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

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Health and safety information

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

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

**Do not disassemble or attempt to repair your camera.**
This may result in electric shock or damage to the camera.

**Do not use your camera near flammable or explosive gases and liquids.**
This may cause a fire or explosion.

**Do not insert flammable materials into the camera or store these materials near the camera.**
This may cause a fire or electric shock.

**Do not handle your camera with wet hands.**
This may result in electric shock.

**Prevent damage to subjects’ eyesight.**
Do not use the flash in close proximity (closer than 1 m/3 ft) to people or animals. If you use the flash too close to your subject’s eyes, this can cause temporary or permanent eyesight damage.

**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.

**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 covering the camera or charger with blankets or clothes.
The camera may overheat, which may distort the camera or cause a fire.

Do not handle the power supply cord or go near the charger during a thunderstorm.
This may result in electric shock.

If liquid or foreign objects enter your camera, immediately disconnect all power sources, such as the battery or charger, and then contact a Samsung service center.

Comply with any regulations that restrict the use of a camera in a certain area.
• Avoid interference with other electronic devices.
• Turn off the camera when in an aircraft. Your camera can cause interference with aircraft equipment. Follow all airline regulations and turn off your camera when directed by airline personnel.
• Turn off the camera near medical equipment. Your camera can interfere with medical equipment in hospitals or health care facilities. Follow all regulations, posted warnings, and directions from medical personnel.

Avoid interference with pacemakers.
Maintain the distance between this camera and all pacemakers to avoid potential interference, as recommended by the manufacturer and research groups. If you have any reason to suspect that your camera is interfering with a pacemaker or other medical device, turn off the camera immediately and contact the manufacturer of the pacemaker or medical device for guidance.
Health and safety information

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

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.

Use only authentic, manufacturer-recommended, Lithium-ion replacement batteries. Do not damage or heat the battery.
Inauthentic, damaged, or heated batteries may cause a fire or personal injury.

Use only Samsung-approved batteries, chargers, cables and accessories.
- Using unauthorized batteries, chargers, cables or accessories can cause batteries to explode, damage your camera, or cause injury.
- Samsung is not responsible for damage or injuries caused by unapproved batteries, chargers, cables or accessories.

Use the battery only for its intended purpose.
Misusing the battery may cause a fire or electric shock.

Do not touch the flash while it fires.
The flash is very hot when fired and may burn your skin.

When you use the AC charger, turn off the camera before you disconnect the power to the AC charger.
Failing to do so may result in fire or electric shock.

Disconnect the charger from the wall socket when not in use.
Failing to do so may result in fire or electric shock.

Do not use a damaged power supply cord, plug, or loose outlet when you charge batteries.
This may cause a fire or electric shock.

Do not allow the AC charger to come in contact with the +/- terminals on the battery.
This may cause a fire or electric shock.

Do not drop or subject the camera to strong impacts.
Doing so may damage the screen or external or internal components.

Exercise caution when you connect cables or adapters and install batteries and memory cards.
If you force the connectors, improperly connect cables, or improperly install batteries and memory cards, you can damage ports, connectors, and accessories.
Health and safety information

Keep cards with magnetic strips away from the camera case. Information stored on the card may be damaged or erased.

Never use a damaged charger, battery, or memory card. This may result in electric shock or camera malfunction or cause a fire.

Do not place the camera in or near magnetic fields. Doing so may cause the camera to malfunction.

Do not use the camera if the screen is damaged. If the glass or acrylic parts are broken, visit a Samsung Electronics Service Center to have the camera repaired.

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.

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

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

Use your camera in the normal position. Avoid contact with your camera’s internal antenna.

Data transference and your responsibilities

• Data transferred via WLAN could be leaked, so avoid transferring sensitive data in public areas or on open networks.
• The camera manufacturer is not liable for any data transfers that infringe on copyrights, trademarks, intellectual property laws, or public decency ordinances.
Copyright information

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- Trademarks and trade names used in this manual are the property of their respective owners.

Outline of the User Manual

Basic functions 18
Learn about your camera's layout, icons, and basic functions for shooting.

Extended functions 42
Learn how to capture a photo and record a video by selecting a mode.

Shooting options 57
Learn how to set the options in Shooting mode.

Playback/Editing 78
Learn how to play back photos or videos, and edit photos or videos. Also, learn how to connect your camera to your computer or TV.

Wireless network (ST150F/ST151F/ST152F only) 101
Learn to connect to wireless local area networks (WLANs) and use functions.

Settings 121
Refer to options to configure your camera's settings.

Appendixes 127
Get information about error messages, specifications, and maintenance.
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<td>→</td>
<td>The order of options or menus you must select to perform a step; for example: Select Face Detection → Normal (represents Select Face Detection, and then select Normal).</td>
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**Expressions used in this manual**

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

**Subject, background, and composition**
- **Subject**: The main object in 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 determines the exposure. You can alter the exposure by changing the shutter speed, aperture value, or ISO sensitivity. By altering the exposure, your photos will be darker or lighter.

- ▲ Normal exposure
- ▲ Overexposure (too bright)
Special features of your camera

Using the DIRECT LINK button (ST150F/ST151F/ST152F only)

Press the DIRECT LINK button to activate the Wi-Fi function that you have designated.

Setting a DIRECT LINK button option
You can select a Wi-Fi function to launch when you press the DIRECT LINK button.

1. Access Settings.
2. Access the DIRECT LINK button option.
3. Select a Wi-Fi feature from the list.
Special features of your camera

Using AutoShare (ST150F/ST151F/ST152F only)
When you capture a photo with your camera, the photo is saved to the smart phone automatically. The camera connects to a smart phone wirelessly.

1 Install Samsung SMART CAMERA App on the smart phone.
2 Turn on the AutoShare feature.
3 Launch Samsung SMART CAMERA App on the smart phone.
4 Select the camera from the list and connect the smart phone to the camera.
   • If a pop-up message appears on your camera, allow the smart phone to connect to your camera.
5 Capture a photo.
   • The captured photo is saved to the camera, and then transferred to the smart phone.
Special features of your camera

Using MobileLink (ST150F/ST151F/ST152F only)
You can send files easily from your camera to a smart phone. The camera connects wirelessly to smart phones that support the MobileLink feature.

1. Install the Samsung SMART CAMERA App on the smart phone.
2. Access the MobileLink mode.
   • If a pop-up message appears, select an option.
3. Launch the Samsung SMART CAMERA App on the smart phone.
4. Select the camera from the list and connect the smart phone to the camera.
   • If a pop-up message appears on your camera, allow the smart phone to connect to your camera.
5. On the smart phone or camera, select files to transfer from the camera.
6. On the smart phone, touch the copy button or on the camera, select Share.
Special features of your camera

Using Remote Viewfinder (ST150F/ST151F/ST152F only)
You can remotely control your camera from a smart phone. The camera connects to a smart phone wirelessly. Use the smart phone as a remote shutter release with the Remote Viewfinder feature. The captured photo will appear on the smart phone.

1. Install the Samsung SMART CAMERA App on the smart phone.

2. Access the Remote Viewfinder mode.

3. Launch the Samsung SMART CAMERA App on the smart phone.

4. Select the camera from the list and connect the smart phone to the camera.
   - If a pop-up message appears on your camera, allow the smart phone to connect to your camera.

5. Touch and hold ⬆ to focus, and then release it to capture a photo.

6. Touch the thumbnail to view the photo.
**Special features of your camera**

**Shooting samples – Macro**
You can capture close up shots of a subject or small subjects, such as flowers or insects.

1. Select the macro option (🔍).
2. Capture a photo.

⚠️ The example image may differ from the actual photo that you capture.
# Basic troubleshooting

Learn to solve common problems by setting shooting options.

## The subject’s eyes appear red.

Red eye occurs when the subject’s eyes reflect light from the camera flash.
- Set the flash option to `Red-eye` or `Red-eye Fix`. (p. 61)
- If the photo has already been captured, select `Red-eye Fix` in the edit menu. (p. 92)

## Photos have dust spots.

If dust particles are present in the air, you may capture them in photos when you use the flash.
- Turn off the flash or avoid capturing photos in a dusty place.
- Set ISO sensitivity options. (p. 63)

## Photos are blurred.

Blurring can occur if you capture photos in low light conditions or hold the camera incorrectly.
Use the DIS function or half-press [Shutter] to ensure the subject is in focus. (p. 40)

## Photos are blurred when shooting at night.

As the camera tries to let in more light, the shutter speed slows. This can make it difficult to hold the camera steady long enough to capture a clear photo and may result in camera shake.
- Select Night Shot mode. (p. 51)
- Turn on the flash. (p. 61)
- Set ISO sensitivity options. (p. 63)
- Use a tripod to prevent your camera from shaking.

## Subjects come out too dark because of backlighting.

When the light source is behind the subject or when there is a high contrast between light and dark areas, the subject may appear too dark.
- Avoid shooting toward the sun.
- Select `Backlight` in Scene mode. (p. 47)
- Set the flash option to `Fill in`. (p. 61)
- Adjust the exposure. (p. 69)
- Set the Auto Contrast Balance (ACB) option. (p. 70)
- Set the metering option to [Spot] if a subject is in the center of the frame. (p. 70)
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Unpacking

The following items are included in your product box.

- Camera
- AC adapter/USB cable
- Rechargeable battery
- Strap
- Quick Start Guide

Optional accessories

- Camera case
- A/V cable
- Battery charger
- Memory card/Memory card adapter

- The illustrations may differ slightly from the items shipped with your product.
- The items included in the box may differ depending on the model.
- You can purchase optional accessories at a retailer or a Samsung service center. Samsung is not responsible for any problems caused by using unauthorized accessories.
Camera layout
Before you start, familiarize yourself with your camera's parts and their functions.

- **Battery chamber cover**: Insert a memory card and battery
- **Tripod mount**
- **Flash**
- **Internal antenna***: Avoid contact with the internal antenna while using the wireless network. (ST150F/ST151F/ST152F only)
- **Microphone**
- **Power button**
- **Shutter button**
- **Speaker**
- **AF-assist light/Timer lamp**
- **USB and A/V port**: Accepts USB cable and A/V cable
**Camera layout**

### Status lamp
- **Blinking:** When the camera is saving a photo or video, being read by a computer, when the image is out of focus, there is a problem charging the battery (On ST150F/ST151F/ST152F, when the camera is connecting to WLAN or sending a photo)
- **Steady:** When the camera is connected to a computer, charging the battery, or when the image is in focus

### Zoom button
- **In Shooting mode:** Zoom in or out
- **In Playback mode:** Zoom in on part of a photo, view files as thumbnails, or adjust the volume

### Attaching the strap

### Display Buttons
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<td>📷</td>
<td>Access the Home screen. (p. 28)</td>
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<tr>
<td>🔽</td>
<td>Access options or menus.</td>
</tr>
<tr>
<td>☑</td>
<td>Enter Playback mode.</td>
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<tr>
<td>☐</td>
<td>Delete files in Playback mode.</td>
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<td>DISP</td>
<td>Change the display option.</td>
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<tr>
<td>🪳</td>
<td>Change the macro option.</td>
</tr>
<tr>
<td>🌊</td>
<td>Change the flash option.</td>
</tr>
<tr>
<td>⏳</td>
<td>Change the timer option.</td>
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<tr>
<td>OK</td>
<td>Confirm the highlighted option or menu.</td>
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Using the DIRECT LINK button (ST150F/ST151F/ST152F only)
You can turn on the Wi-Fi feature conveniently with [_WIFI].
Press [_WIFI] to activate the Wi-Fi function that you have designated.
Press [_WIFI] again to return to the previous mode.

Setting a DIRECT LINK button option
You can select a Wi-Fi function to launch when you press [_WIFI].

1. On the Home screen, scroll to <Basic>.
2. Select <Basic>.
3. Select General → DIRECT LINK (Wi-Fi Button).
4. Select a Wi-Fi feature. (p. 126)
Inserting the battery and memory card

Learn how to insert the battery and an optional memory card into the camera.

Insert a memory card with the gold-colored contacts facing up.

Insert the battery with the Samsung logo facing up.

Removing the battery and memory card

Slide the lock up to release the battery.

Push the card gently until it disengages from the camera, and then pull it out of the slot.

You can use the internal memory for temporary storage if a memory card is not inserted.
Charging the battery and turning on your camera

Charging the battery
Before you use the camera for the first time, you must charge the battery. Plug the small end of the USB cable into your camera, and then plug the other end of the USB cable into the AC adapter.

Turning on your camera
Press [ACC] to turn your camera on or off.
• The initial setup screen appears when you turn on the camera for the first time. (p. 25)

Turning on your camera in Playback mode
Press [ ]. The camera turns on and immediately accesses Playback mode.

Status lamp
• Red light on: Charging
• Red light off: Fully charged
• Red light blinking: Error

Use only the AC adapter and USB cable supplied with your camera. If you use another AC adapter (such as SAC-48), the camera battery may not charge or work properly.
Performing the initial setup

When the initial setup screen appears, follow the steps below to configure the camera's basic settings. The default language is preset for the country or region where the camera is sold. You can change the language as desired by selecting Language.

1. Press [MENU] to select Time Zone, and then press [OK] or [OK].
2. Press [DISP/MENU] to select Home, and then press [OK].
   - When you travel to another country, select Visit, and then select a new time zone.
3. Press [DISP/MENU] to select a time zone, and then press [OK] → [MENU].
4. Press [MENU] to select Date/Time Set, and then press [OK] or [OK].

   ![Date/Time Set Screen]
   
   **Date/Time Set**

   - Year
   - Month
   - Day
   - Hour
   - Min
   - DST

   **2013 01 01 12:00 PM**

   [OK] Set

   [CANCEL]

   [OK] Set

   [MENU]

5. Press [DISP/MENU] to select an item.
6. Press [DISP/MENU] to set the date, time, and daylight-saving time, and then press [OK].
Performing the initial setup

7 Press [좌] to select **Date Type**, and then press [↺] or [설정].

8 Press [DISP/좌] to select a date type, and then press [설정].

9 Press [좌] to select **Time Type**, and then press [↺] or [설정].

10 Press [DISP/좌] to select a time type, and then press [설정].

11 Press [MENU] to finish the initial setup.

The screen may differ depending on the language selected.
Learning icons

The camera displays icons for the mode and options you set. The icons flash yellow for a while if you change options.

1. **Shooting options (left)**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📷</td>
<td>Shooting mode</td>
</tr>
<tr>
<td>🌞</td>
<td>Exposure value adjusted</td>
</tr>
<tr>
<td>📡</td>
<td>ISO sensitivity</td>
</tr>
<tr>
<td>☁</td>
<td>White balance</td>
</tr>
<tr>
<td>🌟</td>
<td>Face detection</td>
</tr>
<tr>
<td>⬜️</td>
<td>Focus Area</td>
</tr>
<tr>
<td>🎥</td>
<td>Face tone</td>
</tr>
</tbody>
</table>

2. **Shooting options (right)**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔍</td>
<td>Intelli zoom on</td>
</tr>
<tr>
<td>16M</td>
<td>Photo resolution</td>
</tr>
<tr>
<td>HD</td>
<td>Video resolution</td>
</tr>
<tr>
<td>📈</td>
<td>Metering</td>
</tr>
<tr>
<td>🌓</td>
<td>Frame rate (per second)</td>
</tr>
<tr>
<td>🔍</td>
<td>Flash</td>
</tr>
<tr>
<td>🔊</td>
<td>Sound Alive on</td>
</tr>
<tr>
<td>🔅</td>
<td>Digital Image Stabilization (DIS)</td>
</tr>
<tr>
<td>🔰</td>
<td>Focus</td>
</tr>
<tr>
<td>🌈</td>
<td>Image adjustment (sharpness, contrast, and saturation)</td>
</tr>
<tr>
<td>🕒</td>
<td>Timer</td>
</tr>
</tbody>
</table>

3. **Shooting information**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013/01/01</td>
<td>Current date</td>
</tr>
<tr>
<td>10:00AM</td>
<td>Current time</td>
</tr>
<tr>
<td>🗝️ 1</td>
<td>Available number of photos</td>
</tr>
<tr>
<td>📡 Memory card inserted</td>
<td></td>
</tr>
<tr>
<td>• 📡 Fully charged</td>
<td></td>
</tr>
<tr>
<td>• 📡 Partially charged</td>
<td></td>
</tr>
<tr>
<td>• 📡 Empty (Recharge)</td>
<td></td>
</tr>
<tr>
<td>• 📡 Charging (Connected with the charger)</td>
<td></td>
</tr>
<tr>
<td>F 2,5</td>
<td>Aperture value</td>
</tr>
<tr>
<td>1/30s</td>
<td>Shutter speed</td>
</tr>
<tr>
<td>00:10</td>
<td>Available recording time</td>
</tr>
<tr>
<td>🔎</td>
<td>Auto focus frame</td>
</tr>
<tr>
<td>🔵</td>
<td>Camera shake</td>
</tr>
<tr>
<td>🔎</td>
<td>Zoom indicator</td>
</tr>
<tr>
<td>3M</td>
<td>Photo resolution when the Intelli zoom is on</td>
</tr>
<tr>
<td>X10.0</td>
<td>Zoom ratio</td>
</tr>
</tbody>
</table>
Using the Home screen

You can select a shooting mode or access the settings menu by selecting the icons on the Home screen.

