About this manual

• Please read this manual before using the device to ensure safe and proper use.
• Descriptions are based on the device’s default settings.
• Images and screenshots may differ in appearance from the actual product.
• Content may differ from your device depending on the software version and is subject to change without prior notice. For the latest version of the manual, refer to the Samsung website, www.samsung.com.
• Content (high quality content) that requires high CPU and RAM usage will affect the overall performance of the device.
• Available features and additional services may vary by device or software.
• Applications and their functions may vary by country, region, or hardware specifications. Samsung is not liable for performance issues caused by applications from any provider other than Samsung.
• Samsung is not liable for performance issues or incompatibilities caused by edited registry settings or modified operating system software. Attempting to customise the operating system may cause the device or applications to work improperly.
• Software, sound sources, wallpapers, images, and other media provided with this device are licensed for limited use. Extracting and using these materials for commercial or other purposes is an infringement of copyright laws. Users are entirely responsible for illegal use of media.
• Default applications that come with the device are subject to updates and may no longer be supported without prior notice. If you have questions about an application provided with the device, contact a Samsung Service Centre. For user-installed applications, contact service providers.
• Modifying the device’s operating system or installing softwares from unofficial sources may result in device malfunctions and data corruption or loss. These actions are violations of your Samsung licence agreement and will void your warranty.
• We recommend using your device within the country where you purchased it.
• Use this device responsibly and adhere to all laws and regulations concerning its use.
Instructional icons

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

⚠️ **Caution**: situations that could cause damage to your device or other equipment

🔍 **Note**: notes, usage tips, or additional information

Copyright

Copyright © 2014 Samsung Electronics
This guide is protected under international copyright laws.
No part of this guide may be reproduced, distributed, translated, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or storing in any information storage and retrieval system, without the prior written permission of Samsung Electronics.
Trademarks

- SAMSUNG and the SAMSUNG logo are registered trademarks of Samsung Electronics.
- Bluetooth® is a registered trademark of Bluetooth SIG, Inc. worldwide.
- Adobe, the Adobe logo, and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- Wi-Fi®, Wi-Fi Protected Setup™, Wi-Fi Direct™, Wi-Fi CERTIFIED™, and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- HDMI, the HDMI logo, and the term “High Definition Multimedia Interface” are trademarks or registered trademarks of HDMI Licensing LLC.
- All other trademarks and copyrights are the property of their respective owners.

Incompatible applications

Some applications from Android Play Store may not be compatible with the device and may not align correctly with the screen boundary.

PlanetFirst represents Samsung Electronics’ commitment to sustainable development and social responsibility through eco-driven business and management activities.
Health and safety information

Always comply with the following precautions and usage tips to avoid dangerous situations and ensure peak performance of your device. Some content may be not applicable to your device.

⚠️ Warning: situations that could cause injury to yourself or others

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

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

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

Do not handle your device or power supply cord 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) to people or animals. If you use the flash too close to your subject’s eyes, this can cause temporary or permanent eyesight damage.

Do not bite or suck the device or the battery, and keep your device away from small children and pets.
  • Doing so may damage the device or result in an explosion or fire.
  • Children or animals can choke on small parts.
  • If children use the device, make sure that they use the device properly.

Do not expose the device 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 device’s internal components.
Avoid covering the device or charger with blankets or clothes.

- The device may overheat, which may distort the device 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 device, immediately disconnect all power sources, such as the battery or charger, and then contact a Samsung service centre.

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

- Avoid interference with other electronic devices.
- Turn off the device when in an aircraft. Your device can cause interference with aircraft equipment. Follow all airline regulations and turn off your device when directed by airline personnel.
- Turn off the device near medical equipment. Your device 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 device and all pacemakers to avoid potential interference, as recommended by the manufacturer and research groups. If you have any reason to suspect that your device is interfering with a pacemaker or other medical device, turn off the device immediately and contact the manufacturer of the pacemaker or medical device for guidance.

Do not use your device while it is charging.

- This may result in electric shock.

Handle and dispose of the device and charger with care.

- Never dispose of the battery or device in a fire. Never place the battery or device on or in heating devices, such as microwave ovens, stoves, or radiators. The device may explode when overheated. Follow all local regulations when disposing of used battery or device.
- Never crush or puncture the device.
- Avoid exposing the device to high external pressure, which can lead to an internal short circuit and overheating.

Protect the device, battery and charger from damage.

- Never use a damaged charger or battery.
Do not use or store your device in areas with high concentrations of dust or airborne materials.

- Dust or foreign materials can cause your device to malfunction and may result in fire or electric shock.

Prevent the multipurpose jack and the small end of the charger from contact with conductive materials, such as liquids, dust, metal powders, and pencil leads.

