22

Display type 19

DPOF 63

Dual IS mode 29

E

Editing 61

Enlarging 58

Error messages 81

Exposure 47

F

Facial brightness 30

Facial imperfection
Hiding in Playback mode 63
Hiding in Shooting mode 31

Flash 41
Auto 41
Fill in 41
Off 41
Red eye 41
Red eye fix 41
Slow sync 41

Focus area
Center AF 44
Multi AF 44

Focus distance
Auto macro 43
Macro 43
Super macro 43

Frame rate 32

H

Half-pressing 33

I

Icons 13

Image restoration 57

ISO speed 42

L

Lens 11

Light source (White balance) 48

Long time shutter 28

M

Memory card
Capacity 83
Format 79
MMC 83
SD 83
SDHC 83
Unlock 81

Memory card gauge 14

Metering
Center 48
Multi 48
Spot 48

Microphone 11

Mode dial 11

Motion timer 40

Movie mode 32

MP3 mode 71

MP3 skin 75

Multifunction jack 11

Multimedia mode 75
MP3 mdoe 71
PMP mode 73
Text Viewer mode 74

Muting sound
Camera 14
Video 32

N

Navigation buttons 12

O

Optical Image Stabilisation (OIS) 33

P

Photo Help Guide mode 18

Photo styles 51

Playback mode 14

PMP mode 73

Power button 11

Power save mode 80

Printing photos 67
Date print 67
File name 67
Images 67
Layout 67
Quality 67
Reset 67
Size 67
Type 67

Print order 63

Program mode 31

Protecting files 56

Q

Quality 38

Quick View 78

R

Recording
Video 32
Voice memo 35

Recycle bin 57

Red-eye 41, 62

Reset 79

Resizing 61

Resolution
Photo 37
Video 37

RGB tone
Defining in Playback mode 62
Defining in Shooting mode 52

Rotating 61

S

Samsung Coverter 24

Samsung Master 25
Installing 20
Using 25

Scene mode 28

Self Portrait 45

Service centre 85

Settings 77
Display 78
Language 78
Sound 78

Shooting mode
Auto mode 28
Beauty Shot mode 30
Dual IS mode 29
Movie mode 32
Program mode 31
Scene mode 28

Shutter button 11

Shutter speed 28

Smile Shot 45

Start image 78
User image 65

Status lamp 12

T

Text Viewer mode 74

Timer 39
10 Sec 39
2 Sec 39
Double 39
Motion Timer 39
Off 39

Timer lamp 11

Transferring files
Mac 26
Windows 20

Tripod mount 11

V

Video
Playing 60
Recording 35

Video signal output 80

Viewing files 55
on TV 66
Slide show 59
Listening to music 72
Thumbnails 56

Voice memo
Playing 60
Recording 35

W

While balance 48

Z

Zoom button 12

Zooming 16

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

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