Accessing the Home screen

In Shooting or Playback mode, press [ ].
Press [ ] again to return to the previous mode.

Using the Home screen

You can select a shooting mode or access the settings menu by selecting the icons on the Home screen.

Current Home screen

- Rotate [Zoom] to the left or right to switch to another Home screen.
- Press [DISP] to scroll to the Home screen name, and then press [ / / ] to switch to another Home screen.
- Press [ / / ] repeatedly to switch to another Home screen.

Mode icons

- Press [DISP / / ] to scroll to a desired mode, and then press [OK] to access the mode.
## Icons on the Home screen

### <Basic>

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Smart Auto" /></td>
<td><strong>Smart Auto</strong>: Capture a photo with a scene mode selected automatically by the camera. (p. 43)</td>
</tr>
<tr>
<td><img src="image" alt="Program" /></td>
<td><strong>Program</strong>: Capture a photo with settings you have adjusted manually. (p. 44)</td>
</tr>
<tr>
<td><img src="image" alt="Smart Movie" /></td>
<td><strong>Smart Movie</strong>: Record a video with a scene mode selected automatically by the camera. (p. 45)</td>
</tr>
<tr>
<td><img src="image" alt="Movie" /></td>
<td><strong>Movie</strong>: Record a video. (p. 46)</td>
</tr>
<tr>
<td><img src="image" alt="Scene" /></td>
<td><strong>Scene</strong>: Capture a photo with options that are preset for a specific scene. (p. 47)</td>
</tr>
<tr>
<td><img src="image" alt="Live Panorama" /></td>
<td><strong>Live Panorama</strong>: Capture and combine a series of photos to create a panoramic image. (p. 48)</td>
</tr>
<tr>
<td><img src="image" alt="Settings" /></td>
<td><strong>Settings</strong>: Adjust settings to match your preferences. (p. 122)</td>
</tr>
</tbody>
</table>

### <Wi-Fi> (ST150F/ST151F/ST152F only)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="MobileLink" /></td>
<td><strong>MobileLink</strong>: Send photos or videos to a smart phone. (p. 107)</td>
</tr>
<tr>
<td><img src="image" alt="Remote Viewfinder" /></td>
<td><strong>Remote Viewfinder</strong>: Use a smart phone as a remote shutter release and see a preview on your smart phone of an image from your camera. (p. 108)</td>
</tr>
<tr>
<td><img src="image" alt="Auto Backup" /></td>
<td><strong>Auto Backup</strong>: Send photos or videos that you captured with the camera to a PC wirelessly. (p. 110)</td>
</tr>
<tr>
<td><img src="image" alt="Email" /></td>
<td><strong>Email</strong>: Send photos or videos stored on the camera via email. (p. 112)</td>
</tr>
<tr>
<td><img src="image" alt="SNS &amp; Cloud" /></td>
<td><strong>SNS &amp; Cloud</strong>: Upload photos or videos to file sharing websites. (p. 115)</td>
</tr>
<tr>
<td><img src="image" alt="AllShare Play" /></td>
<td><strong>AllShare Play</strong>: Upload photos to AllShare Play online storage or view files on devices that support AllShare Play. (p. 117)</td>
</tr>
</tbody>
</table>
### Using the Home screen

#### <Scene>

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Beauty Shot" /></td>
<td><strong>Beauty Shot</strong>: Capture a portrait with options to hide facial imperfections. (p. 50)</td>
</tr>
<tr>
<td><img src="image" alt="Night Shot" /></td>
<td><strong>Night Shot</strong>: Capture a night scene by adjusting shutter speed. (p. 51)</td>
</tr>
<tr>
<td><img src="image" alt="Close-up Shot" /></td>
<td><strong>Close-up Shot</strong>: Capture close-up photos of subjects. (p. 51)</td>
</tr>
<tr>
<td><img src="image" alt="Magic Frame" /></td>
<td><strong>Magic Frame</strong>: Capture a photo with various frame effects. (p. 52)</td>
</tr>
<tr>
<td><img src="image" alt="Photo Filter" /></td>
<td><strong>Photo Filter</strong>: Capture a photo with various filter effects. (p. 53)</td>
</tr>
<tr>
<td><img src="image" alt="Movie Filter" /></td>
<td><strong>Movie Filter</strong>: Record a video with various filter effects. (p. 54)</td>
</tr>
<tr>
<td><img src="image" alt="Split Shot" /></td>
<td><strong>Split Shot</strong>: Capture several photos and arrange them with preset layouts. (p. 55)</td>
</tr>
<tr>
<td><img src="image" alt="Motion Photo" /></td>
<td><strong>Motion Photo</strong>: Capture and combine a series of photos, and then select an area to be animated to create a GIF animation. (p. 56)</td>
</tr>
</tbody>
</table>

#### <Album>

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Album" /></td>
<td><strong>Album</strong>: View files as thumbnails. (p. 80)</td>
</tr>
<tr>
<td><img src="image" alt="Photo Editor" /></td>
<td><strong>Photo Editor</strong>: Edit photos with various effects. (p. 89)</td>
</tr>
</tbody>
</table>
Setting Wallpaper
Set wallpaper for the Home screen with the desired image.

1. On the Home screen, scroll to <Basic>.
2. Select *.
3. Select Display → Wallpapers.
4. Select an option.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wallpaper Gallery</td>
<td>Select the desired wallpaper from the default gallery.</td>
</tr>
<tr>
<td>Album</td>
<td>Set a photo you have captured as a wallpaper.</td>
</tr>
</tbody>
</table>

5. Scroll to the desired wallpaper, and then press [OK].
   - If you select a photo you have captured, you can set a specified area as wallpaper. Rotate [Zoom] to the left or right to reduce or enlarge the area. Press [DISP/Zoom/SET/F] to move the area.

   - If you select a photo you have captured, press [OK], and then select Yes.

You can also set the photo you are viewing as wallpaper by pressing [MENU], and then selecting Set Wallpaper in Playback mode.
Selecting options or menus

To select an option or a menu, press [MENU], and then press [DISP/\$/\$] or [OK].

1. In Shooting mode, press [MENU].
2. Select an option or a menu.
   • To move up or down, press [DISP] or [\$].
   • To move left or right, press [\$] or [\$].
3. Press [OK] to confirm the highlighted option or menu.

Going back to the previous menu

Press [MENU] to go back to the previous menu.

Half-press [Shutter] to return to Shooting mode.
Selecting options or menus

For example, to select a White Balance option in Program mode:

1. On the Home screen, scroll to <Basic>.
2. Select ☰.
3. Press [MENU].

4. Press [DISP/♀] to select White Balance, and then press [ivre] or [OK].

5. Press [.dtd/♀] to select a White Balance option.


AutoShare is available in ST150F/ST151F/ST152F only.
Setting the display and sound

Learn how to change the basic display information and sound settings.

Setting the display type

You can select a display type for the Shooting or Playback mode. Each type displays different shooting or playback information. See the table below.

Press [DISP] repeatedly to change the display type.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Display type</th>
</tr>
</thead>
</table>
| Shooting| • Hide all information about shooting options.  
           • Show all information about shooting options. |
| Playback| • Hide all information about the current file.  
             • Hide all information about the current file except basic information.  
             • Show all information about the current file. |

Setting the option display view

You can hide or show the option display appearing in some modes.


• Hide the option display.
• Show the option display.

▲ For example, in Scene mode
Setting the sound
Turn on or off the sound your camera emits when you perform functions.

1. On the Home screen, scroll to `<Basic>`.
2. Select 🕒.
3. Select **Sound → Beep Sound**.
4. Select an option.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>The camera does not emit any sounds.</td>
</tr>
<tr>
<td>On</td>
<td>The camera emits sounds.</td>
</tr>
</tbody>
</table>
Capturing photos
Learn how to capture photos easily and quickly in Smart Auto mode.

1. On the Home screen, scroll to <Basic>.
2. Select 📸
3. Align your subject in the frame.

   • A green frame means the subject is in focus.
   • A red frame means the subject is out of focus.

5. Press [Shutter] to capture a photo.
6. Press [➡️] to view the captured photo.
   • To delete the photo, press [>Delete], and then select Yes.
7. Press [➡️] to return to Shooting mode.

See page 40 for tips to get clearer photos.
**Zooming**

You can capture close-up photos by adjusting the zoom.

When you rotate the zoom button, the zoom ratio shown on the screen may change inconsistently.

**Digital zoom**

The Digital zoom is supported by default in Shooting mode. If you zoom in on a subject in Shooting mode and the zoom indicator is in the digital range, your camera is using the Digital zoom. By using both the 5X Optical zoom and 5X Digital zoom, you can zoom in up to 25 times.

- Digital zoom is not available with the Tracking AF option.
- If you capture a photo with the Digital zoom, the photo quality may be lower than normal.
Capturing photos

### Intelli zoom
If the zoom indicator is in the Intelli range, your camera is using the Intelli zoom. Photo resolution varies according to the zoom rate if you use the Intelli zoom. By using both the Optical zoom and Intelli zoom, you can zoom in up to 10 times.

- **Optical range**
- **Intelli range**

Photo resolution when the Intelli zoom is on

#### Setting Intelli zoom
1. In Shooting mode, press [MENU].
2. Select **Intelli Zoom**.
3. Select an option.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌ Off</td>
<td>Off: The Intelli zoom is deactivated.</td>
</tr>
<tr>
<td>✅ On</td>
<td>On: The Intelli zoom is activated.</td>
</tr>
</tbody>
</table>

- Intelli zoom is not available with the Text option in SCN mode and the Tracking AF option.
- The Intelli zoom helps you capture a photo with less quality deterioration than the Digital zoom. However, the photo quality may be lower than when you use the Optical zoom.
- The Intelli zoom is available only when you set a 4:3 resolution ratio. If you set another resolution ratio with Intelli zoom on, the Intelli zoom will be turned off automatically.
- The Intelli zoom is always on in Smart Auto mode.
Reducing camera shake (DIS)
Reduce camera shake digitally in Shooting mode.

1. In Shooting mode, press [MENU].
2. Select DIS.
3. Select an option.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📸</td>
<td>Off: DIS is deactivated.</td>
</tr>
<tr>
<td>📸</td>
<td>On: DIS is activated.</td>
</tr>
</tbody>
</table>

- DIS may not function properly when:
  - you move your camera to follow a moving subject
  - you use the Digital zoom
  - there is too much camera shake
  - the shutter speed is slow (for example, when you capture night scenes)
  - the battery is low
  - you capture a close-up shot
- If the camera is hit or dropped, the display will be blurry. If this occurs, turn off the camera, and then turn it on again.
- DIS is available in Program mode only.
**Tips for getting a clearer photo**

**Holding your camera correctly**
Ensure nothing is blocking the lens, flash, or microphone.

**Half-pressing the shutter button**
Half-press [Shutter] and adjust the focus. The camera adjusts the focus and exposure automatically.

The camera sets the aperture value and shutter speed automatically.

**Focus frame**
- Press [Shutter] to capture the photo if the focus frame appears in green.
- Change the composition and half-press [Shutter] again if the focus frame appears in red.

**Reducing camera shake**
Set the Digital Image Stabilization option to reduce camera shake digitally. (p. 39)

**When 🏛️ is displayed**
When you shoot 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 steady long enough to capture a clear photo.
- Use a tripod or set the flash option to Fill in. (p. 61)
- Set ISO sensitivity options. (p. 63)
Preventing your subject from being out of focus

It may be difficult to get your subject in focus when:
- there is little contrast between the subject and background (for example, when your subject is wearing clothing that is similar in color to the background)
- the light source behind the subject is too bright
- the subject is shiny or reflective
- the subject includes horizontal patterns, such as blinds
- the subject is not positioned in the center of the frame

• When you capture photos in low light
  Turn on the flash. (p. 61)

• When subjects are moving rapidly
  Use the Continuous or Motion Capture function. (p. 73)

Using the focus lock
Half-press [Shutter] to focus. When the subject is in focus, you can reposition the frame to change the composition. When you are ready, press [Shutter] to capture your photo.
Extended functions
Learn how to capture a photo and record a video by selecting a mode.

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Using the Smart Auto mode ............................. 43
Using the Program mode ................................. 44
Using the Smart Movie mode ............................ 45
Using the Movie mode ..................................... 46
Using the Scene mode ..................................... 47
Using the Live Panorama mode ......................... 48

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Using the Beauty Shot mode ............................. 50
Using the Night Shot mode ............................... 51
Using the Close-up Shot mode ......................... 51
Using the Magic Frame mode ............................ 52
Using the Photo Filter mode ............................. 53
Using the Movie Filter mode .............................. 54
Using the Split Shot mode ............................... 55
Using the Motion Photo mode ......................... 56
Using Basic modes

Capture photos or record videos using basic modes. You can also use the Scene mode and the Live Panorama mode.

Using the Smart Auto mode

In Smart Auto mode, your camera automatically chooses the appropriate camera settings based on the type of scene it detects. The Smart Auto mode is helpful if you are not familiar with the camera settings for various scenes.

1. On the Home screen, scroll to <Basic>.
2. Select <Basic>.
3. Align your subject in the frame.
   • The camera automatically selects a scene. An appropriate scene icon appears at the top left of the screen. The icons are listed below.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="landscape.png" alt="Icon" /></td>
<td>Landscapes</td>
</tr>
<tr>
<td><img src="bright-white.png" alt="Icon" /></td>
<td>Scenes with bright white backgrounds</td>
</tr>
<tr>
<td><img src="night.png" alt="Icon" /></td>
<td>Landscapes at night</td>
</tr>
<tr>
<td><img src="night-portrait.png" alt="Icon" /></td>
<td>Portraits at night</td>
</tr>
<tr>
<td><img src="backlighting.png" alt="Icon" /></td>
<td>Landscapes with backlighting</td>
</tr>
<tr>
<td><img src="portrait-backlighting.png" alt="Icon" /></td>
<td>Portraits with backlighting</td>
</tr>
<tr>
<td><img src="portrait.png" alt="Icon" /></td>
<td>Portraits</td>
</tr>
<tr>
<td><img src="close-up.png" alt="Icon" /></td>
<td>Close-up photos of objects</td>
</tr>
<tr>
<td><img src="close-up-text.png" alt="Icon" /></td>
<td>Close-up photos of text</td>
</tr>
<tr>
<td><img src="sunset.png" alt="Icon" /></td>
<td>Sunsets</td>
</tr>
<tr>
<td><img src="indoors-dark.png" alt="Icon" /></td>
<td>Indoors, dark</td>
</tr>
<tr>
<td><img src="partially-lit.png" alt="Icon" /></td>
<td>Partially lit</td>
</tr>
<tr>
<td><img src="close-up-spot.png" alt="Icon" /></td>
<td>Close-up with spot lighting</td>
</tr>
<tr>
<td><img src="portrait-spot.png" alt="Icon" /></td>
<td>Portraits with spot lighting</td>
</tr>
<tr>
<td><img src="blue-skies.png" alt="Icon" /></td>
<td>Blue skies</td>
</tr>
<tr>
<td><img src="forested-areas.png" alt="Icon" /></td>
<td>Forested areas</td>
</tr>
</tbody>
</table>
Using Basic modes

Using the Program mode

In Program mode, you can set most options, except the shutter speed and aperture value, which the camera sets automatically.

1. On the Home screen, scroll to <Basic>.
2. Select .
3. Set the desired options.
   - For a list of options, refer to "Shooting options". (p. 57)
4. Align your subject in the frame, and then half-press [Shutter] to focus.
5. Press [Shutter] to capture the photo.

Extended functions 44
Using the Smart Movie mode

In Smart Movie mode, your camera automatically chooses the appropriate camera settings based on the scene it has detected. This mode is available only when you insert a memory card into the camera.

1. On the Home screen, scroll to <Basic>.
2. Select <Basic>.
3. Align your subject in the frame.
   • The camera automatically selects a scene. An appropriate scene icon will appear at the top left of the screen.
   • If the camera does not recognize an appropriate scene mode, it uses the default settings for Smart Movie mode.
   • The camera may not select the correct scene depending on the shooting conditions, such as camera shake, lighting, and distance to the subject.

4. Press [Shutter] to start recording.
5. Press [Shutter] again to stop recording.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🏖️</td>
<td>Landscapes</td>
</tr>
<tr>
<td>🌅</td>
<td>Sunsets</td>
</tr>
<tr>
<td>🌅</td>
<td>Blue skies</td>
</tr>
<tr>
<td>🌲</td>
<td>Forested areas</td>
</tr>
</tbody>
</table>

Extended functions 45
Using the Movie mode

In Movie mode, you can customize settings to record HD videos (1280X720) of up to 20 minutes in length. The camera saves recorded videos as MP4 (H.264) files. This mode is available only when you insert a memory card into the camera.

1. On the Home screen, scroll to <Basic>.
2. Select Movies.
3. Set desired options.
   - For a list of options, refer to “Shooting options”. (p. 57)
4. Press [Shutter] to start recording.
5. Press [Shutter] again to stop recording.