- Conductive materials may cause a short circuit or corrosion of the terminals, which may result in an explosion or fire.

Do not insert the device or supplied accessories into the eyes, ears, or mouth.

- Doing so may cause suffocation or serious injuries.

Do not handle a damaged or leaking Lithium Ion (Li-Ion) battery.

- For safe disposal of your Li-Ion battery, contact your nearest authorised service centre.

Do not use your device outdoor during a thunderstorm.

- Doing so may result in electric shock or device malfunction.

Do not use your device in a hospital, on an aircraft, or in an automotive equipment that can be interfered with by radio frequency.

- Avoid using your device within a 15 cm range of a pacemaker, if possible, as your device can interfere with the pacemaker.
- To minimise possible interference with a pacemaker, use your device only on the side of your body that is opposite the pacemaker.
- If you use medical equipment, contact the equipment manufacturer before using your device to determine whether or not the equipment will be affected by radio frequencies emitted by the device.
- On an aircraft, using electronic devices can interfere with the aircraft’s electronic navigational instruments. Make sure the device is turned off during takeoff and landing. After takeoff, you can use the device in flight mode if allowed by aircraft personnel.
- Turn off the device in a hospital and follow all regulations, posted warnings, and directions from medical personnel. Your device can interfere with medical equipment.
- Electronic devices in your car may malfunction, due to radio interference from your device. Contact the manufacturer for more information.
Caution: situations that could cause damage to your device or other equipment

Remove the batteries from your device when storing it for an extended period of time.

- Installed batteries may leak or corrode over time and cause serious damage to your device.

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 generic batteries or chargers may shorten the life of your device or cause the device to malfunction. They may also cause a fire or cause the battery to explode.
- Use only Samsung-approved battery and charger specifically designed for your device. Incompatible battery and charger can cause serious injuries or damage to your device.
- Samsung cannot be responsible for the user’s safety when using accessories or supplies that are not approved by Samsung.

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 charger, turn off the device before you disconnect the power to the 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 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 device to strong impacts.

- Doing so may damage the screen or external or internal components.

Exercise caution when you connect cables 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.

Keep cards with magnetic strips away from the device case.

- Information stored on the card may be damaged or erased.

Never use a damaged battery, or memory card.

- This may result in electric shock or device malfunction or cause a fire.

Do not place the device in or near magnetic fields.

- Your device may malfunction or the battery may discharge from exposure to magnetic fields.

- Magnetic stripe cards, including credit cards, phone cards, passbooks, and boarding passes, may be damaged by magnetic fields.

Do not use the device if the screen is damaged.

- If the glass or acrylic parts are broken, visit a Samsung service centre to have the device repaired.

Check that the device is operating properly before use.

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

You must plug the small end of the USB cable into your device.

- If the cable is reversed, it may damage your files. The manufacturer is not responsible for any loss of data.

Do not expose the lens to direct sunlight.

- This may discolour the image sensor or cause it to malfunction.
If the device overheats, remove the battery and allow it to cool down.

- Prolonged usage of the device may overheat the battery and raise the internal temperature of the device. If the device stops operating, remove the battery and allow it to cool down.
- High internal temperatures may result in noise in your photos. This is normal and does not affect your device's overall performance.

Avoid interference with other electronic devices.

- Your device 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 device in the normal position.

- Avoid contact with your device's internal antenna when the device is turned on.

Do not use your device near other electronic devices.

- Most electronic devices use radio frequency signals. Your device may interfere with other electronic devices.

Do not expose the device to heavy smoke or fumes.

- Doing so may damage the outside of the device or cause it to malfunction.

If you use a hearing aid, contact the manufacturer for information about radio interference.

- The radio frequency emitted by your device may interfere with some hearing aids. Before using your device, contact the manufacturer to determine whether or not your hearing aid will be affected by radio frequencies emitted by the device.

Do not use your device near devices or apparatuses that emit radio frequencies, such as sound systems or radio towers.

- Radio frequencies may cause your device to malfunction.
Turn off the device in potentially explosive environments.

- Turn off your device in potentially explosive environments instead of removing the battery.
- Always comply with regulations, instructions and signs in potentially explosive environments.
- Do not use your device at refuelling points (petrol stations), near fuels or chemicals, or in blasting areas.
- Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the device, its parts, or accessories.

If you notice strange smells or sounds coming from your device or the battery, or if you see smoke or liquids leaking from the device or battery, stop using the device immediately and take it to a Samsung Service Centre.

- Failure to do so may result in fire or explosion.

Comply with all safety warnings and regulations regarding device usage while operating a vehicle.

- While driving, safely operating the vehicle is your first responsibility. Never use your device while driving, if it is prohibited by law.