- H.264 (MPEG-4 part10/AVC) is a high-compression video format established by the international standards organizations ISO-IEC and ITU-T.
- Some memory cards may not support high definition recording. If your card does not, set a lower resolution.
- Memory cards with slow writing speeds will not support high-resolution videos. To record high-resolution videos, use memory cards with faster write speeds.
- If you use the zoom function when recording a video, the camera may record the noise of the zoom operating. To decrease zoom noise, use the Sound Alive function. (p. 75)
Using Basic modes

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

- Press [OK] to pause while recording.
- Press [OK] to resume.

**Using the Scene mode**
In Scene mode, you can capture a photo with options that are preset for a specific scene.

1. On the Home screen, scroll to <Basic>.
2. Select 📸.
3. Select a scene.
Using Basic modes

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape</td>
<td>Capture still-life scenes and landscapes.</td>
</tr>
<tr>
<td>Sunset</td>
<td>Capture scenes at sunset, with natural-looking reds and yellows.</td>
</tr>
<tr>
<td>Dawn</td>
<td>Capture scenes at sunrise.</td>
</tr>
<tr>
<td>Backlight</td>
<td>Capture backlit subjects.</td>
</tr>
<tr>
<td>Beach &amp; Snow</td>
<td>Reduce underexposure of subjects caused by sunlight reflected from sand or snow.</td>
</tr>
<tr>
<td>Text</td>
<td>Clearly capture text from printed or electronic documents.</td>
</tr>
</tbody>
</table>

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

5 Press [Shutter] to capture the photo.

Using the Live Panorama mode

In Live Panorama mode, you can capture a wide panoramic scene in a single photo. Capture and combine a series of photos to create a panoramic image.

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

2 Select 📸.

3 Align your subject in the frame, and then half-press [Shutter] to focus.
   • Align the camera with the far left or the far right, or very top or bottom, of the scene you want to capture.

4 Press and hold [Shutter] to start shooting.
5 With [Shutter] pressed, slowly move the camera in the direction that will let it capture the rest of the panorama.
   • Arrows toward the direction of motion are displayed, and the entire shooting image is displayed in the preview box.
   • When the viewfinder is aligned with the next scene, the camera captures the next photo automatically.

6 When you are finished, release [Shutter].
   • When you have captured all the necessary shots, the camera combines them into one panoramic photo.

   • For best results when capturing panoramic photos, avoid the following:
     - moving the camera too quickly or too slowly
     - moving the camera too little to capture the next image
     - moving the camera at irregular speeds
     - shaking the camera
     - shooting in dark places
     - capturing moving subjects nearby
     - shooting conditions where the brightness or color of light is changing

   • Photos taken are automatically saved, and shooting is stopped under the following conditions:
     - if you change the shooting direction while shooting
     - if you move the camera too rapidly
     - if you don't move the camera

   • Selecting Live Panorama mode will disable the digital and optical zoom functions. If you select Live Panorama mode while the lens is zoomed in, the camera automatically zooms out to the default position.
   • Some shooting options are not available.
   • The camera may stop shooting due to the shooting composition or movement within the scene.
   • Your camera may not capture the last scene in its entirety if you stop moving the camera exactly where you want the scene to end. To capture the entire scene, move your camera slightly beyond the point where you want the scene to end.
Using Scene modes
Capture a photo or record a video by selecting appropriate modes for various scenes or effects.

Using the Beauty Shot mode
In Beauty Shot mode, you can capture a portrait with options to hide facial imperfections.

1. On the Home screen, scroll to <Scene>.
2. Select 🎃.
   • For example, increase the face retouch setting to hide more imperfections.

4. Press [MENU].
5. Select Face Tone.

   • For example, increase the face tone setting to make skin appear lighter.

7. Press [OK] to save the setting.
8. Align your subject in the frame, and then half-press [Shutter] to focus.
9. Press [Shutter] to capture the photo.
Using the Night Shot mode
In Night Shot mode, you can use a slow shutter speed to extend the time the shutter stays open. Increase the aperture value to prevent overexposure.

1. On the Home screen, scroll to <Scene>.
2. Select 
3. Press [▽/▽] to adjust the shutter speed.

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

Use a tripod to prevent blurry photos.

Using the Close-up Shot mode
In Close-up Shot mode, you can capture close-up photos of subjects, such as flowers or insects.

1. On the Home screen, scroll to <Scene>.
2. Select 
3. Align your subject in the frame, and then half-press [Shutter] to focus.
4. Press [Shutter] to capture the photo.
Using Scene modes

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

1. On the Home screen, scroll to <Scene>.
2. Select  
3. Select a desired frame.
4. Align your subject in the frame, and then half-press [Shutter] to focus.
5. Press [Shutter] to capture the photo.

The resolution is automatically set to 2M.
Using Scene modes

Using the Photo Filter mode
Apply various filter effects to your photos to create unique images.

1. On the Home screen, scroll to <Scene>.
2. Select 📷.
3. Select an effect.

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

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

5 Press [Shutter] to capture a photo.

- Depending on the option you select, the resolution may change to 5M or smaller automatically.
- To apply filter effects to saved photos, press [MENU], and then select Open Image → a desired image.

Using the Movie Filter mode

Apply various filter effects to your videos to create unique images.
This mode is available only when you insert a memory card into the camera.

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

2 Select 📽️.

3 Select an effect.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miniature</td>
<td>Apply a tilt-shift effect to make the subject appear in miniature. (The top and bottom of the photo will be blurred.)</td>
</tr>
<tr>
<td>Vignetting</td>
<td>Apply the retro-looking colors, high contrast, and strong vignette effect of Lomo cameras.</td>
</tr>
</tbody>
</table>

4 Press [Shutter] to start recording.

5 Press [Shutter] again to stop recording.

- If you select Miniature, playback speed will increase.
- If you select Miniature, you cannot record sound in the video.
- Depending on the option you select, the recording resolution may change to 5M or smaller automatically.
Using the Split Shot mode
In Split Shot mode, you can capture several photos and arrange them with preset layouts.

1. On the Home screen, scroll to <Scene>.
2. Select 
3. Select a split style.
   - To adjust the sharpness of the dividing line, press [MENU], and then select Line Blur → a desired value.
   - To apply a Smart Filter effect to part of the shot, press [MENU], and then select Smart Filter → a desired option. You can apply different Smart Filter effects to each part of the shot.
4. Align your subject in the frame, and then half-press [Shutter] to focus.
5. Press [Shutter] to capture a photo.
   - Repeat steps 4 and 5 to capture the rest of the photos.
   - To recapture a photo, press [ 

The resolution is automatically set to 3M or smaller.
Using the Motion Photo mode

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

1. On the Home screen, scroll to <Scene>
2. Select 📸.
3. Align your subject in the frame, and then half-press [Shutter] to focus.
4. Press [Shutter] to capture the photo.
   • The camera captures multiple photos while the status lamp is blinking.
5. Press [DISP/[]/4/7] to scroll to an area to be animated.
   • To recapture a photo, press [MENU].
6. Rotate [Zoom] to the left or right to reduce or enlarge the area.
7. Press [OK] to save the photo.
   • The resolution is automatically set to VGiR.
   • Use a tripod to prevent your camera from shaking.
   • It may take longer to save files.
# Shooting options

Learn how to set the options in Shooting mode.

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<th>Page</th>
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</table>
Selecting a resolution and quality

Learn how to change the image resolution and quality settings.

Selecting a resolution

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

Setting the photo resolution

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16M</td>
<td>4608 X 3456: Print on A1 paper.</td>
</tr>
<tr>
<td>14MP</td>
<td>4608 X 3072: Print on A1 paper in wide ratio (3:2).</td>
</tr>
<tr>
<td>12MW</td>
<td>4608 X 2592: Print on A1 paper in panorama ratio (16:9) or play back on an HDTV.</td>
</tr>
<tr>
<td>10M</td>
<td>3648 X 2736: Print on A2 paper.</td>
</tr>
<tr>
<td>5M</td>
<td>2592 X 1944: Print on A4 paper.</td>
</tr>
<tr>
<td>3M</td>
<td>1984 X 1488: Print on A5 paper.</td>
</tr>
<tr>
<td>2M</td>
<td>1920 X 1080: Print on A5 paper in panorama ratio (16:9) or play back on an HDTV.</td>
</tr>
<tr>
<td>1M</td>
<td>1024 X 768: Attach to an email.</td>
</tr>
</tbody>
</table>

Setting the video resolution

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD</td>
<td>1280 X 720: HD files to play back on an HDTV.</td>
</tr>
<tr>
<td>VGA</td>
<td>640 X 480: SD files to play back on an analog TV.</td>
</tr>
<tr>
<td>QVGA</td>
<td>320 X 240: Post on a web page.</td>
</tr>
<tr>
<td></td>
<td>240 For Sharing (ST150F/ST151F/ST152F only): Post on a website using the wireless network (30 seconds maximum).</td>
</tr>
</tbody>
</table>

Selecting a resolution and quality

Learn how to change the image resolution and quality settings.
Selecting an image quality
Set a photo quality settings. Higher image quality settings will result in larger file sizes. The camera compresses and saves the photos you capture in the JPEG format.

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Super Fine icon" /></td>
<td><strong>Super Fine</strong>: Capture photos in super high quality.</td>
</tr>
<tr>
<td><img src="image" alt="Fine icon" /></td>
<td><strong>Fine</strong>: Capture photos in high quality.</td>
</tr>
<tr>
<td><img src="image" alt="Normal icon" /></td>
<td><strong>Normal</strong>: Capture photos in normal quality.</td>
</tr>
</tbody>
</table>
Using the timer

Learn how to set the timer to delay shooting.

1 In Shooting mode, press [ ].

2 Select an option.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Off" /></td>
<td>Off: The timer is not active.</td>
</tr>
<tr>
<td><img src="image" alt="10 Sec" /></td>
<td>10 Sec: Capture a photo after a 10-second delay.</td>
</tr>
<tr>
<td><img src="image" alt="2 Sec" /></td>
<td>2 Sec: Capture a photo after a 2-second delay.</td>
</tr>
<tr>
<td><img src="image" alt="Double" /></td>
<td>Double: Capture one photo after a 10-second delay and another photo after a 2-second delay.</td>
</tr>
</tbody>
</table>

Available options may differ depending on the shooting conditions.

3 Press [Shutter] to start the timer.
   - The AF-assist light/timer lamp blinks. The camera will automatically capture a photo after the specified time has elapsed.
   
   - Press [Shutter] or [ ] to cancel the timer.
   - Depending on the Face Detection options you selected, the timer function may not be available.
   - Timer options are not available if you set burst options.
   - In some modes, you can also set the timer option by pressing [MENU], and then selecting Timer.
Shooting in the dark

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

Preventing red-eye

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

Before correction

After correction

Using the flash

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

1 In Shooting mode, press [ ].

2 Select an option.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off:</td>
<td></td>
</tr>
<tr>
<td>• The flash will not fire.</td>
<td></td>
</tr>
<tr>
<td>• The camera will display the shake warning ( ) when you are shooting in low light.</td>
<td></td>
</tr>
</tbody>
</table>

| Auto: |
| The camera will select a proper flash setting for the scene it detects in Smart Auto mode. |
### Shooting in the dark

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

Available options may differ depending on the shooting conditions.

- Flash options are not available if you set burst options or select **Blink Detection**.  
- Make sure that your subjects are within the recommended distance from the flash. (p. 142)  
- If light from the flash is reflected or there is a substantial amount of dust in the air, tiny spots may appear in your photo.  
- In some modes, you can also set the flash option by pressing [MENU], and then selecting **Flash**.
Adjusting the ISO sensitivity
The ISO sensitivity is the measure of a film's sensitivity to light as defined by the International Organization for Standardization (ISO). The higher ISO sensitivity you select, the more sensitive to light your camera becomes. Use a higher ISO sensitivity to capture better photos and reduce camera shake when not using the flash.

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

Higher ISO sensitivities may result in more image noise.
Changing the camera’s focus
Learn how to adjust the camera’s focus to suit the subject and the shooting conditions.

Using macro
Use macro to capture close-up photos of subjects, such as flowers or insects. (Refer to "Changing the focus option").

![Image of a person taking a close-up photo]

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

Changing the focus option
You can get clearer photos by selecting an appropriate focus option according to the distance between the camera and subjects.

1. In Shooting mode, press [ ].

![Image of a camera interface with focus options]

- Normal (AF)
- Macro
### Adjusting the focus area

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

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="icon" alt="Normal AF" /></td>
<td><strong>Normal (AF):</strong> Focus on a subject farther than 31 in. (80 cm) away. Farther than 98 in. (250 cm) away when you use the zoom.</td>
</tr>
<tr>
<td><img src="icon" alt="Macro" /></td>
<td><strong>Macro:</strong> Focus on a subject that is 2-31 in. (5-80 cm) from the camera. 39-98 in. (100–250 cm) cm when you use the zoom.</td>
</tr>
</tbody>
</table>
| ![Auto Macro](icon) | **Auto Macro:**
  - Focus on a subject farther than 2 in. (5 cm) away. Farther than 39 in. (100 cm) away when you use the zoom.
  - Auto Macro is set automatically in some modes. You cannot set it manually. |

Available shooting options may differ depending on the shooting conditions.

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

Available shooting options may differ depending on the shooting conditions.
Changing the camera’s focus

**Using tracking auto focus**

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

1. In Shooting mode, press [MENU].
2. Select **Focus Area → Tracking AF**.
3. Focus on the subject you want to track, and then press [OK].
   - A focus frame appears on the subject and follows the subject as you move the camera.
   - The white frame means that your camera is tracking the subject.
   - When you half-press [Shutter], the green frame means that your subject is in focus.
   - The red frame means that your camera failed to focus.
4. Press [Shutter] to capture the photo.

- If you do not select a focus area, the focus frame will appear in the center of the screen.
- Tracking a subject may fail when:
  - the subject is too small
  - the subject moves excessively
  - the subject is backlit or you are shooting in a dark place
  - colors or patterns on the subject and the background are the same
  - the subject includes horizontal patterns, such as blinds
  - the camera shakes excessively
- When tracking fails, the feature will be reset.
- If the camera fails to track the subject, you must reselect the subject to track.
- If the camera fails to focus, the focus frame will change to red and the focus will be reset.
- If you use this function, you cannot set Face Detection options, Timer options, Burst options, and Intelli zoom.
Using Face Detection

If you use Face Detection options, your camera can automatically detect a human face. When you focus on a human face, the camera adjusts the exposure automatically. Use **Blink Detection** to detect closed eyes or **Smile Shot** to capture a smiling face.

**Detecting faces**

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

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

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

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

**Capturing a smile shot**

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

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

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

- When your subject smiles broadly, your camera can detect the smile more easily.
Detecting eye blinking
If your camera detects closed eyes, it will automatically capture 2 photos in succession.

1 In Shooting mode, press [MENU].

2 Select Face Detection → Blink Detection.

Tips for detecting faces
- When your camera detects a face, it tracks the detected face automatically.
- Face Detection may not be effective when:
  - the subject is far from the camera (The focus frame will appear orange for Smile Shot and Blink Detection.)
  - it is too bright or too dark
  - the subject is not facing the camera
  - the subject is wearing sunglasses or a mask
  - the subject’s facial expression changes drastically
  - the subject is backlit or the lighting conditions are unstable
- When you set Face Detection options, the AF area is automatically set to Multi AF.
- Depending on the Face Detection options you selected, some shooting options may not be available.
- Depending on the shooting options you selected, Face Detection options may not be available.
Adjusting brightness and color

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

**Adjusting the exposure manually (EV)**

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

1. In Shooting mode, press [MENU].
2. Select **EV**.
3. Press [F] to adjust the exposure.
   - The photo will be brighter as the exposure value increases.
   - Once you adjust the exposure, the setting will be stored automatically. You may need to change the exposure value later to avoid overexposure or underexposure.
   - If you cannot decide on an appropriate exposure, select the **AEB** (Auto Exposure Bracket) option. The camera will capture 3 consecutive photos, each with a different exposure: normal, underexposed, and overexposed. (p. 73)
Compensating for backlighting (ACB)
When the light source is behind your subject or there is high contrast between your subject and the background, your subject is likely to appear dark in the photo. In this case, set the Auto Contrast Balance (ACB) option.

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>ACB (Auto Contrast Balance) is deactivated.</td>
</tr>
<tr>
<td>On</td>
<td>ACB (Auto Contrast Balance) is activated.</td>
</tr>
</tbody>
</table>

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

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

1. In Shooting mode, press [MENU].
2. Select Metering.
3. Select an option.

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

The color of your photo depends on the type and quality of the light source. If you want the color of your photo to be realistic, select a White Balance setting that is appropriate for the lighting conditions, such as Auto WB, Daylight, Cloudy, or Tungsten.

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌠</td>
<td>Auto WB: Automatically set the White Balance based on the lighting conditions.</td>
</tr>
<tr>
<td>☀</td>
<td>Daylight: For outdoor photos on a sunny day.</td>
</tr>
<tr>
<td>🌌</td>
<td>Cloudy: For outdoor photos on a cloudy day or in shadows.</td>
</tr>
<tr>
<td>🌏</td>
<td>Fluorescent_H: For shooting under a daylight fluorescent or 3-way fluorescent light.</td>
</tr>
<tr>
<td>☀️</td>
<td>Fluorescent_L: For shooting under white fluorescent light.</td>
</tr>
<tr>
<td>🌃</td>
<td>Tungsten: For shooting indoor photos under incandescent bulbs or halogen lamps.</td>
</tr>
<tr>
<td>🎯</td>
<td>Custom Set: To use White Balance settings that you define. (p. 72)</td>
</tr>
</tbody>
</table>
Defining your own White Balance

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

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

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

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Single</strong>: Capture a single photo.</td>
</tr>
</tbody>
</table>
| ![Motion Capture] | **Continuous**:  
  • While you are pressing [Shutter], the camera continuously captures photos.  
  • The maximum number of photos depends on the capacity of your memory card. |

**Icon Description**

- **Motion Capture**: While you are pressing [Shutter], the camera captures [VGR] photos (5 photos per second; maximum of 30 photos).
- **AEB**:  
  • Capture 3 consecutive photos, each with a different exposure: normal, underexposed, and overexposed.  
  • It may take longer to capture the photo. Use a tripod for best results.

Available options may differ depending on the shooting conditions.

- When you select **Motion Capture**, your camera will set the resolution to [VGR] and set the ISO sensitivity to **Auto**.  
- Depending on the Face Detection option you selected, some shooting options may not be available.  
- It may take longer to save the photos depending on the memory card capacity and performance.
Adjusting images

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

1. In Shooting mode, press [MENU].

2. Select Image Adjust.

3. Select an option.
   - Sharpness
   - Contrast
   - Saturation

4. Press [F/T] to adjust each value.

<table>
<thead>
<tr>
<th>Sharpness</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Soften the edges on your photos (suitable for editing the photos on your computer).</td>
</tr>
<tr>
<td>+</td>
<td>Sharpen the edges to improve the clarity of your photos. (This may also increase the noise in your photos.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contrast</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Decrease the color and brightness.</td>
</tr>
<tr>
<td>+</td>
<td>Increase the color and brightness.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Saturation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Decrease the saturation.</td>
</tr>
<tr>
<td>+</td>
<td>Increase the saturation.</td>
</tr>
</tbody>
</table>

5. Press [OK] to save your settings.

   Select 0 if you do not want to apply any effects (suitable for printing).
Reducing the sound of the zoom

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

1. In Video Shooting mode, press [MENU].
2. Select Voice.
3. Select an option.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎧</td>
<td>Sound Alive On: Turn on the Sound Alive function to reduce the zoom noise.</td>
</tr>
<tr>
<td>🔊</td>
<td>Sound Alive Off: Turn off the Sound Alive function. The camera can record the zoom noise.</td>
</tr>
<tr>
<td>🔊</td>
<td>Mute: Do not record sounds.</td>
</tr>
</tbody>
</table>

- Do not block the microphone when you use the Sound Alive function.
- Recordings made with Sound Alive may differ from actual sounds.
## Available shooting options by shooting mode

For details about shooting options, refer to "Shooting options". (p. 57)

<table>
<thead>
<tr>
<th>Option</th>
<th>Mode</th>
<th>Smart Auto</th>
<th>Program</th>
<th>Smart Movie</th>
<th>Movie</th>
<th>Scene</th>
<th>Live Panorama</th>
<th>Beauty Shot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>Quality</td>
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<tr>
<td>Timer</td>
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<td>Flash</td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>ISO Sensitivity</td>
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<tr>
<td>Macro</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>●</td>
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<tr>
<td>Focus Area</td>
<td>–</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Face Detection</td>
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<td>EV</td>
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<tr>
<td>ACB</td>
<td>●</td>
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<td>Sound Alive</td>
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</tbody>
</table>

* ●: The option is available. Some options may be limited or may not be changeable.
* –: The option is not available.
### Available shooting options by shooting mode

<table>
<thead>
<tr>
<th>Option</th>
<th>Mode</th>
<th>Night Shot</th>
<th>Close-up Shot</th>
<th>Magic Frame</th>
<th>Photo Filter</th>
<th>Movie Filter</th>
<th>Split Shot</th>
<th>Motion Photo</th>
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</thead>
<tbody>
<tr>
<td>Resolution</td>
<td></td>
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<tr>
<td>Focus Area</td>
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<td>Metering</td>
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<tr>
<td>Image Adjust</td>
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<tr>
<td>Sound Alive</td>
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<td>–</td>
</tr>
<tr>
<td>Digital zoom</td>
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<td>–</td>
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<tr>
<td>Intelli zoom</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

●: The option is available. Some options may be limited or may not be changeable.
–: The option is not available.
Playback/Editing
Learn how to play back photos or videos, and edit photos or videos. Also, learn how to connect your camera to your computer or TV.

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### Viewing photos or videos in Playback mode

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

#### Starting Playback mode

View photos or play videos stored in your camera.

1. Press [Play/Rec].
   - The most recent file will be displayed.
   - If the camera is off, it will turn on and display the most recent file.
   - To view files by category, select Album on the Home screen. (p. 81)

2. Press [F/0] to scroll through files.
   - Press and hold [F/0] to scroll through files quickly.

- If you want to view files stored in the internal memory, remove your memory card.
- You may not be able to edit or play back files that were captured with other cameras, due to unsupported sizes (image size, etc) or codecs. Use a computer or another device to edit or play back these files.
- Photos or videos captured in portrait orientation do not rotate automatically and are displayed in landscape orientation by the camera and other devices.

#### Photo file information

- **Memory in use**
- **File Information**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>Current file/Total files</td>
</tr>
<tr>
<td>100-0001</td>
<td>Folder name–File name</td>
</tr>
<tr>
<td>GIF</td>
<td>GIF file</td>
</tr>
<tr>
<td>On</td>
<td>Protected file</td>
</tr>
</tbody>
</table>

To display file information on the screen, press [DISP].
Viewing photos or videos in Playback mode

### Video file information

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>Current file/Total files</td>
</tr>
<tr>
<td>100-0002</td>
<td>Folder name-File name</td>
</tr>
<tr>
<td>00:00</td>
<td>Current playback time</td>
</tr>
<tr>
<td>00:20</td>
<td>Video length</td>
</tr>
<tr>
<td>🗝️</td>
<td>Protected file</td>
</tr>
</tbody>
</table>

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

---

### Viewing files as thumbnails

Scan thumbnails of files.

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

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

Press [DISP/_separator/_separator/_separator] to scroll through files.
Viewing photos or videos in Playback mode

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

1 In Playback mode, rotate [Zoom] to the left.
   • You can also view files as thumbnails by scrolling to <Album> on the Home screen, and then selecting 📷.

2 Press [MENU].

3 Select Filter → a category.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📗</td>
<td>All: View files normally.</td>
</tr>
<tr>
<td>☀️</td>
<td>Date: View files by the date they were saved.</td>
</tr>
<tr>
<td>📛</td>
<td>File Type: View files by the file type.</td>
</tr>
</tbody>
</table>

4 Scroll to a desired list, and then press [OK] to open the list.

5 Scroll to a desired file, and then press [OK] to view the file.

6 Rotate [Zoom] to the left, and then press [MENU] to return to the previous view.

⚠️ If you change the category, it may take some time for the camera to reorganize files depending on the number of files.

⚠️ If you delete a category classified by Date or File Type, all files in the category will be deleted.
Viewing photos or videos in Playback mode

Protecting a file
Protect a file from accidental deletion.

1 In Playback mode, select a file to protect.
2 Press [MENU], and then select Protect → On.
3 Repeat steps 1 and 2 to protect additional files.

You cannot delete, resize, or rotate a protected file.

Deleting files
Select files to delete in Playback mode.

Deleting a single file
You can select one file, and then delete it.

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

You can also delete files in Playback mode by pressing [MENU], and then selecting Delete → Delete → Yes.
Deleting multiple files
You can select multiple files, and then delete them at once.

1 In Playback mode, press [\(\text{\textbullet}\)].
   • When in thumbnails view, press [MENU], select Delete → Select, and then skip to step 3, or press [\(\text{\textbullet}\)], select Select, and then skip to step 3.

2 When the pop-up message appears, select **Multiple Delete**.

3 Scroll to each file you want to delete, and then press [OK].
   • Press [OK] again to cancel your selection.

4 Press [\(\text{\textbullet}\)].

5 When the pop-up message appears, select **Yes**.

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

1 In Playback mode, press [MENU].
   • When in thumbnails view, press [MENU], select Delete → Delete All, and then skip to step 3, or press [\(\text{\textbullet}\)], select Delete All, and then skip to step 3.

2 Select Delete → Delete All.

3 When the pop-up message appears, select **Yes**.
   • All unprotected files are deleted.

Copying files to a memory card
Copy files from the internal memory to a memory card.

1 In Playback mode, press [MENU].

2 Select **Copy to Card**.
Viewing photos or videos in Playback mode

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

**Enlarging a photo**

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

![Enlarged area](image)

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

![Warning](image)

When you view photos that were captured by another camera, the zoom ratio may differ.
Viewing photos or videos in Playback mode

Viewing panoramic photos
View photos captured in Live Panorama mode.

1 In Playback mode, press [F / t] to scroll to a desired panoramic photo.
   • The entire panoramic photo appears on the screen.

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

3 Press [MENU] to return to Playback mode.

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

Viewing animated photos
View animated GIF files repeatedly that were captured in Motion Photo mode.

1 In Playback mode, press [F / t] to scroll to a desired GIF file.

2 Press [OK].
   • The GIF file plays back repeatedly.

3 Press [OK] to stop playing back.
Viewing photos or videos in Playback mode

**Playing a slide show**

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

1. In Playback mode, press [MENU].
2. Select **Slide Show Options**.
   - Skip to step 5 to start a slide show with no effects.
3. Select a slide show effect option.

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

4. Press [MENU].
5. Select **Start Slide Show**.
6. View the slide show.
   - Press [OK] to pause the slide show.
   - Press [OK] again to resume the slide show.

   - Press [OK], and then press [÷]/[×] to stop the slide show and return to Playback mode.
   - Rotate [Zoom] to the left or right to adjust the volume level.
Playing a video
In Playback mode, you can view a video, and then capture or trim parts of the playing video. You can save the captured or trimmed segments as new files.

1. In Playback mode, select a video, and then press [OK].
2. View the video.

<table>
<thead>
<tr>
<th>To</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan backward</td>
<td>Press [◊]. Each time you press [◊], you change the scan speed in this order: 2X, 4X, 8X.</td>
</tr>
<tr>
<td>Pause or resume playback</td>
<td>Press [OK].</td>
</tr>
<tr>
<td>Scan forward</td>
<td>Press [◇]. Each time you press [◇], you change the scan speed in this order: 2X, 4X, 8X.</td>
</tr>
<tr>
<td>Adjust the volume level</td>
<td>Rotate [Zoom] to the left or right.</td>
</tr>
</tbody>
</table>

When playing a movie, you can begin using features such as scanning backward, scanning forward, or pausing after the video has run for 2 seconds.
Viewing photos or videos in Playback mode

**Trimming a video**

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

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

**Capturing an image from video**

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

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

Learn how to edit photos.

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

Resizing photos

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

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

Rotating a photo

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

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

Available resize options differ depending on the original size of the photo.
Applying Smart Filter effects
Apply special effects to your photos.

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

Option | Description
--- | ---
Normal | No effect
Miniature | Apply a tilt-shift effect to make the subject appear in miniature. (The top and bottom of the photo will be blurred.)

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

5. Press [📸] to save.
Adjusting your photos

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

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

Adjusting brightness, contrast, or saturation

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>☀</td>
<td>Brightness</td>
</tr>
<tr>
<td></td>
<td>Contrast</td>
</tr>
<tr>
<td>⚫</td>
<td>Saturation</td>
</tr>
</tbody>
</table>

5. Press [专栏/()] to adjust the option.
6. Press [OK].
7. Press [()] to save.

Adjusting dark subjects (ACB)

1. On the Home screen, scroll to <Album>.
2. Select .
3. Rotate [Zoom] to the left, and then select a photo.
4. Select ACB.
5. Press [()] to save.
Retouching faces
1. On the Home screen, scroll to <Album>.
2. Select 📸.
3. Rotate [Zoom] to the left, and then select a photo.
4. Select Face Retouch.
5. Press [📞/.basename] to adjust the option.
   • As the number increases, the skin tone becomes brighter and smoother.
6. Press [✔️] to save.

Removing red-eye
1. On the Home screen, scroll to <Album>.
2. Select 📸.
3. Rotate [Zoom] to the left, and then select a photo.
4. Select Red-eye Fix.
5. Press [✔️] to save.
Viewing files on a TV

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

1. On the Home screen, scroll to <Basic>.
2. Select 📸.
3. Select Connectivity → Video Out.
4. Select the video signal output for your country or region. (p. 124)
5. Turn off your camera and TV.
6. Connect your camera to your TV with the A/V cable.
7. Turn on your TV, and then select the A/V video source.
8. Turn on your camera.
   • The camera automatically enters into Playback mode when you connect it to a TV.
9. View photos or play videos using the camera buttons.

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

Connect the camera to a computer to transfer files from the camera's memory card to the computer.

Transferring files to your Windows OS computer

Connect the camera to your computer as a removable disk.

Your computer must be running Windows XP, Windows Vista, Windows 7, or Windows 8 for you to connect the camera as a removable disk.

1. On the Home screen, scroll to <Basic>.
2. Select 📸.
3. Select Connectivity → i-Launcher → Off.
4. Turn off the camera.
5. Connect the camera to your computer with the USB cable.
6. Turn on the camera.
   • The computer recognizes the camera automatically.
7. On your computer, select My Computer → Removable Disk → DCIM → 100PHOTO.
8. Drag or save files to your computer.

Disconnecting the camera (for Windows XP)

With Windows Vista, Windows 7 and Windows 8 the methods for disconnecting the camera are similar.

1. If the status lamp on your camera is blinking, wait until it stops.
2. Click 📸 on the tool bar at the bottom right of your computer screen.
3. Click the pop-up message.
4. Click the message box that indicates the camera can be removed safely.
5. Remove the USB cable.
Transferring files to your Mac OS computer

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

- Mac OS 10.5 or later (except PowerPC) is supported.

1. Turn off the camera.
2. Connect your camera to your Mac OS computer with the USB cable.
   - You must plug the small end of the USB cable into your camera. If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.
3. Turn on the camera.
   - The computer recognizes the camera automatically and displays a removable disk icon.
4. Double-click the removable disk icon.
5. Drag or save files to your computer.
Using programs on a computer

i-Launcher allows you to playback files with Multimedia Viewer and provides links so that you can download useful programs.

Installing i-Launcher

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

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

6. Turn on the camera.
7. Select a destination folder on your computer, and then select Yes.
   • If a pop-up window prompting you to run iLinker.exe appears, run it first.
   • When you connect the camera to a computer with i-Launcher installed, the program will launch automatically.
8. Follow the on-screen instructions to complete the installation.
   • An i-Launcher shortcut will appear on the computer.

• Before installing the program, ensure that the PC is connected to a network.
• To install i-Launcher on your Mac OS computer, click Devices → i-Launcher → Mac → iLinker.
**Available programs when using i-Launcher**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia Viewer</td>
<td>You can view files with Multimedia Viewer.</td>
</tr>
<tr>
<td>Firmware Upgrade</td>
<td>You can update the firmware of your camera.</td>
</tr>
<tr>
<td>PC Auto Backup (ST150F/ST151F/ST152F only)</td>
<td>i-Launcher provides a link for downloading the PC Auto Backup program when you connect the camera to a computer. You can send photos or videos that you captured with the camera to a PC wirelessly.</td>
</tr>
</tbody>
</table>

If you use a Mac OS computer, only Firmware Upgrade and PC Auto Backup are available.

**Using i-Launcher**

i-Launcher allows you to play back files with Multimedia Viewer and provides a link to download the PC Auto Backup program.

- The requirements are recommendation only. i-Launcher may not work properly even when the computer meets the requirements, depending on the condition of your computer.
- If your computer does not meet the requirements, videos may not play correctly.

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Intel® Pentium®4 3.2 GHz or higher/ AMD Athlon™ FX 2.6 GHz or higher</td>
</tr>
<tr>
<td>RAM</td>
<td>Minimum 512 MB RAM (1 GB or more recommended)</td>
</tr>
<tr>
<td>OS*</td>
<td>Windows XP SP2, Windows Vista, Windows 7, or Windows 8</td>
</tr>
<tr>
<td>Hard disk capacity</td>
<td>250 MB or more (1 GB and above recommended)</td>
</tr>
</tbody>
</table>
| Others       | • 1024 X 768 pixels, 16-bit color display compatible monitor (1280 X 1024 pixels, 32-bit color display recommended)  
|              | • USB 2.0 port                                                              |
|              | • nVIDIA GeForce 7600GT or higher/ ATI X1600 series or higher               |
|              | • Microsoft DirectX 9.0c or higher                                          |

* A 32-bit version of i-Launcher will be installed—even on 64-bit editions of Windows XP, Windows Vista, Windows 7, and Windows 8.