Keep your device dry.

- Humidity and liquids may damage the parts or electronic circuits in your device.
- Do not turn on your device if it is wet. If your device is already on, turn it off and remove the battery immediately (if the device will not turn off or you cannot remove the battery, leave it as-is). Then, dry the device with a towel and take it to a service centre.
- Liquids will change the colour of the label that indicates water damage inside the device. Water damage to your device can void your manufacturer’s warranty.

Store your device only on flat surfaces.

- If your device falls, it may be damaged.

Do not use your device or applications for a while if the device is overheated.

- Prolonged exposure of your skin to an overheated device may cause low temperature burn symptoms, such as red spots and pigmentation.
Do not use your device with the flap open.

- The battery may fall out of the device, which may result in damage or malfunction.

Use caution when exposed to flashing lights.

- While using your device, leave some lights on in the room and do not hold the screen too close to your eyes.
- Seizures or blackouts can occur when you are exposed to flashing lights while watching videos or playing Flash-based games for extended periods. If you feel any discomfort, stop using the device immediately.
- If anyone related to you has experienced seizures or blackouts while using a similar device, consult a physician before using the device.
- If you feel discomfort, such as a muscle spasm, or disoriented, stop using the device immediately and consult a physician.
- To prevent eye strain, take frequent breaks while using the device.

Reduce the risk of repetitive motion injuries.

- When you repetitively perform actions, such as pressing keys, drawing characters on a touch screen with your fingers, or playing games, you may experience occasional discomfort in your hands, neck, shoulders, or other parts of your body. When using your device for extended periods, hold the device with a relaxed grip, press the keys lightly, and take frequent breaks. If you continue to have discomfort during or after such use, stop using the device and consult a physician.

Protect your hearing and ears when using a headset.

- Excessive exposure to loud sounds can cause hearing damage.
- Exposure to loud sounds while walking may distract your attention and cause an accident.
- Always turn the volume down before plugging the earphones into an audio source and use only the minimum volume setting necessary to listen to music.
- In dry environments, static electricity can build up in the headset. Avoid using headsets in dry environments or touch a metal object to discharge static electricity before connecting a headset to the device.
- Do not use a headset while driving or riding. Doing so may distract your attention and cause an accident, or may be illegal depending on your region.
Use caution when using the device while walking or moving.

- Always be aware of your surroundings to avoid injury to yourself or others.
- Make sure the headset cable does not become entangled in your arms or on nearby objects.

Do not carry your device in your back pockets or around your waist.

- You could be injured or damage the device if you fall.

Install devices and equipment with caution.

- Ensure that any devices or related equipment installed in your vehicle are securely mounted.
- Avoid placing your device and accessories near or in an airbag deployment area. Improperly installed wireless equipment can cause serious injury when airbags inflate rapidly.

Allow only qualified personnel to service your device.

- Allowing unqualified personnel to service your device may result in damage to your device and will void your manufacturer’s warranty.

Do not use the device for anything other than its intended use.

- Your device may malfunction.

Do not short-circuit the charger or the device.

- Doing so may cause electric shock or fire, or the battery may malfunction or explode.

Do not store your device in very hot or very cold areas. It is recommended to use your device at temperatures from 5 °C to 35 °C.

- Do not store your device in very hot areas such as inside a car in the summertime. Doing so may cause the screen to malfunction, result in damage to the device, or cause the battery to explode.
- Do not expose your device to direct sunlight for extended periods of time (on the dashboard of a car, for example).
Data transference and your responsibilities

Protect your personal data and prevent leakage or misuse of sensitive information.

- While using your device, be sure to back up important data. Samsung is not responsible for the loss of any data.
- When disposing of your device, back up all data and then reset your device to prevent misuse of your personal information.
- Carefully read the permissions screen when downloading applications. Be particularly cautious with applications that have access to many functions or to a significant amount of your personal information.
- Check your accounts regularly for unapproved or suspicious use. If you find any sign of misuse of your personal information, contact your service provider to delete or change your account information.
- In the event your device is lost or stolen, change the passwords on your accounts to protect your personal information.
- Avoid using applications from unknown sources and lock your device with a pattern, password, or PIN.
- Data transferred via Wi-Fi network could be leaked, so avoid transferring sensitive data in public areas or on open networks.
- The device manufacturer is not liable for any data transfers that infringe on copyrights, trademarks, intellectual property laws, or public decency ordinances.
Table of Contents

Getting started
18  Device layout
19   Buttons
20  Package contents
21  Installing the battery
23  Charging the battery
24  Checking the battery charge status
25  Inserting a memory card
27  Attaching a hand strap
28  Turning the device on and off
28  Adjusting the volume
29  Switching to silent mode