### Mac OS requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>Mac OS 10.5 or higher (except PowerPC)</td>
</tr>
<tr>
<td>RAM</td>
<td>Minimum 256 MB RAM (512 MB or more recommended)</td>
</tr>
<tr>
<td>Hard disk capacity</td>
<td>Minimum 110 MB</td>
</tr>
<tr>
<td>Others</td>
<td>USB 2.0 port</td>
</tr>
</tbody>
</table>

### Opening i-Launcher

On your computer, select **Start → All Programs → Samsung → i-Launcher → Samsung i-Launcher**. On your Mac, click **Applications → Samsung → i-Launcher**.
Using Multimedia Viewer
Multimedia Viewer allows you to play back files. From the Samsung i-Launcher screen, click Multimedia Viewer.

- Multimedia Viewer supports the following formats:
  - Videos: MP4 (Video: H.264, Audio: AAC), WMV (WMV 7/8/9), AVI (MJPEG)
  - Photos: JPG, GIF, BMP, PNG, TIFF, MPO
- Files that have been recorded with other manufacturers’ devices may not play back smoothly.

Viewing photos

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>File name</td>
</tr>
<tr>
<td>2</td>
<td>Enlarged area</td>
</tr>
<tr>
<td>3</td>
<td>Histogram</td>
</tr>
<tr>
<td>4</td>
<td>Open the selected file.</td>
</tr>
<tr>
<td>5</td>
<td>Histogram button</td>
</tr>
<tr>
<td>6</td>
<td>Rotate to the left/Rotate to the right.</td>
</tr>
<tr>
<td>7</td>
<td>Move to the previous file/Move to the next file.</td>
</tr>
<tr>
<td>8</td>
<td>Fit the photo to the screen.</td>
</tr>
<tr>
<td>9</td>
<td>View the photo in its original size.</td>
</tr>
<tr>
<td>10</td>
<td>Zoom in/Zoom out</td>
</tr>
<tr>
<td>11</td>
<td>Switch between 2D and 3D mode.</td>
</tr>
</tbody>
</table>
Using programs on a computer

Viewing Videos

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>File name</td>
</tr>
<tr>
<td>2</td>
<td>Adjust the volume.</td>
</tr>
<tr>
<td>3</td>
<td>Open the selected file.</td>
</tr>
<tr>
<td>4</td>
<td>Move to the next file.</td>
</tr>
<tr>
<td>5</td>
<td>Stop</td>
</tr>
<tr>
<td>6</td>
<td>Pause</td>
</tr>
<tr>
<td>7</td>
<td>Move to the previous file.</td>
</tr>
<tr>
<td>8</td>
<td>Progress bar</td>
</tr>
</tbody>
</table>

From the Samsung i-Launcher screen, click **Firmware Upgrade**.

From the Samsung i-Launcher screen, click **PC Auto Backup**.

For information about installing the PC Auto Backup program, refer to page 110.

Downloading the PC Auto Backup program (ST150F/ST151F/ST152F only)
Wireless network (ST150F/ST151F/ST152F only)

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

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  Connecting to a WLAN .................................. 102
  Using the login browser .................................. 103
  Network connection tips .................................. 104
  Entering text .............................................. 105

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Sending photos or videos to a smart phone ........................................ 107

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Connecting to a WLAN and configuring network settings

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

Connecting to a WLAN

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

- Select Refresh to refresh connectable APs.
- Select Add wireless network to add an AP manually. Your AP name must be in English to add the AP manually.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑</td>
<td>Ad hoc AP</td>
</tr>
<tr>
<td>☐</td>
<td>Secured AP</td>
</tr>
<tr>
<td>☐</td>
<td>WPS AP</td>
</tr>
<tr>
<td>☐</td>
<td>Signal strength</td>
</tr>
<tr>
<td>➞</td>
<td>Press (⌵) to open network setting options.</td>
</tr>
</tbody>
</table>

- When you select a secured AP, a pop-up window appears. Enter the required passwords to connect to the WLAN. For information about entering text, refer to "Entering text": (p. 105)
- When a login page appears, refer to "Using the login browser": (p. 103)
- When you select an unsecured AP, the camera will connect to the WLAN.
- If you select a WPS profile supported AP, select ➞ WPS PIN connection, and then enter a PIN on the AP device. You can also connect to a WPS profile supported AP by selecting ➞ WPS button connection on the camera, and then pushing the WPS button on the AP device.
Connecting to a WLAN and configuring network settings

**Setting network options**

1. In the Wi-Fi Setting screen, move to an AP, and then press [ ].
2. Select each option, and then enter the required information.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Password</td>
<td>Enter the network password.</td>
</tr>
<tr>
<td>IP Setting</td>
<td>Set the IP address automatically or manually.</td>
</tr>
</tbody>
</table>

**Manually setting the IP address**

1. In the Wi-Fi Setting screen, move to an AP, and then press [ ].
2. Select **IP Setting → Manual**.
3. Select each option, and then enter the required information.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>Enter the static IP address.</td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>Enter the subnet mask.</td>
</tr>
<tr>
<td>Gateway</td>
<td>Enter the gateway.</td>
</tr>
<tr>
<td>DNS Server</td>
<td>Enter the DNS address.</td>
</tr>
</tbody>
</table>

**Using the login browser**

You can enter your login information via the login browser when connecting to some APs, sharing sites, or cloud servers.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[DISP/YES/YES/YES]</td>
<td>Move to an item or scroll the page.</td>
</tr>
<tr>
<td>[OK]</td>
<td>Select an item.</td>
</tr>
</tbody>
</table>

- **[MENU]**
  - **Previous Page**: Move to the previous page.
  - **Next Page**: Move to the next page.
  - **Reload**: Reload the page.
  - **Stop**: Stop loading the page.
  - **Exit**: Close the login browser.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>Close the login browser.</td>
</tr>
</tbody>
</table>

- You may not be able to select some items depending on the page you connected to. This does not indicate a malfunction.
- The login browser may not close automatically after you log into some pages. If this occurs, close the login browser by pressing [ ], and then proceed with the desired operation.
- It may take longer to load the login page due to the page size or network speed. If this occurs, wait until the login information input window appears.
Connecting to a WLAN and configuring network settings

Network connection tips
- You must insert a memory card to use the Wi-Fi features.
- The quality of the network connection will be determined by the AP.
- The further the distance between your camera and the AP, the longer it will take to connect to the network.
- If a nearby device is using the same radio frequency signal as your camera, it may interrupt your connection.
- If your AP name is not in English, the camera may not be able to locate the device or the name may appear incorrectly.
- For network settings or a password, contact your network administrator or network service provider.
- If a WLAN requires authentication from the service provider, you may not be able to connect to it. To connect the WLAN, contact your network service provider.
- Depending on the encryption type, the number of digits in the password may differ.
- A WLAN connection may not be possible in all surroundings.
- The camera may display a WLAN enabled printer on the AP List. You cannot connect to a network via a printer.
- You cannot connect your camera to a network and a TV simultaneously.
- Connecting to a network may incur additional charges. Costs will vary based on the conditions of your contract.
- If you cannot connect to a WLAN, try another AP from the available AP list.
- A login page may appear when you select free WLANs provided by some network service providers. Enter your ID and password to connect to the WLAN. For information about registering or the service, contact the network service providers.
- Be cautious when you enter personal information for an AP connection. Do not enter any payment or credit card information on your camera. The manufacturer is not liable for any problem caused by entering such information.
- Available network connections may differ by country.
- The WLAN feature of your camera must comply with radio transmission laws in your region. To ensure compliance, use the WLAN feature only in the country where you purchased the camera.
- The process for adjusting network settings may differ, depending on network conditions.
- Do not access a network that you are not authorized to use.
- Before you connect to a network, ensure your battery is fully charged.
- You cannot upload or send files captured in some modes.
- Files that you transfer to another device may not be supported by the device. In this case, use a computer to playback the files.
Continuing to a WLAN and configuring network settings

Entering text
Learn how to enter text. The icons in the table below let you move the cursor, change the case, etc. Press [DISP/ﬁ/ lighten] to move to a desired key, and then press [OK] to enter the key.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>←</td>
<td>Delete the last letter.</td>
</tr>
<tr>
<td>↑</td>
<td>Move the cursor.</td>
</tr>
<tr>
<td>↑</td>
<td>In ABC mode, change the case.</td>
</tr>
<tr>
<td>.com</td>
<td>Enter &quot;com&quot;.</td>
</tr>
<tr>
<td>@#/ABC</td>
<td>Switch between Symbol mode and ABC mode.</td>
</tr>
<tr>
<td></td>
<td>Enter a space.</td>
</tr>
<tr>
<td>Done</td>
<td>Save the displayed text.</td>
</tr>
<tr>
<td>?</td>
<td>View the entering text guide.</td>
</tr>
</tbody>
</table>

- You can use only the English alphabets in some modes, regardless of the display language.
- To move to Done directly, press [ ]
- You can enter up to 64 characters.
- The screen may differ depending on the input mode.
Saving files to a smart phone automatically

The camera connects to a smart phone that supports the AutoShare feature via a WLAN. When you capture a photo with your camera, the photo is saved to the smart phone automatically.

- The AutoShare feature is supported by Galaxy series smart phones or Galaxy Tab models with the Android 2.2 OS or higher or iOS devices with the iOS 4.3 or higher. Before using this feature, check the device’s firmware and update it if needed.
- You should install the Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. The Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
- If you set this function, the setting is maintained even when you change the Shooting mode.
- This feature may not be supported in some modes.

1. On the camera, in Shooting mode, press [MENU].
2. On the camera, select AutoShare → On.
   - If the pop-up message that prompts you to download the application appears, select Next.
   - For iOS devices, turn on the Wi-Fi feature before turning on the application.
4. Select the camera from the list and connect the smart phone to the camera.
   - The smart phone can connect to only one camera at a time.
5. On the camera, allow the smart phone to connect to your camera.
   - If the smart phone has been connected to your camera before, it is connected automatically.
   - An icon that shows the connection status () will appear on the camera’s screen.
6. On the camera, capture a photo.
   - The captured photo is saved to the camera, and then transferred to the smart phone.
   - If you recorded a video, it is saved only to the camera.
   - The GIF file captured in the motion capture mode is not saved on the smart phone.
Sending photos or videos to a smart phone

The camera connects to a smart phone that supports the MobileLink feature via a WLAN. You can easily send photos or videos to your smart phone.

• The MobileLink feature is supported by Galaxy series smart phones or Galaxy Tab models with the Android 2.2 OS or higher or iOS devices with the iOS 4.3 or higher. Before using this feature, check the device’s firmware and update it if needed.
• You should install the Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. The Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
• When there are no files in the camera memory, you cannot use this feature.
• If you select files from the smart phone, you can view up to 1,000 recent files and send up to 150 files at a time. If you select files from the camera, you can view files that were selected from the camera. The maximum number of files that can be sent varies depending on the storage space of the smart phone.

1 On the camera’s Home screen, scroll to <Wi-Fi>.
2 On the camera, select .
   • If the pop-up message that prompts you to download the application appears, select Next.
3 On the camera, select a sending option.
   • If you select Select Files from Smartphone, you can use your smart phone to view and share files stored on the camera.
   • If you select Select Files from Camera, you can select files to send on the camera.
4 On the smart phone, turn on the Samsung SMART CAMERA App.
   • For iOS devices, turn on the Wi-Fi feature before turning on the application.
5 Select the camera from the list and connect the smart phone to the camera.
   • The smart phone can connect to only one camera at a time.
6 On the camera, allow the smart phone to connect to your camera.
   • If the smart phone has been connected to your camera before, it is connected automatically.
7 On the smart phone or camera, select files to transfer from the camera.
8 On the smart phone, touch the copy button or on the camera, select Share.
   • The camera will send the files.
Using a smart phone as a remote shutter release

The camera connects to a smart phone via a WLAN. Use the smart phone as a remote shutter release with the Remote Viewfinder feature. The captured photo will display on the smart phone.

- The Remote Viewfinder feature is supported by Galaxy series smart phones or Galaxy Tab models with the Android 2.2 OS or higher or iOS devices with the iOS 4.3 or higher. Before using this feature, check the device's firmware and update it if needed.
- You should install the Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps, the Google Play Store, or the Apple App Store. The Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.

1. On the camera's Home screen, scroll to <Wi-Fi>.

2. On the camera, select [Wi-Fi].
   - If the pop-up message that prompts you to download the application appears, select Next.

   - For iOS devices, turn on the Wi-Fi feature before turning on the application.

4. Select the camera from the list and connect the smart phone to the camera.
   - The smart phone can connect to only one camera at a time.

5. On the camera, allow the smart phone to connect to your camera.
   - If the smart phone has been connected to your camera before, it is connected automatically.

6. On the smart phone, set the following shooting options.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Flash]</td>
<td>Flash option</td>
</tr>
<tr>
<td>![Timer]</td>
<td>Timer option</td>
</tr>
<tr>
<td>![Photo size]</td>
<td>Photo size</td>
</tr>
<tr>
<td>![Saving location]</td>
<td>Saving location</td>
</tr>
<tr>
<td>![Zoom ratio]</td>
<td>Zoom ratio</td>
</tr>
</tbody>
</table>

- While using this feature, some buttons are not available on your camera.
- The zoom button and the shutter button on your smart phone will not function when using this feature.
- Remote Viewfinder mode supports the [Wide] and [Macro] photo sizes only.
Using a smart phone as a remote shutter release

7 On the smart phone, touch and hold 📷 to focus.
   • The focus is automatically set to Multi AF.

8 Release 📷 to capture the photo.
   • The photo will be resized to 640 X 360 when it is stored to the smart phone.

   • When you use this feature, the ideal distance between the camera and the smart phone may vary, depending on your surroundings.
   • The smart phone must be within 7 m of the camera to use this feature.
   • It will take some time to capture the photo after you release 📷 on the smart phone.
   • The Remote Viewfinder function will deactivate when:
     - there is an incoming call on the smart phone
     - either the camera or the smart phone turn off
     - the memory is full
     - either device loses its connection to the WLAN
     - the Wi-Fi connection is poor or unstable
Using Auto Backup to send photos or videos

You can send photos or videos that you captured with the camera to a PC wirelessly.

Installing the program for Auto Backup on your PC

1. Install i-Launcher on the PC. (p. 96)
2. Connect the camera to the PC with the USB cable.
3. When the Auto Backup program icon appears, click it.
   - The Auto Backup program is installed on the PC and the information about the PC will be stored to the camera. Follow the on-screen instructions to complete the installation.
   - You can also store the information about the PC to the camera by connecting the PC and the camera via Wi-Fi.
4. Remove the USB cable.

Sending photos or videos to a PC

1. On the camera's Home screen, scroll to <Wi-Fi>.
2. Select 
   - If the the pop-up message that prompts you to download the application appears, select Next.
   - You must configure the backup PC information to use the Auto Backup feature. For more details, refer to “Installing the program for Auto Backup on your PC”. If the Auto Backup program is installed on your PC, you can save the PC information via USB cable or Wi-Fi connection.
   - The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   - If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)

Before installing the program, ensure that the PC is connected to a network.
Using Auto Backup to send photos or videos

3 Select a backup PC.
   • If you have performed a backup before, skip to step 4.
4 Select OK.
   • To cancel sending, select Cancel.
   • You cannot select individual files to backup. This function backs up only new files on the camera.
   • The backup's progress will be shown on the PC monitor.
   • When the transfer is completed, the camera will turn off automatically in approximately 30 seconds. Select Cancel to return to the previous screen and prevent the camera from turning off automatically.
   • To turn off your PC automatically after the transfer is complete, press [MENU], and then select Shut down PC after backup → On.
   • To change the backup PC, select Change PC.

   • When you connect the camera to the WLAN, select the AP that is connected to the PC.
   • The camera will search for available access points even if you are connecting to the same access point again.
   • If you turn off the camera or remove the battery while sending files, the file transfer will be interrupted.
   • While you are using this feature, the shutter control is disabled on your camera.
   • You can connect only one camera to the PC at a time for sending files.
   • The backup may be canceled due to network conditions.
   • Photos or videos can be sent to a PC one time only. Files cannot be sent again even if you reconnect your camera to another PC.
   • When there are no files in the camera memory, you cannot use this feature.
   • You must turn off Windows Firewall and any other firewalls before using this feature.
   • You can send up to 1,000 recent files.
   • On the PC software, the server name must be entered in the Latin alphabet and can contain no more than 48 characters.
   • When multiple file types are created at once, only the image files (JPG) will be sent to the PC with this feature.
Sending photos or videos via email

You can change settings in the email menu and send photos or videos stored on the camera via email.

Changing email settings

In the email menu, you can change settings for storing your information. You can also set or change the email password. For information about entering text, refer to "Entering text". (p. 105)

Storing your information

1. On the Home screen, scroll to <Wi-Fi>.
2. Select .
   - The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   - If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
3. Press [MENU].
4. Select Sender Setting.
5. Select the Name box, enter your name, and then select Done.
6. Select the Email box, enter your email address, and then select Done.
7. Select Save to save your changes.
   - To delete your information, select Reset.
### Setting an email password

1. On the Home screen, scroll to `<Wi-Fi>`.
2. Select [ ].
   - The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   - If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
3. Press [MENU].
4. Select **Setting Password → On**.
   - To deactivate the password, select **Off**.
5. When the pop-up appears, press [OK].
   - The pop-up disappears automatically even if you do not press [OK].
6. Enter a 4-digit password.
7. Enter the password again.
8. When the pop-up appears, press [OK].

If you lost your password, you can reset it by selecting **Reset** on the password setting screen. When you reset the information the previously saved user’s setting information, email address, and recently sent email list will be deleted.

### Changing the email password

1. On the Home screen, scroll to `<Wi-Fi>`.
2. Select [ ].
   - The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   - If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
3. Press [MENU].
4. Select **Change Password**.
5. Enter your current 4-digit password.
6. Enter a new 4-digit password.
7. Enter the new password again.
8. When the pop-up appears, press [OK].
Sending photos or videos via email

You can send photos or videos stored on the camera via email. For information about entering text, refer to "Entering text". (p. 105)

1 On the Home screen, scroll to <Wi-Fi>.
2 Select .
   - The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   - If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
3 Select the Sender box, enter your email address, and then select Done.
   - If you have previously saved your information, it will be inserted automatically. (p. 112)
   - To use an address from the list of previous senders, select → an address.
4 Select the Receiver box, enter an email address, and then select Done.
   - To use an address from the list of previous recipients, select ← an address.
   - Select + to add additional recipients. You can input up to 30 recipients.
   - Select X to delete an address from the list.
5 Select Next.
6 Scroll to files to send, and then press [OK].
   - You can select up to 20 files. The total size must be 7 MB or less.
7 Select Next.
8 Select the Comment box, enter your comments, and then select Done.
9 Select Send.
   - The camera will send the email.

- Even if a photo appears to have transferred successfully, errors with the recipient's email account may cause the photo to be rejected or recognized as spam.
- You may not be able to send an email if no network connection is available or if your email account settings are incorrect.
- You cannot send an email if the file size exceeds the limit. The maximum photo resolution you can send is 2M and the longest video you can send is 30 seconds at VGA resolution or a video recorded using . If the selected photo resolution is higher than 2M, it will be automatically resized to a lower resolution.
- If you cannot send an email because of firewall or user authentication settings, contact your network administrator or network service provider.
- When there are no files in the camera memory, you cannot use this feature.
- You can also send an email in Playback mode by pressing [MENU], and then selecting Share(Wi-Fi) → Email.
Using photo or video sharing websites

Upload your photos or videos to file sharing websites. Available websites will be displayed on your camera. To upload files to some websites, you must visit the website and register before connecting your camera.

Accessing a website

1. On the Home screen, scroll to <Wi-Fi>.
2. Select ．
3. Select a website.
   • If the pop-up message that prompts you to create an account appears, select OK.
   • The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   • If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
4. Enter your ID and password to log in.
   • For information about entering text, refer to “Entering text”. (p. 105)
   • If you connected to SkyDrive, refer to “Using the login browser”. (p. 103)
   • To select an ID from the list, select ▼ → an ID.
   • If you have previously logged in to the website, you may be logged in automatically.

   You must have an existing account on the file sharing website to use this feature.

Uploading photos or videos

1. Access the website with your camera.
2. Select files to upload.
   • You can select up to 20 files. The total size must be 10 MB or less. (On some websites, the total size or number of files may vary.)
   • On some websites, you can enter your comments by selecting the Comment box. For information about entering text, refer to "Entering text". (p. 105)
Using photo or video sharing websites

- You can set an upload folder for Facebook by pressing [MENU], and then selecting **Upload Folder (Facebook)** on the website’s list screen.
- You cannot upload files if the file size exceeds the limit. The maximum photo resolution you can upload is 2M, and the longest video you can upload is 30 seconds at resolution or a video recorded using . If the selected photo resolution is higher than 2M, it will be automatically resized to a lower resolution. (On some websites, the maximum photo resolution may vary.)
- The method of uploading photos or videos may differ depending on the selected website.
- If you cannot access a website because of firewall or user authentication settings, contact your network administrator or network service provider.
- Uploaded photos or videos may be automatically titled with the date they were captured.
- The speed of your internet connection may affect how quickly photos upload or web pages open.
- When there are no files in the camera memory, you cannot use this feature.
- You can also upload photos or videos to file sharing websites in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi)** → a desired website.
- You cannot upload videos to some websites.
- When you upload photos to SkyDrive, they will be resized to 2M while maintaining their aspect ratios.

Wireless network (ST150F/ST151F/ST152F only)
Using AllShare Play to send files

You can upload files from your camera to AllShare Play online storage or view files on an AllShare Play device connected to the same AP.

### Uploading photos to online storage

1. On the Home screen, scroll to <Wi-Fi>.
2. Select → **Web storage**.
   - If the guide message appears, press [OK].
   - The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   - If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
   - To change the size for uploaded photos, press [MENU], and then select **Upload Image Size**.
   - If you have registered more than two web storage, you can select from the list by pressing [MENU], and then selecting **Change Web storage**.
3. Enter your ID and password, and then select **Login → OK**.
   - For information about entering text, refer to "Entering text". (p. 105)
   - To select an ID from the list, select ▼ → an ID.
   - If you have previously logged in to the website, you may be logged in automatically.

   ![To use this feature, you must create an AllShare Play account and an account with an affiliated online storage service using your PC. After finishing creating accounts, add your online storage account to AllShare Play.]

4. Scroll to the files you want to upload, and then press [OK].
5. Select **Upload**.
   - If you have registered more than two web storage, select a web storage first.
   - You cannot upload video files to AllShare Play online storage.
   - When there are no files in the camera memory, you cannot use this feature.
   - You can upload up to 20 files.
   - You can also upload photos in Playback mode by pressing [MENU], and then selecting **Share(Wi-Fi) → AllShare Play**.
Using AllShare Play to send files

Viewing photos or videos on devices that support AllShare Play

1. On the Home screen, scroll to <Wi-Fi>.

2. Select → Nearby devices.
   • If the guide message appears, press [OK].
   • The camera will automatically attempt to connect to a WLAN via the most recently connected AP device.
   • If the camera has not previously been connected to a WLAN, it will search for available AP devices. (p. 102)
   • You can set to allow only selected devices or all devices to connect by pressing [MENU], and then selecting DLNA Access Control on the screen.
   • A sharing file list is created. Wait until other devices can find your camera.

3. Connect the AllShare Play device to a network, and then turn on the AllShare Play feature.
   • Refer to your device’s user manual for more information.

4. On the camera, allow the AllShare Play device to connect to your camera.

5. On the AllShare Play device, select a camera to connect.

6. On the AllShare Play device, browse the shared photos or videos.
   • For information about searching for the camera and browsing the photos or videos on the AllShare Play device, refer to the device’s user manual.
   • Videos may not play smoothly depending on the type of AllShare Play device or the network condition. If this happens, re-record the video in VGR or smaller quality and play it again. If videos do not play smoothly on your device over the wireless connection, try connecting the camera to the device with an A/V cable.

△ A camera is connected to a TV that supports AllShare Play via WLAN.
• You can share up to 1,000 recent files.
• On an AllShare Play device, you can view only photos or videos captured with your camera.
• The range of the wireless connection between your camera and an AllShare Play device may vary depending on the specifications of the AP.
• If the camera is connected to 2 AllShare Play devices, playback may be slower.
• Photos or videos will be shared in their original sizes.
• You can use this feature only with devices that support AllShare Play.
• Shared photos or videos will not be stored on the AllShare Play device, but they can be stored in the camera to meet the device’s specifications.
• Transferring photos or videos to the AllShare Play device may take some time depending on the network connection, the number of files to be shared, or the sizes of the files.
• If you power off the camera abnormally while viewing photos or videos on an AllShare Play device (for example, by removing the battery), the device considers the camera to still be connected.
• The order of photos or videos on the camera may be different than on the AllShare Play device.
• Depending on the number of photos or videos you want to share, it may take some time to load your photos or videos and complete the initial set-up process.
• While viewing photos or videos on the AllShare Play device, continuously using the device’s remote or performing additional operations on the device may prevent this feature from working properly.
• If you reorder or sort files on the camera while viewing them on an AllShare Play device, you must repeat the initial set-up process to update the list of files on the device.
• When there are no files in the camera memory, you cannot use this feature.
• We recommend you use a network cable to connect your AllShare Play device to your AP. This will minimize any video ‘Stuttering’ you may experience when streaming content.
• To view files on an AllShare Play device using the Nearby devices feature, enable multicast mode on your AP.
Sending photos using Wi-Fi Direct

When the camera connects via a WLAN to a device that supports the Wi-Fi Direct function, you can send photos to the device. This feature may not be supported on some devices.

1. On the device, turn on the Wi-Fi Direct option.
2. On the camera, in Playback mode, scroll to a photo.
3. Press [MENU], and then select Share(Wi-Fi) → Wi-Fi Direct.
   • When in the single image view, you can send only one photo at a time.
   • When in the thumbnails view, you can select multiple photos by scrolling to thumbnails, and then pressing [OK]. Select Next when you are finished selecting photos.
4. Select the device from the camera’s list of Wi-Fi Direct devices.
   • Ensure that the device's Wi-Fi Direct option is turned on.
   • You can also select your camera from the device’s list of Wi-Fi Direct devices.
5. On the device, allow the camera to connect to the device.
   • The photo will be sent to the device.

Additional notes:
• You can send up to 20 files at a time.
• When there are no files in the camera memory, you cannot use this feature.
• If you cannot connect to a Wi-Fi Direct device, update the device with the latest firmware. This feature may not be supported on some devices.
Settings
Refer to options to configure your camera’s settings.

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**Settings menu**

Learn to configure your camera's settings.

**Accessing the settings menu**

1. On the Home screen, scroll to *<Basic>*.
2. Select 📸.
3. Select a menu.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎧</td>
<td><strong>Sound</strong>: Set various camera sounds and the volume. (p. 123)</td>
</tr>
<tr>
<td>🎨</td>
<td><strong>Display</strong>: Customize the display settings. (p. 123)</td>
</tr>
<tr>
<td>⚡</td>
<td><strong>Connectivity</strong>: Set the connection options. (p. 124)</td>
</tr>
<tr>
<td>👤</td>
<td><strong>General</strong>: Change the settings for the camera system such as memory format and default file name. (p. 125)</td>
</tr>
</tbody>
</table>

4. Select an item.

5. Select an option.

6. Press [MENU] to return to the previous screen.
## Sound

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>Set the volume of all sounds. <em>(Off, Low, Medium</em>, High)*</td>
</tr>
<tr>
<td>Beep Sound</td>
<td>Set the sound the camera emits when you press the buttons or switch modes. <em>(Off, On)</em></td>
</tr>
<tr>
<td>Shutter Sound</td>
<td>Set the sound the camera emits when you press the shutter button. <em>(Off, Sound 1</em>, Sound 2, Sound 3)</td>
</tr>
<tr>
<td>Start Sound</td>
<td>Set the sound the camera emits when you turn on your camera. <em>(Off</em>, Star Flight, Laser Show, Cloud)</td>
</tr>
<tr>
<td>AF Sound</td>
<td>Set the sound the camera emits when you half-press the shutter button. <em>(Off, On)</em></td>
</tr>
</tbody>
</table>

## Display

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Image</td>
<td>Set a start image to display when the camera turns on.</td>
</tr>
<tr>
<td></td>
<td>• Off*: Display no start image.</td>
</tr>
<tr>
<td></td>
<td>• Logo: Display a default image stored in the internal memory.</td>
</tr>
<tr>
<td></td>
<td>• User Image: Select User Image from the photos you captured in the memory.</td>
</tr>
<tr>
<td></td>
<td>• The camera will save only one User Image in the internal memory at a time.</td>
</tr>
<tr>
<td></td>
<td>• If you select a new photo as a User Image or reset your camera, the camera will delete the current image.</td>
</tr>
<tr>
<td>Wallpapers</td>
<td>Set wallpaper for the Home screen with the desired image.</td>
</tr>
<tr>
<td></td>
<td><em>(Wallpaper Gallery, Album)</em></td>
</tr>
<tr>
<td>Guide Line</td>
<td>Select a guide to help you compose a scene. <em>(Off</em>, 3 X 3, 2 X 2, Cross, Diagonal)</td>
</tr>
<tr>
<td>Date/Time Display</td>
<td>Set whether or not to display the date and time on the camera's display. <em>(Off</em>, On)</td>
</tr>
<tr>
<td>Help Guide Display</td>
<td>Display a brief description of an option or menu. <em>(Off, On)</em></td>
</tr>
</tbody>
</table>
## Connectivity

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display Brightness</strong></td>
<td>Adjust the brightness of the screen. <em>(Auto</em>, Dark, Normal, Bright)*</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Normal" /> is fixed in Playback mode even if you have selected Auto.</td>
</tr>
<tr>
<td><strong>Quick View</strong></td>
<td>Set whether or not to review a captured image before returning to the Shooting mode. <em>(Off, On</em>)</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="On" /> This feature does not work in some modes.</td>
</tr>
<tr>
<td><strong>Power Save</strong></td>
<td>If you perform no operations for 30 seconds, the camera automatically switches to Power save mode. <em>(Off, On)</em></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Off" /> In Power save mode, press any button other than <img src="image" alt="Shutter" /> to resume using the camera.</td>
</tr>
</tbody>
</table>

### Video Out
- **NTSC**: USA, Canada, Japan, Korea, Taiwan, Mexico, etc
- **PAL** (supports only BDGHI): Australia, Austria, Belgium, China, Denmark, England, Finland, France, Germany, Italy, Kuwait, Malaysia, Netherlands, New Zealand, Norway, Singapore, Spain, Sweden, Switzerland, Thailand, etc

### i-Launcher
- Set i-Launcher to launch automatically when you connect your camera to your computer. *(Off, On)*
### General

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network Information</strong></td>
<td>View the Mac address and network certification number of your camera.</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>Set a language for the display text.</td>
</tr>
<tr>
<td><strong>Time Zone</strong></td>
<td>Set the time zone for your location. When you travel to another country, select <strong>Visit</strong>, and then select the appropriate time zone. (<strong>Home</strong>, <strong>Visit</strong>)</td>
</tr>
<tr>
<td><strong>Date/Time Set</strong></td>
<td>Set the date and time.</td>
</tr>
<tr>
<td><strong>Date Type</strong></td>
<td>Set a date format. (<strong>YYYY/MM/DD</strong>, <strong>MM/DD/YYYY</strong>, <strong>DD/MM/YYYY</strong>)</td>
</tr>
<tr>
<td><strong>Time Type</strong></td>
<td>Set the time format. (<strong>12 Hr</strong>, <strong>24 Hr</strong>)</td>
</tr>
</tbody>
</table>

---

### File No.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Specify how to name files.** | - **Reset**: Set the file number to start from 0001 when you insert a new memory card, format a memory card, or delete all files.  
- **Series**: Set the file number to resume from the previous file number when you insert a new memory card, format a memory card, or delete all files.  |

- The default name of the first folder is 100PHOTO and the default name of the first file is SAM_0001.  
- The file number increases by one, from SAM_0001 to SAM_9999, each time you take a picture.  
- The folder number increases by one, from 100PHOTO to 999PHOTO, each time a folder is full.  
- The maximum number of files that can be stored in one folder is 9,999.  
- The camera defines file names according to the Design rule for Camera File system (DCF) standard. If you intentionally change file names, the camera may not play back the files.  

---

---
### Settings menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imprint</strong></td>
<td>Set whether or not to display the date and time on captured photos. <em>(Off</em>, <strong>Date</strong>, <strong>Date &amp; Time)</strong>&lt;br&gt;  • The date and time will be displayed on the bottom right corner of the photo.&lt;br&gt;  • Some printer models may not print the date and time properly.&lt;br&gt;  • The photo will not display the date and time if:&lt;br&gt;    - you select <strong>Text</strong> in Scene mode&lt;br&gt;    - you select Live Panorama, Motion Photo mode</td>
</tr>
<tr>
<td><strong>Auto Power Off</strong></td>
<td>Set the camera to automatically turn off when you perform no operations for a specified period. <em>(Off, 1 min, 3 min</em>, 5 min, 10 min)*&lt;br&gt;  • Your settings will not change when you replace the battery.&lt;br&gt;  • The camera will not automatically turn off when the camera is connected to a computer or WLAN, and while you are playing a slide show or videos.</td>
</tr>
</tbody>
</table>
Appendixes
Get information about error messages, specifications, and maintenance.

Error messages ............................................. 128
Camera maintenance ................................. 129
   Cleaning your camera ................................ 129
   Using or storing the camera ....................... 130
   About memory cards ................................. 131
   About the battery ................................... 134
Before contacting a service center ............. 138
Camera specifications ............................... 141
Glossary .................................................. 145
Index ..................................................... 150
## Error messages

When the following error messages appear, try these remedies.