Basics
30   Indicator icons
31  Using the touch screen
33  Control motions
37  Notifications
37  Quick setting panel
38  Home screen
40  Using applications
41  Applications screen
42  Help
42  Entering text
44  Connecting to a Wi-Fi network
45  Setting up accounts
45   Using the NFC Feature (Tag & Go)
46  Transferring files
48  Securing the device
49  Upgrading the device

Camera: Basic functions
50  Launching Camera
52  Taking photos
52  Taking videos
53  Viewing photos and videos
53  Auto focus and auto exposure
53  Zooming in or out
54  Taking photos or videos with voice commands
54  Taking photos or videos with filter effects
55  Changing shooting options quickly
55  Reducing camera shake
56  Using face detection
57  Tips for taking clearer photos

Camera: Shooting modes
61  Auto
61  Smart
73  Expert
76  My modes
Camera: Shooting options and settings
77 Customising shooting options
77 EV (brightness)
78 ISO (sensitivity)
79 WB (light source)
81 Metering
81 Drive mode
82 Save as User mode
82 Photo size
82 Quality
82 Adjust image
82 Auto contrast
83 Flash
83 Timer
84 Focus
84 AF area
84 One touch shot
85 Face detection
85 AE Bracket set
86 OIS (anti-shake)
86 Video recording options
87 Sharing options
87 Camera settings
96 Story Album
100 Xtremera
101 Music
103 YouTube

Communication
104 Contacts
108 Email
109 Google Mail
111 Hangouts
111 Google+
111 G+ Photos
112 ChatON

Web & network
113 Internet
114 Chrome
115 Bluetooth
116 Samsung Link
118 Group Play

Application & media stores
120 Play Store
121 Samsung Apps
121 Play Books
122 Play Movies
122 Play Music
122 Play Newsstand
122 Play Games

Media
89 Gallery
93 Paper Artist
94 Video
95 Video Editor
Utilities
123  S Memo
126  S Planner
128  Dropbox
128  Cloud
129  Drive
130  Clock
132  Calculator
132  S Voice
133  Google
133  Voice Search
134  My Files
135  Downloads

Appendix
150  Troubleshooting
157  Using or storing the device
161  About the battery
164  Malware and viruses

Cleaning the device

Travel & local
136  Maps

Settings
137  About Settings
137  Connections
140  My device
146  Accounts
147  More
149  Google Settings
Getting started

Device layout

- Power button
- Microphone
- Zoom button
- Internal antenna
- Lens
- AF-assist light
- Flash release button
- Flash
- NFC tag
- Speaker
- HDMI port
- Latch
- Flap
- Shutter button
- Headset jack
- Multipurpose jack
- Eyelet for strap
- Touch screen

Tripod mount
Getting started

Do not use the device if it is cracked or broken. Broken glass or acrylic could cause injury to your hands and face. Take the device to a Samsung Service Centre to have it repaired.

- Do not cover the antenna area with your hands or other objects, except when you are taking photos or videos. This may cause connectivity problems or drain the battery.
- Do not use a screen protector. This causes sensor malfunctions.
- Do not allow water to contact the touch screen. The touch screen may malfunction in humid conditions or when exposed to water.

Buttons

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
</table>
| Power | Press and hold to turn the device on or off.  
Press and hold for more than 7 seconds to reset the device if it has fatal errors or hang-ups, or freezes.  
Press to lock or unlock the device. The device goes into lock mode when the touch screen turns off. |
| Flash release | Press to pop the flash up. |
| Shutter | In the camera application, half-press to focus on the subject. When the subject is in focus, the focus frame turns green. Press to take the photo.  
Press to turn the camera on. |
| Zoom | In the camera application, rotate to zoom in or out.  
Rotate to adjust the device volume. |
| Menu | Tap to open a list of options available for the current screen.  
Tap and hold on the Home screen to launch Google search. |
| Home | Tap to return to the Home screen.  
Tap twice to launch S Voice.  
Tap and hold to open the list of recent applications. |
| Back | Tap to return to the previous screen. |
Package contents

Check the product box for the following items:

- Device
- Battery
- USB cable
- USB power adaptor
- Hand strap
- Quick start guide / Quick reference guide

- The illustrations may differ from the actual items.
- The items supplied with the device and any available accessories may vary depending on the region.
- The supplied items are designed only for this device and may not be compatible with other devices.
- Appearances and specifications are subject to change without prior notice.

Optional accessories

You can purchase and use the following accessories with your device:

- Battery, battery charger, flip cover, case, hand strap, screen protector, and HDMI cable

- For more information about available accessories, refer to the Samsung website.
- Make sure they are compatible with the device before purchase.
- Use only Samsung-approved accessories. Malfunctions caused by using unapproved accessories are not covered by the warranty service.
- Some TVs may not be compatible with the device due to differing HDMI specifications.
Installing the battery

Insert the included battery.

1. Slide the latch and open the flap.

⚠️ Do not bend or twist the battery cover excessively. Doing so may damage the cover.

2. Insert the battery.

⚠️ Make sure to properly align the battery’s gold-coloured contacts when inserting the battery.
3 Replace the flap and slide the latch.

Removing the battery

⚠️ Turn off the device before removing the battery. If you remove the battery when the device is turned on, the device may malfunction.

Slide the battery lock to release the battery, and then pull it out.
Charging the battery

Before using the device for the first time or when the battery has been unused for an extended period, you must charge the battery.

⚠️ Use only Samsung-approved chargers, batteries, and cables. Unapproved chargers or cables can cause the battery to explode or damage the device.

• When the battery power is low, the battery icon appears empty.
• If the battery is completely discharged, the device cannot be turned on immediately when the charger is connected. Allow a depleted battery to charge for a few minutes before turning on the device.
• If you use multiple applications at once, network applications, or applications that need a connection to another device, the battery will drain quickly. To avoid disconnecting from the network or losing power during a data transfer, always use these applications after fully charging the battery.
• You can charge the device by connecting it to a computer with the supplied USB cable. You may not charge the device when it is connected to other devices, such as a set-top box or audio equipment.

Connect the USB cable to the USB power adaptor and then plug the end of the USB cable into the multipurpose jack.

Connecting the charger improperly may cause serious damage to the device. Any damage caused by misuse is not covered by the warranty.
• The device can be used while it is charging, but it may take longer to fully charge the battery.
• If the device receives an unstable power supply while charging, the touch screen may not function. If this happens, unplug the charger from the device.
• While charging, the device may heat up. This is normal and should not affect the device’s lifespan or performance. If the battery gets hotter than usual, the charger may stop charging.
• If the device is not charging properly, take the device and the charger to a Samsung Service Centre.
• Overcharging or over-discharging batteries may shorten their lifespans.

After fully charging, disconnect the device from the charger. First unplug the charger from the device, and then unplug it from the electric socket.

Do not remove the battery before removing the device. This may damage the device.

To save energy, unplug the charger when not in use. The charger does not have a power switch, so you must unplug the charger from the electric socket when not in use to avoid wasting power. The charger should remain close to the electric socket and easily accessible while charging.

**Checking the battery charge status**

When you charge the battery while the device is off, the following icons will show the current battery charge status:

- **Charging**
- **Fully charged**
Reducing the battery consumption

Your device provides options that help you save battery power. By customising these options and deactivating features in the background, you can use the device longer between charges:

- When you are not using the device, switch to sleep mode by pressing the Power button.
- Close unnecessary applications with the task manager.
- Deactivate the Bluetooth feature.
- Deactivate the Wi-Fi feature.
- Deactivate auto-syncing of applications.
- Decrease the backlight time.
- Decrease the brightness of the display.

Inserting a memory card

You can use an optional memory card as an external storage location.

Your device accepts memory cards with maximum capacities of 64 GB. Depending on the memory card manufacturer and type, some memory cards may not be compatible with your device.

⚠️ Some memory cards may not be fully compatible with the device. Using an incompatible card may damage the device or the memory card, or corrupt the data stored in it.
- Use caution to insert the memory card right-side up.

✅ The device supports the FAT and the exFAT file systems for memory cards. When inserting a card formatted in a different file system, the device asks to reformat the memory card.
- Frequent writing and erasing of data shortens the lifespan of memory cards.
- When inserting a memory card into the device, the memory card’s file directory appears in the SD memory card folder.
1. Slide the latch and open the flap.

2. Insert a memory card with the gold-coloured contacts facing upwards.

3. Push the memory card into the slot until it locks in place.

4. Replace the flap and slide the latch.

Removing the memory card

Before removing the memory card, first unmount it for safe removal. On the Home screen, tap **Apps → Settings → More → Storage → Unmount SD card**.

Push the memory card until it disengages from the device, and then pull it out.

⚠️ Do not remove the memory card while the device is transferring or accessing information. Doing so can cause data to be lost or corrupted or damage to the memory card or device. Samsung is not responsible for losses that result from the misuse of damaged memory cards, including the loss of data.
Formatting the memory card

A memory card formatted on a computer may not be compatible with the device. Format the memory card on the device.

On the Home screen, tap Apps → Settings → More → Storage → Format SD card → Format SD card → Erase everything.

Before formatting the memory card, remember to make backup copies of all important data stored on the device. The manufacturer’s warranty does not cover loss of data resulting from user actions.