<table>
<thead>
<tr>
<th>Error message</th>
<th>Suggested remedies</th>
</tr>
</thead>
</table>
| **Card Error**      | • Turn off your camera, and then turn it on again.  
                        • Remove your memory card, and then insert it again.  
                        • Format your memory card.                                      |
| **Card not supported.** | The inserted memory card is not supported by your camera. Insert a microSD, microSDHC, or microSDXC memory card. |
| **Connection failed.** | • The camera cannot connect to the network using the selected access point. Select another AP and try again.  
                                • The camera has failed to connect to the other devices. Try connecting again. |
| **DCF Full Error**  | File names do not match the DCF standard. Transfer the files from the memory card to your computer and format the card. Then, open the Settings menu and select **General → File No. → Reset.** (p. 125) |
| **Device disconnected.** | Network connection disconnected while transferring photos. Reselect a device that supports AllShare Play. |
| **File Error**      | Delete the damaged file or contact a service center.                            |
| **File system not supported.** | Your camera does not support the FAT file structure of the inserted memory card. Format the memory card on the camera. |
| **Initialization failed.** | The camera has failed to locate a device that supports AllShare Play. Turn on devices on the network that support AllShare Play. |
| **Invalid password.** | The password for transferring files to another camera is wrong. Enter the correct password again. |
| **Low Battery**     | Insert a charged battery or recharge the battery.                              |
| **Memory Full**     | Delete unnecessary files or insert a new memory card.                           |
| **No Image File**   | Capture photos or insert a memory card that contains some photos.              |
| **Photo transfer failed.** | Network connection disconnected while transferring photos. Try restarting the AllShare Play feature. |
| **Transfer failed.** | • The camera has failed to send a photo to the other devices. Try sending again.  
                                • The camera has failed to send an email or transfer a photo to a device that supports AllShare Play. Check the network connection and try again. |
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 lens cleaning paper and wipe gently.

**Camera body**

Wipe gently with a soft, dry cloth.

• *Never use benzene, thinners, or alcohol to clean the device. These solutions can damage the camera or cause it to malfunction.*
• *Do not press on the lens cover or use a blower brush on the lens cover.*
Using or storing the camera

Inappropriate places to use or store the camera

- Avoid exposing the camera to very cold or very hot temperatures.
- Avoid using your camera in areas with extremely high humidity, or where the humidity changes drastically.
- Avoid exposing the camera to direct sunlight and storing it in hot, poorly-ventilated areas, such as in a car during summer time.
- Protect your camera and the display from impact, rough handling, and excessive vibration to avoid serious damage.
- Avoid using or storing your camera in dusty, dirty, humid, or poorly-ventilated areas to prevent damage to moving parts and internal components.
- 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.
- Do not store the camera where there are mothballs.

Using on beaches or shores

- Protect your camera from sand and dirt when you use it on beaches or in similar areas.
- Your camera is not waterproof. Do not handle the battery, adapter, or memory card with wet hands. Operating the camera with wet hands may cause damage to your camera.

Storing for extended period of time

- When you store the camera for an extended period, place it in a sealed container with an absorbent material, such as silica gel.
- Over time, unused batteries will discharge and must be recharged before use.
- You must reset the date and time when you turn the camera on after the camera and battery have been separated for a prolonged period.

Using the camera with caution in humid environments

When you transfer the camera from a cold environment to a warm one, condensation can form on the lens or internal components of the camera. In this situation, turn off the camera and wait for at least 1 hour. If condensation forms on the memory card, remove the memory card from the camera and wait until all moisture has evaporated before reinserting it.

Other cautions

- Do not swing your camera by the strap. This may cause injury to yourself or others or damage to your camera.
- Do not paint your camera, as paint can clog moving parts and prevent proper operation.
- Turn off the camera when not using it.
- Your camera contains delicate parts. Avoid impacts to the camera.
• Protect the display from external force by keeping it in the case when not in use. Protect the camera from scratches by keeping it away from sand, sharp implements, or loose change.
• Do not use the camera if the screen is cracked or broken. Broken glass or acrylic could cause injury to your hands and face. Take the camera to a Samsung service center to have it repaired.
• Never place cameras, batteries, chargers, or accessories near, on, or in heating devices, such as microwave ovens, stoves, or radiators. These devices may be deformed and can overheat and cause a fire or explosion.
• Do not expose the lens to direct sunlight, as this may discolor the image sensor or cause it to malfunction.
• Protect the lens from fingerprints and scratches. Clean the lens with a soft, clean, debris-free lens cloth.
• The camera may turn off if struck or dropped. This is to protect the memory card. Turn on the camera to use it again.
• While you use the camera, it may heat up. This is normal and should not affect your camera's lifespan or performance.
• When you use the camera in low temperatures, it may take some time to turn on, the color of the display may be changed temporarily, or after-images may appear. These conditions are not malfunctions and they will correct themselves when the camera is returned to milder temperatures.

About memory cards

Your camera supports microSD (Secure Digital), microSDHC (Secure Digital High Capacity), or microSDXC (Secure Digital eXtended Capacity) memory cards.

To read data with a PC or memory card reader, insert the memory card into a memory card adapter.
The memory capacity may differ depending on the scenes you shoot or shooting conditions. These capacities are based on a 2 GB microSD card:

### Photo

<table>
<thead>
<tr>
<th>Size</th>
<th>Super Fine</th>
<th>Fine</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>16M</td>
<td>218</td>
<td>430</td>
<td>637</td>
</tr>
<tr>
<td>14M</td>
<td>244</td>
<td>481</td>
<td>711</td>
</tr>
<tr>
<td>12M</td>
<td>287</td>
<td>564</td>
<td>832</td>
</tr>
<tr>
<td>10M</td>
<td>340</td>
<td>666</td>
<td>979</td>
</tr>
<tr>
<td>5M</td>
<td>634</td>
<td>1222</td>
<td>1768</td>
</tr>
<tr>
<td>3M</td>
<td>1000</td>
<td>1887</td>
<td>2678</td>
</tr>
<tr>
<td>2M</td>
<td>1322</td>
<td>2448</td>
<td>3419</td>
</tr>
<tr>
<td>1M</td>
<td>2495</td>
<td>4336</td>
<td>5750</td>
</tr>
</tbody>
</table>

### Video

<table>
<thead>
<tr>
<th>Size</th>
<th>30fps</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD 1280 X 720</td>
<td>Approx. 26' 20&quot;</td>
</tr>
<tr>
<td>VGA 640 X 480</td>
<td>Approx. 46' 55&quot;</td>
</tr>
<tr>
<td>QVGA 320 X 240</td>
<td>Approx. 261' 11&quot;</td>
</tr>
</tbody>
</table>

The figures above are measured without using the zoom function. Available recording time may vary if you use the zoom. Several videos were recorded in succession to determine the total recording time.
Cautions when using memory cards

- Avoid exposing memory cards to very cold or very hot temperatures (below 0 °C/32 °F or above 40 °C/104 °F). Extreme temperatures can cause memory cards to malfunction.
- Insert a memory card in the correct direction. Inserting a memory card in the wrong direction may damage your camera and memory card.
- Do not use memory cards that have been formatted by other cameras or by a computer. Reformat the memory card with your camera.
- Turn off the camera before you insert or remove the memory card.
- Do not remove the memory card or turn off your camera while the lamp is blinking, as this may damage your data.
- When the lifespan of a memory card has expired, you cannot store any more photos on the card. Use a new memory card.
- Do not bend, drop, or subject memory cards to heavy impact or pressure.
- Avoid using or storing memory cards near strong magnetic fields.
- Avoid using or keeping memory cards in areas with high temperatures, high humidity, or corrosive substances.

- Prevent memory cards from making contact with liquids, dirt, or foreign substances. If dirty, wipe the memory card clean with a soft cloth before you insert the memory card into your camera.
- Do not allow liquids, dirt, or foreign substances to come in contact with memory cards or the memory card slot. Doing so may cause memory cards or the camera to malfunction.
- When you carry a memory card, use a case to protect the card from electrostatic discharges.
- Transfer important data to other media, such as a hard disk, CD, or DVD.
- When you use the camera for an extended period, the memory card may become warm. This is normal and does not indicate a malfunction.

⚠️ The manufacturer is not responsible for any loss of data.
About the battery
Use only Samsung-approved batteries.

Battery specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>BP70A</td>
</tr>
<tr>
<td>Type</td>
<td>Lithium-ion battery</td>
</tr>
<tr>
<td>Cell capacity</td>
<td>700 mAh</td>
</tr>
<tr>
<td>Voltage</td>
<td>3.7 V</td>
</tr>
<tr>
<td>Charging time* (when the camera is switched off)</td>
<td>Approximately 160 min</td>
</tr>
</tbody>
</table>

* Charging the battery by connecting it to a computer may take longer.

Battery life

<table>
<thead>
<tr>
<th>Average shooting time/Number of photos</th>
<th>Test conditions (when the battery is fully charged)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photos</td>
<td>The battery life was measured under the following conditions: in Program mode, in darkness, <strong>Fine</strong> resolution, Fine quality, DIS on.</td>
</tr>
<tr>
<td></td>
<td>1. Set the flash option to <strong>Fill in</strong>, take a single shot, and zoom in or out.</td>
</tr>
<tr>
<td></td>
<td>2. Set the flash option to <strong>Off</strong>, take a single shot, and zoom in or out.</td>
</tr>
<tr>
<td></td>
<td>3. Perform steps 1 and 2, waiting 30 seconds between each step. Repeat the process for 5 minutes, and then turn off the camera for 1 minute.</td>
</tr>
<tr>
<td></td>
<td>4. Repeat steps 1 to 3.</td>
</tr>
<tr>
<td>Videos</td>
<td>The figures above are measured by Samsung's standards. Your results may differ, depending on your actual usage.</td>
</tr>
<tr>
<td></td>
<td>Several videos were recorded in succession to determine the total recording time.</td>
</tr>
<tr>
<td></td>
<td>When using network functions, the battery will be depleted more quickly.</td>
</tr>
</tbody>
</table>

| Approximately 125 min/Approximately 250 photos | \[Record videos at **Hi** resolution and 30 FPS.\]                                                                 |
Camera maintenance

**Low battery message**
When the battery has fully discharged, the battery icon will turn red and the “Low Battery” message will appear.

**Notes about using the battery**
- Avoid exposing batteries to very cold or very hot temperatures (below 0 °C/32 °F or above 40 °C/104 °F). Extreme temperatures can reduce the charging capacity of your batteries.
- When you use the camera for an extended period, the area around the battery chamber may become warm. This does not affect the normal use of the camera.
- Do not pull the power supply cord to disconnect the plug from the power outlet, as this may cause a fire or electric shock.
- In temperatures below 0 °C/32 °F, battery capacity and battery life may decrease.
- Battery capacity may decrease in low temperatures, but will return to normal in milder temperatures.
- Remove the batteries from your camera when storing it for an extended period. Installed batteries may leak or corrode over time and cause serious damage to your camera. Storing the camera for extended periods with the battery installed causes the battery to discharge. You may not be able to recharge a fully discharged battery.
- When you do not use the camera for an extended period (3 months or more), check the battery and recharge it regularly. If you let the battery discharge continually, its capacity and life may decrease, which can lead to a malfunction, fire, or explosion.

**Cautions about using the battery**
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 and may cause a fire or electric shock.

**Notes about charging the battery**
- If the status lamp is off, make sure that the battery is inserted correctly.
- If the camera is on while charging, the battery may not fully charge. Turn off the camera before charging the battery.
- Do not use your camera when you are charging the battery. This may cause a fire or electric shock.
- Do not pull the power supply cord to disconnect the plug from the power outlet, as this may cause a fire or electric shock.
- Let the battery charge for at least 10 minutes before turning on the camera.
- If you connect the camera to an external power source when the battery is depleted, using high energy-consuming functions will cause the camera to turn off. To use the camera normally, recharge the battery.
Camera maintenance

- If you reconnect the power cable when the battery is fully charged, the status lamp turns on for approximately 30 minutes.
- Using the flash or recording videos depletes the battery quickly. Charge the battery until the red status lamp turns off.
- If the status lamp blinks in red, reconnect the cable, or remove the battery and insert it again.
- If you charge the battery when the cable is overheated or the temperature is too high, the status lamp may blink in red. Charging will start when the battery cools down.
- Overcharging batteries may shorten battery life. After charging is finished, disconnect the cable from your camera.
- Do not bend or place heavy objects on the AC cable. Doing so may damage the cable.

Notes about charging with a computer connected
- Use only the provided USB cable.
- The battery may not charge 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)

Handle and dispose of batteries and chargers with care
- Never dispose of batteries in a fire. Follow all local regulations when you dispose of used batteries.
- Never place batteries or cameras on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when they are overheated.
Personal injury or death can occur if the battery is handled carelessly or improperly. For your safety, follow these instructions for proper battery handling:

- The battery can ignite or explode if not handled properly. If you notice any deformities, cracks, or other abnormalities in the battery, immediately discontinue use of the battery and contact a service center.
- Use only authentic, manufacturer-recommend battery chargers and adapters and charge the battery only by the methods described in this user manual.
- Do not place the battery near heating devices or expose it to excessively warm environments, such as the inside of an enclosed car in the summertime.
- Do not place the battery in a microwave oven.
- Avoid storing or using the battery in hot, humid places, such as spas or shower enclosures.
- Do not rest the device on flammable surfaces, such as bedding, carpets, or electric blankets for a prolonged period.
- When the device is switched on, do not leave it in any confined space for a prolonged period.
- Do not allow battery terminals to come in contact with metallic objects, such as necklaces, coins, keys, or watches.
- Use only authentic, manufacturer-recommended, Lithium-ion replacement batteries.

- Do not disassemble the battery or puncture it with any sharp object.
- Avoid exposing the battery to high pressure or crushing forces.
- Avoid exposing the battery to major impacts, such as dropping it from high places.
- Do not expose the battery to temperatures of 60 °C (140 °F) or above.
- Do not allow the battery to come in contact with moisture or liquids.
- Do not expose the battery to sources of excessive heat such as sunshine, fire or the like.

Disposal guidelines
- Dispose of the battery with care.
- Do not dispose of the battery in a fire.
- Disposal regulations may differ by country or region. Dispose of the battery in accordance with all local and federal regulations.

Guidelines for charging the battery
Charge the battery only by the methods described in this user manual. The battery can ignite or explode if not charged properly.
# Before contacting a service center

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

> When you leave your camera at a service center, be sure to also leave the other components that may have contributed to the malfunction, such as the memory card and battery.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Suggested remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cannot turn on the camera</strong></td>
<td>• Ensure that the battery is inserted.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that the battery is inserted correctly. (p. 23)</td>
</tr>
<tr>
<td></td>
<td>• Charge the battery.</td>
</tr>
<tr>
<td><strong>The power turns off suddenly</strong></td>
<td>• Charge the battery.</td>
</tr>
<tr>
<td></td>
<td>• Your camera may be in Auto Power Off mode. (p. 126)</td>
</tr>
<tr>
<td></td>
<td>• The camera may turn off to prevent the memory card from being damaged due to an impact. Turn on your camera again.</td>
</tr>
<tr>
<td><strong>The camera is losing battery power quickly</strong></td>
<td>• The battery may lose power more quickly in low temperatures (below 0 °C/32 °F). Keep the battery warm by putting it into your pocket.</td>
</tr>
<tr>
<td></td>
<td>• Using the flash or recording videos depletes the battery quickly. Recharge if needed.</td>
</tr>
<tr>
<td></td>
<td>• Batteries are consumable parts that must be replaced over time. Get a new battery if the battery life is diminishing quickly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Situation</th>
<th>Suggested remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cannot capture photos</strong></td>
<td>• There is no space on the memory card. Delete unnecessary files or insert a new card.</td>
</tr>
<tr>
<td><strong>The camera freezes</strong></td>
<td>• Format the memory card.</td>
</tr>
<tr>
<td><strong>The camera heats up</strong></td>
<td>• The memory card is defective. Get a new memory card.</td>
</tr>
<tr>
<td><strong>The flash does not work</strong></td>
<td>• Make sure that the camera is switched on.</td>
</tr>
<tr>
<td><strong>Make sure that the battery is inserted correctly.</strong></td>
<td>• Charge the battery.</td>
</tr>
<tr>
<td><strong>Remove the battery and insert it again.</strong></td>
<td>• Make sure that the battery is inserted correctly.</td>
</tr>
<tr>
<td><strong>While you use the camera, it may heat up. This is normal and should not affect your camera's lifespan or performance.</strong></td>
<td><strong>The flash does not work</strong></td>
</tr>
<tr>
<td><strong>You cannot use the flash in some modes.</strong></td>
<td><strong>Appendixes 138</strong></td>
</tr>
<tr>
<td>Situation</td>
<td>Suggested remedies</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The flash fires unexpectedly</td>
<td>The flash may fire due to static electricity. The camera is not malfunctioning.</td>
</tr>
<tr>
<td>The date and time are incorrect</td>
<td>Set the date and time in the display settings. (p. 125)</td>
</tr>
<tr>
<td>The display or buttons do not work</td>
<td>Remove the battery, and then insert it again.</td>
</tr>
<tr>
<td>The camera display responds poorly</td>
<td>If you use your camera at very low temperatures, it may cause the camera screen to malfunction or discolor. For better performance of your camera screen, use your camera in moderate temperatures.</td>
</tr>
<tr>
<td>The memory card has an error</td>
<td>• Turn off your camera, and then turn it on again.</td>
</tr>
<tr>
<td></td>
<td>• Remove your memory card, and then insert it again.</td>
</tr>
<tr>
<td></td>
<td>• Format your memory card. See &quot;Cautions when using memory cards&quot; for more detail. (p. 133)</td>
</tr>
<tr>
<td>Cannot play back files</td>
<td>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 the files on your computer.</td>
</tr>
<tr>
<td>The photo is blurry</td>
<td>• Make sure that the focus option you set is suitable for close-up shots. (p. 64)</td>
</tr>
<tr>
<td></td>
<td>• Make sure that the lens is clean. If not, clean the lens. (p. 129)</td>
</tr>
<tr>
<td></td>
<td>• Make sure that the subject is within range of the flash. (p. 142)</td>
</tr>
<tr>
<td>The colors in the photo do not match</td>
<td>An incorrect White Balance can create unrealistic color. Select the proper White Balance option to suit the light source. (p. 71)</td>
</tr>
<tr>
<td>the actual scene</td>
<td>Your photo is overexposed.</td>
</tr>
<tr>
<td></td>
<td>• Turn off the flash. (p. 61)</td>
</tr>
<tr>
<td></td>
<td>• Adjust the ISO sensitivity. (p. 63)</td>
</tr>
<tr>
<td></td>
<td>• Adjust the exposure value. (p. 69)</td>
</tr>
<tr>
<td>The photo is too dark</td>
<td>Your photo is underexposed.</td>
</tr>
<tr>
<td></td>
<td>• Turn on the flash. (p. 61)</td>
</tr>
<tr>
<td></td>
<td>• Adjust the ISO sensitivity. (p. 63)</td>
</tr>
<tr>
<td></td>
<td>• Adjust the exposure value. (p. 69)</td>
</tr>
</tbody>
</table>
Before contacting a service center