Attaching a hand strap

Slide the small end of a hand strap through the slot and push the large end through the loop.

Do not swing your device by the strap. This may cause injury to yourself or others or damage to your device.
Turning the device on and off

When turning on the device for the first time, follow the on-screen instructions to set up your device.

Press and hold the Power button for a few seconds to turn the device on.

- Follow all posted warnings and directions from authorised personnel in areas where the use of wireless devices is restricted, such as aeroplanes and hospitals.
- Press and hold the Power button and tap **Flight mode** to disable the wireless features.

To turn off the device, press and hold the Power button, and then tap **Power off**.

Adjusting the volume

Rotate the Zoom button to adjust the notification sound volume, or to adjust the sound volume when playing music or video.
Switching to silent mode

Use one of the following methods:

- Rotate the Zoom button anti-clockwise until it switches to silent mode.
- Press and hold the Power button, and then tap **Mute** or **Vibrate**.
- Open the notifications panel at the top of the screen, and then tap **Sound** or **Vibrate**.
Basics

Indicator icons

The icons displayed at the top of the screen provide information about the status of the device. The icons listed in the table below are most common.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>📡</td>
<td>Wi-Fi connected</td>
</tr>
<tr>
<td>📡</td>
<td>Bluetooth feature activated</td>
</tr>
<tr>
<td>🕳️</td>
<td>GPS activated</td>
</tr>
<tr>
<td>�中小型</td>
<td>Connected to computer</td>
</tr>
<tr>
<td>🕳️</td>
<td>Alarm activated</td>
</tr>
<tr>
<td>🚘</td>
<td>Mute mode activated</td>
</tr>
<tr>
<td>⚽️</td>
<td>Vibration mode activated</td>
</tr>
<tr>
<td>⚽️</td>
<td>Flight mode activated</td>
</tr>
<tr>
<td>⚠️</td>
<td>Error occurred or caution required</td>
</tr>
<tr>
<td>🍃</td>
<td>Battery power level</td>
</tr>
</tbody>
</table>
Using the touch screen

Use only fingers to use the touch screen.

- Do not allow the touch screen to come into contact with other electrical devices. Electrostatic discharges can cause the touch screen to malfunction.
- To avoid damaging the touch screen, do not tap it with anything sharp or apply excessive pressure to it with your fingertips.
- The device may not recognise touch inputs close to the edges of the screen, which are outside of the touch input area.
- Leaving the touch screen idle for extended periods may result in afterimages (screen burn-in) or ghosting. Turn off the touch screen when you do not use the device.

Finger gestures

Tapping

To open an application, to select a menu item, to press an on-screen button, or to enter a character using the on-screen keyboard, tap it with a finger.
Tapping and holding
Tap and hold an item for more than 2 seconds to access available options.

Dragging
To move an icon, thumbnail, or preview to a new location, tap and hold it and drag it to the target position.

Double-tapping
Double-tap on a webpage or image to zoom in a part. Double-tap again to return.
**Flicking**

Flick left or right on the Home screen or the Applications screen to see another panel. Flick up or down to scroll through a webpage or a list, such as contacts.

![Flicking gesture](image)

**Pinching**

Spread two fingers apart on a webpage, map, or image to zoom in a part. Pinch to zoom out.

![Pinching gesture](image)

**Control motions**

Simple motions allow easy control of the device.

Before using motions, make sure the motion feature is activated. On the Home screen, tap Apps → Settings → My device → Motion, and then drag the Motion switch to the right.

Excessive shaking or impact to the device may result in unintended inputs. Control motions properly.
Rotating the screen

Many applications allow display in either portrait or landscape orientation. Rotating the device causes the display to automatically adjust to fit the new screen orientation.

To prevent the display from rotating automatically, open the notifications panel and deselect Screen rotation.

- Some applications do not allow screen rotation.
- Some applications display a different screen depending on the orientation. The calculator turns into a scientific calculator when rotated to landscape.

Tilting

Tap and hold two points on the screen, and then tilt the device back and forth to zoom in or out.
Panning to move
Tap and hold an item, and then move the device to the left or right to move the item to another panel on the Home screen or the Applications screen.

Panning to browse
When an image is zoomed in, tap and hold a point on the screen, and then move the device in any direction to browse the image.
**Sweeping**

Sweep your hand across the screen to capture a screenshot. The image is saved in **Gallery → Screenshots**.

![Sweeping Diagram]

**Covering**

Cover the screen with a palm to pause media playback.

![Covering Diagram]
Notifications

Notification icons appear on the status bar at the top of the screen to report calendar events, device status, and more. Drag down from the status bar to open the notifications panel. Scroll the list to see additional alerts. To close the notifications panel, drag up the bar that is at the bottom of the screen.

Quick setting panel

From the quick setting panel, you can view your device’s current settings. Drag down from the status bar, tap to open the quick setting panel, and then use the following options:

- **Wi-Fi**: Activate or deactivate the Wi-Fi feature.
- **GPS**: Activate or deactivate the GPS feature.
- **Sound**: Activate or deactivate silent mode. You can vibrate or mute your device in silent mode.
- **Screen rotation**: Allow or prevent the interface from rotating when you rotate the device.
- **Bluetooth**: Activate or deactivate the Bluetooth feature.
- **Blocking mode**: Activate or deactivate blocking mode. In blocking mode, the device will block notifications. To select which notifications will be blocked, tap Settings → My device → Blocking mode.
- **Hands-free mode**: Activate or deactivate hands-free mode.
- **Sync**: Activate or deactivate auto-syncing of applications.
- **Flight mode**: Activate or deactivate flight mode.

The available options may vary depending on the region.

To rearrange the options on the quick setting panel, open the quick setting panel, tap and hold an item, and then drag the item to another location.
Home screen

The Home screen is the starting point to access all of the device’s features. It displays indicator icons, widgets, folders, and others.

The Home screen can have multiple panels. To view other panels, scroll left or right.

Rearranging items

Adding an application icon

On the Home screen, tap Apps, tap and hold an application icon, and then drag it into a panel preview.

Adding an item

Tap and hold the empty area on the Home screen, and then select one of the following categories:

- **Apps and widgets**: Add widgets or applications to the Home screen.
- **Folder**: Create a new folder.
- **Page**: Add a new panel to the Home screen.

Moving an item

Tap and hold an item and drag it to a new location. To move it to another panel, drag it to the side of the screen.

Removing an item

Tap and hold an item, and drag it to the rubbish bin that appears at the top of the Home screen. When the rubbish bin turns red, release the item.
Rearranging panels

Adding a new panel
Tap  → Edit page → .

Moving a panel
Tap  → Edit page, tap and hold a panel preview, and then drag it to a new location.

Removing a panel
Tap  → Edit page, tap and hold a panel preview, and then drag it to the rubbish bin.

Setting wallpaper
Set an image or photo stored in the device as wallpaper for the Home screen.
On the Home screen, tap  → Set wallpaper → Home screen, and then select one of the following:

• Gallery: See photos taken by the device’s camera or images downloaded from the Internet.
• Live wallpapers: See animated images.
• Wallpapers: See wallpaper images.

Then, select an image and tap Set wallpaper. Or, select an image, resize it by dragging the frame, and then tap Done.
Using widgets

Widgets are small applications that provide convenient functions and information on your Home screen. To use them, add widgets from the widgets panel to the Home screen.

The widgets available may vary depending on the region.

Adding widgets to the Home screen

On the Home screen, tap Apps → Widgets. Scroll left or right on the widgets panel, and then tap and hold a widget to add it to the Home screen. Put it on a location you want, resize it by dragging the frame if necessary, and then tap anywhere on the screen to save the location of the widget.

Using applications

This device can run many different types of applications, ranging from media to Internet applications.

Opening an application

On the Home screen or the Applications screen, select an application icon to open it.

Opening from recently-used applications

Tap and hold  to open the list of recently-used applications. Select an application icon to open.

Closing an application

Close applications not in use to save battery power and maintain device performance. Tap and hold  , tap  , and then tap End next to an application to close it. To close all running applications, tap End all. Alternatively, tap and hold  , and then tap  .
Applications screen

The Applications screen displays icons for all applications, including any new applications installed.

On the Home screen, tap Apps to open the Applications screen.

To view other panels, scroll left or right.

Rearranging applications

Tap → Edit, tap and hold an application, and then drag it to a new location. To move it to another panel, drag it to the side of the screen.

Organising with folders

Put related applications together in a folder for convenience.

Tap → Edit, tap and hold an application, and then drag it to Create folder. Enter a folder name and then tap OK. Put applications into the new folder by dragging, and then tap Save to save the arrangement.

Rearranging panels

Pinch on the screen, tap and hold a panel preview, and then drag it to a new location.

Installing applications

Use application stores, such as Samsung Apps, to download and install applications.

Uninstalling applications

Tap → Uninstall, and then select an application to uninstall it.

Default applications that come with the device cannot be uninstalled.
Sharing applications

Share downloaded applications with other users via email, Bluetooth, or other methods. Tap  → Share app, select applications, tap Done, and then select a sharing method. The next steps vary depending on the method selected.

Help

Access help information to learn how to use the device and applications or configure important settings.

Tap Help on the Applications screen. Tap , and then select an item.