<table>
<thead>
<tr>
<th>Situation</th>
<th>Suggested remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>The TV does not display your photos</td>
<td>• Make sure that the camera is correctly connected to the TV with the A/V cable.</td>
</tr>
<tr>
<td></td>
<td>• Make sure that your memory card contains photos.</td>
</tr>
<tr>
<td>Your computer does not recognize your camera</td>
<td>• Make sure that the USB cable is connected correctly.</td>
</tr>
<tr>
<td></td>
<td>• Make sure that your camera is switched on.</td>
</tr>
<tr>
<td></td>
<td>• Make sure that you are using a supported operating system.</td>
</tr>
<tr>
<td>Your computer disconnects the camera while transferring files</td>
<td>The file transmission may be interrupted by static electricity. Disconnect the USB cable and connect it again.</td>
</tr>
<tr>
<td>Your computer cannot play videos</td>
<td>Videos may not play on some video player programs.</td>
</tr>
<tr>
<td></td>
<td>To play video files captured with your camera, use the Multimedia Viewer program that you can install with the i-Launcher program on your computer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Situation</th>
<th>Suggested remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-Launcher is not functioning properly</td>
<td>• End i-Launcher and restart the program.</td>
</tr>
<tr>
<td></td>
<td>• Make sure that i-Launcher is set to On in the settings menu. (p. 124)</td>
</tr>
<tr>
<td></td>
<td>• Depending on your Windows computer's specifications and environment, the program may not launch automatically. In this case, click Start → All Programs → Samsung → i-Launcher → Samsung i-Launcher on your computer. (For Windows 8, click Start → All apps → Samsung i-Launcher.) Or, click Applications → Samsung → i-Launcher on your Mac OS computer.</td>
</tr>
<tr>
<td>Your TV or computer cannot display photos and videos that are stored on a microSDXC memory card.</td>
<td>microSDXC memory cards use the exFAT file system. Ensure that the external device is compatible with the exFAT file system before connecting the camera to the device.</td>
</tr>
<tr>
<td>Your computer does not recognize a microSDXC memory card.</td>
<td>microSDXC memory cards use the exFAT file system. To use microSDXC memory cards on a Windows XP computer, download and update the exFAT file system driver from the Microsoft website.</td>
</tr>
</tbody>
</table>
# Camera specifications

**Image sensor**

<table>
<thead>
<tr>
<th>Type</th>
<th>1/2.3&quot; (Approximately 7.76 mm) CCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective pixels</td>
<td>Approximately 16.2 mega-pixels</td>
</tr>
<tr>
<td>Total pixels</td>
<td>Approximately 16.5 mega-pixels</td>
</tr>
</tbody>
</table>

**Lens**

<table>
<thead>
<tr>
<th>Focal length</th>
<th>Samsung Lens f = 4.5–22.5 mm (35 mm film equivalent: 25–125 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-stop range</td>
<td>F2.5 (W)–F6.3 (T)</td>
</tr>
</tbody>
</table>
| Zoom                  | • Still image mode: 1.0–5.0X (Optical zoom X Digital zoom: 25.0X, Optical zoom X Intelli zoom: 10.0X)  
                        • Playback mode: 1.0–14.4X (depending on image size) |

**Display**

<table>
<thead>
<tr>
<th>Type</th>
<th>TFT LCD</th>
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<tr>
<td>Feature</td>
<td>3.0&quot; (75.0 mm) 230K</td>
</tr>
</tbody>
</table>

**Focusing**

| Type                  | TTL auto focus (Center AF, Multi AF, Tracking AF, Face Detection AF) |

## Range

<table>
<thead>
<tr>
<th>Normal (AF)</th>
<th>31 in. (80 cm)–infinity</th>
<th>98 in. (250 cm)–infinity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro</td>
<td>2–31 in. (5–80 cm)</td>
<td>39–98 in. (100–250 cm)</td>
</tr>
<tr>
<td>Auto Macro</td>
<td>2 in. (5 cm)–infinity</td>
<td>39 in. (100 cm)–infinity</td>
</tr>
</tbody>
</table>

## Shutter speed

- Auto: 1/8–1/2,000 sec.
- Program: 1–1/2,000 sec.
- Night: 16–1/2,000 sec.
- Fireworks: 2 sec.

## Exposure

<table>
<thead>
<tr>
<th>Control</th>
<th>Program AE</th>
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<tr>
<td>Metering</td>
<td>Multi, Spot, Center-weighted, Face Detection</td>
</tr>
<tr>
<td>Compensation</td>
<td>± 2EV (1/3 EV Step)</td>
</tr>
<tr>
<td>ISO equivalent</td>
<td>Auto, ISO 80, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200</td>
</tr>
</tbody>
</table>
## Camera Specifications

### Flash

<table>
<thead>
<tr>
<th>Mode</th>
<th>Off, Smart Auto, Auto, Red-eye, Fill in, Slow Sync, Red-eye Fix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>• Wide: 8-157 in. (0.2-4.0 m) (ISO Auto) &lt;br&gt;• Tele: 20–63 in. (0.5–1.6 m) (ISO Auto)</td>
</tr>
<tr>
<td>Recharging time</td>
<td>Approximately 5 sec.</td>
</tr>
</tbody>
</table>

### Shake Reduction

Digital Image Stabilization (DIS) Effect

- Photo Shooting mode
  - Photo Filter (Smart Filter): Miniature, Vignetting, Ink Painting, Oil Painting, Cartoon, Cross Filter, Sketch, Soft Focus, Fish-eye, Old Film, Half Tone Dot, Classic, Retro, Zooming Shot
  - Image Adjust: Sharpness, Contrast, Saturation

- Video Shooting mode
  - Movie Filter (Smart Filter): Miniature, Vignetting, Half Tone Dot, Sketch, Fish-eye, Classic, Retro, Palette Effect 1, Palette Effect 2, Palette Effect 3, Palette Effect 4

### White Balance

Auto WB, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom Set

### Date Imprinting

Date & Time, Date, Off

### Shooting

#### Photos

- Modes: Smart Auto (Portrait, Night Portrait, Backlight Portrait, Night, Backlight, Landscape, White, Natural Green, Blue Sky, Sunset, Macro, Macro text, Macro Color, Tripod, Action, Fireworks, Candle, Spotlight, Spotlight (Macro), Spotlight (Portrait)), Program, Scene (Landscape, Sunset, Dawn, Backlight, Beach & Snow, Text), Live Panorama, Beauty Shot, Night Shot, Close-up Shot, Magic Frame, Photo Filter, Split Shot, Motion Photo
- Burst: Single, Continuous, Motion Capture, AEB
- Timer: Off, 10 Sec, 2 Sec, Double (10 Sec, 2 Sec)

#### Videos

- Modes: Smart Movie (Landscape, Blue Sky, Natural Green, Sunset), Movie, Movie Filter
- Format: MP4 (H.264) (Max recording time: 20 min)
- Size: 1280 X 720, 640 X 480, 320 X 240, For Sharing (ST150F/ST151F/ST152F only)
- Frame Rate: 30 fps
- Sound Alive: Sound Alive On, Sound Alive Off, Mute
- Video editing (embedded): Pause during recording
Camera specifications

Playback

Photos
- Type: Single image, Thumbnails, Multi Slide Show with Music and Effect, Movie clip
- Edit: Resize, Rotate, Smart Filter, Crop
- Effect: Image Adjust (Brightness, Contrast, Saturation, ACB, Face Retouch, Red-eye Fix), Smart Filter (Normal, Miniature, Vignetting, Ink Painting, Oil Painting, Cartoon, Cross Filter, Sketch, Soft Focus, Fish-eye, Old Film, Half Tone Dot, Classic, Retro, Zooming Shot)

Videos
- Edit: Still image capture, Time trimming

Storage

Media
- Internal memory: Approximately 9.5 MB
- External memory (Optional): microSD card (2 GB guaranteed), microSDHC card (up to 32 GB guaranteed), microSDXC card (up to 64 GB guaranteed)
Internal memory capacity may not match these specifications.

File format
- Still Image: JPEG (DCF), EXIF 2.21, GIF

Wireless network (ST150F/ST151F/ST152F only)
MobileLink, Remote Viewfinder, Auto Backup, Email, SNS & Cloud, AllShare Play, AutoShare, Wi-Fi Direct, S/W Upgrade Notifier

Image size

<table>
<thead>
<tr>
<th>Icon</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>16M</td>
<td>4608 X 3456</td>
</tr>
<tr>
<td>14MP</td>
<td>4608 X 3072</td>
</tr>
<tr>
<td>12M</td>
<td>4608 X 2592</td>
</tr>
<tr>
<td>10M</td>
<td>3648 X 2736</td>
</tr>
<tr>
<td>5M</td>
<td>2592 X 1944</td>
</tr>
<tr>
<td>3M</td>
<td>1984 X 1488</td>
</tr>
<tr>
<td>2M</td>
<td>1920 X 1080</td>
</tr>
<tr>
<td>1M</td>
<td>1024 X 768</td>
</tr>
</tbody>
</table>
## Interface

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital output connector</td>
<td>USB 2.0</td>
</tr>
<tr>
<td>Audio input/output</td>
<td>Internal speaker (Mono), Microphone (Mono)</td>
</tr>
<tr>
<td>Video output</td>
<td>A/V: NTSC, PAL (selectable)</td>
</tr>
<tr>
<td>DC power input connector</td>
<td>5.0 V</td>
</tr>
</tbody>
</table>

## Power source

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rechargeable battery</td>
<td>Lithium-ion battery (BP70A, 700 mAh)</td>
</tr>
<tr>
<td>Connector type</td>
<td>Micro USB (5 pin)</td>
</tr>
</tbody>
</table>

The power source may differ depending on your region.

## Dimensions (W X H X D)

3.7X2.3X0.7 in. (94.4 X 57.95 X 17.7 mm) (without protrusions)

## Weight

- ST150F/ST151F/ST152F: 4 oz. (112 g) (without battery and memory card)
- ST72/ST73: 3.8 oz. (108 g) (without battery and memory card)

## Operating Temperature

0–40 °C (32–104 °F)

## Operating Humidity

5–85 %

## Software

i-Launcher

Specifications may change without notice to improve performance.
**Glossary**

**ACB (Auto Contrast Balance)**
This feature automatically improves the contrast of your images when the subject is backlit or when there is a high contrast between your subject and the background.

**AEB (Auto Exposure Bracket)**
This feature automatically captures several images at different exposures to help you capture a properly-exposed image.

**AF (Auto Focus)**
A system that automatically focuses the camera lens on the subject. Your camera uses the contrast to focus automatically.

**Aperture**
The aperture controls the amount of light that reaches the camera's sensor.

**Camera shake (Blur)**
If the camera is moved while the shutter is open, the entire image may appear blurred. This occurs more often when the shutter speed is slow. Prevent camera shake by raising the sensitivity, using the flash, or using a faster shutter speed. Alternately, use a tripod, the DIS or OIS function to stabilize the camera.

**Composition**
Composition in photography means arranging objects in a photo. Usually, abiding by the rule of thirds leads to a good composition.

**DCF (Design rule for Camera File system)**
A specification to define a file format and file system for digital cameras created by the Japan Electronics and Information Technology Industries Association (JEITA).

**Depth of field**
The distance between the nearest and farthest points that can be acceptably focused in a photograph. Depth of field varies with lens aperture, focal length, and distance from the camera to the subject. Selecting a smaller aperture, for example, will increase the depth of field and blur the background of a composition.

**Digital zoom**
A feature that artificially increases the amount of zoom available with a zoom lens (Optical zoom). When using the Digital zoom, the image quality will deteriorate as the magnification increases.
**Glossary**

**DIS (Digital Image Stabilization)**
This feature compensates in real-time for shaking and vibrating while shooting. There can be a certain amount of image degradation compare to Optical Image Stabilization.

**EV (Exposure Value)**
All the combinations of the camera's shutter speed and lens aperture that result in the same exposure.

**EV Compensation**
This feature allows you to quickly adjust the exposure value measured by the camera, in limited increments, to improve the exposure of your photos. Set the EV compensation to -1.0 EV to adjust the value one step darker and 1.0 EV to one step brighter.

**Exif (Exchangeable Image File Format)**
A specification to define an image file format for digital cameras created by the Japan Electronic Industries Development Association (JEIDA).

**Exposure**
The amount of light allowed to reach the camera's sensor. Exposure is controlled by a combination of the shutter speed, the aperture value, and ISO sensitivity.

**Flash**
A speed light that helps to create adequate exposure in low-light conditions.

**Focal length**
The distance from the middle of the lens to its focal point (in millimeters). Longer focal lengths result in narrower angles of view and the subject is magnified. Shorter focal lengths result in wider angles of view.

**H.264/MPEG-4**
A high-compression video format established by international standard organizations ISO-IEC and ITU-T and developed by the Joint Video Team (JVT). This codec is capable of providing good video quality at low bit rates.

**Image sensor**
The physical part of a digital camera that contains a photosite for each pixel in the image. Each photosite records the brightness of the light that strikes it during an exposure. Common sensor types are CCD (Charge-coupled Device) and CMOS (Complementary Metal Oxide Semiconductor).
ISO sensitivity
The sensitivity of the camera to light, based on the equivalent film speed used in a film camera. At higher ISO sensitivity settings, the camera uses a higher shutter speed, which can reduce blur caused by camera shake and low light. However, images with high sensitivity are more susceptible to noise.

JPEG (Joint Photographic Experts Group)
A lossy method of compression for digital images. JPEG images are compressed to reduce their overall file size with minimal deterioration of the image resolution.

LCD (Liquid Crystal Display)
A visual display commonly used in consumer electronics. This display needs a separate backlight, such as CCFL or LED, to reproduce colors.

Macro
This feature allows you to capture close-up photos of very small objects. When using the macro feature, the camera can maintain a sharp focus on small objects at a near life-size ratio (1:1).

Metering
The metering refers to the way in which the camera measures the quantity of light to set the exposure.

MJPEG (Motion JPEG)
A video format which is compressed as a JPEG image.

Noise
Misinterpreted pixels in a digital image that may appear as misplaced or random, bright pixels. Noise usually occurs when photos are shot with a high sensitivity or when a sensitivity is automatically set in a dark place.

Optical zoom
This is a general zoom which can enlarge images with a lens and does not degrade the quality of images.

Quality
An expression of the rate of compression used in a digital image. Higher quality images have a lower rate of compression, which usually results in a larger file size.

Resolution
The number of pixels present in a digital image. High resolution images contain more pixels and typically show more detail than low resolution images.
Glossary

**Shutter speed**
Shutter speed refers to the amount of time it takes to open and close the shutter, and it is an important factor in the brightness of a photo, as it controls the amount of light which passes through the aperture before it reaches the image sensor. A fast shutter speed allows less time to let light in and the photo becomes darker and more easily freezes subjects in motion.

**Vignetting**
A reduction of an image's brightness or saturation at the periphery (outer edges) compared to the center of the image. Vignetting can draw interest to subjects positioned in the center of an image.

**White balance (color balance)**
An adjustment of the intensities of colors (typically the primary colors red, green, and blue), in an image. The goal of adjusting the white balance, or color balance, is to correctly render the colors in an image.
Correct Disposal of This Product  
(Waste Electrical & Electronic Equipment)  
(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them 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 these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product  
(Applicable in countries with separate collection 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.
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Please refer to the warranty that came with your product or visit our website www.samsung.com for after-sales service or inquiries.