Entering text

Use the Samsung keyboard or the voice input feature to enter text.

- Text entry is not supported in some languages. To enter text, you must change the input language to one of the supported languages.
- Text input mode may differ depending on the region.

Changing the keyboard type

Tap any text field, open the notifications panel, tap Choose input method, and then select the type of keyboard to use.

Using the Samsung keyboard

Setting input languages

On the keyboard, tap → Select input languages, and then select languages.
Changing the keyboard layout

Tap  and change the keyboard layout.

On the 3x4 keyboard, a key has three or four characters. To enter a character, tap repeatedly the key corresponding to the character.

Entering uppercase

Tap  before entering a character. For all caps, tap it twice.

Changing language keyboards

Add languages to the keyboard, and then slide the space key left or right to change language keyboards.

Entering text by voice

Activate the voice input feature and then speak into the microphone. The device displays what you speak.

To change the language or add languages for the voice recognition, tap the current language.

Copying and pasting

Tap and hold over text, drag  or  to select more or less text, and then tap Copy to copy or Cut to cut. The selected text is copied to the clipboard.

To paste it into a text entry field, tap and hold at the point where it should be inserted, and then tap Paste.
Connecting to a Wi-Fi network

Connect the device to a Wi-Fi network to use the Internet or share media files with other devices. (p. 137)

Turning Wi-Fi on and off

Open the notifications panel, and then tap Wi-Fi to turn it on or off.

- Your device uses a non-harmonised frequency and is intended for use in all European countries. The WLAN can be operated in the EU without restriction indoors, but cannot be operated outdoors.
- Turn off Wi-Fi to save the battery when not in use.

Joining Wi-Fi networks

On the Applications screen, tap Settings → Connections → Wi-Fi, and then drag the Wi-Fi switch to the right.

Select a network from the list of detected Wi-Fi networks, enter a password if necessary, and then tap Connect. Networks that require a password appear with a lock icon. After the device connects to a Wi-Fi network, the device will automatically connect to it any time it is available.

Adding Wi-Fi networks

If the desired network does not appear in the networks list, tap Add Wi-Fi network at the bottom of the networks list. Enter the network name in Network SSID, select the security type and enter the password if it is not an open network, and then tap Connect.

Forgetting Wi-Fi networks

Any network that has ever been used, including the current network, can be forgotten so the device will not automatically connect to it. Select the network in the networks list, and then tap Forget.
Setting up accounts

Google applications, such as Play Store, require a Google account, and Samsung Apps requires a Samsung account. Create Google and Samsung accounts to have the best experience with the device.

Adding accounts

Follow the instructions that appear when opening a Google application without signing in to set up a Google account.

To sign in with or sign up for a Google account, on the Applications screen, tap Settings → Accounts → Add account → Google. After that, tap New to sign up, or tap Existing, and then follow the on-screen instructions to complete the account setup. More than one Google account can be used on the device.

Set up a Samsung account as well.

Removing accounts

On the Applications screen, tap Settings → Accounts, select an account name under My accounts, select the account to remove, and then tap Remove account.

Using the NFC Feature (Tag & Go)

Place the smart phone’s NFC antenna near your device’s NFC tag to launch the feature for using the smart phone as a remote shutter. You can also transfer files to an NFC-enabled device while viewing them.
• This feature is supported by NFC-enabled smart phones running Android OS. It is recommended that you use the latest version. This feature is not available for iOS devices.
• You should install Samsung SMART CAMERA App on your phone or device before using this feature. You can download the application from Samsung Apps or the Google Play Store. Samsung SMART CAMERA App is compatible with Samsung camera models manufactured in 2013 or later.
• To read an NFC tag, place the NFC-enabled device near your device’s NFC tag for more than 2 seconds.
• Do not modify the tag information in any way.

Turning on the remote viewfinder feature

On the Applications screen, tap Camera. Read a tag from an NFC-enabled device to turn on the remote viewfinder feature.

Transferring photos or videos

On the Applications screen, tap Gallery. Read a tag from an NFC-enabled device to transfer the current file to the smartphone automatically.

• To transfer multiple files, select files from the thumbnails view, and then read a tag from an NFC-enabled device.

Transferring files

Move audio, video, image, or other types of files from the device to the computer, or vice versa.

The following file formats are supported by some applications. Some file formats are not supported depending on the version of the device’s software or the computer operating system.

• Music: mp3, m4a, 3ga, aac, ogg, oga, wav, wma, amr, awb, flac, mid, midi, xmf, mxmf, imy, rtttl, rtx, and ota
• Image: bmp, gif, jpg, and png
• Video: 3gp, mp4, avi, wmv, flv, and mkv
• Document: doc, docx, dot, dotx, xls, xlsx, xlt, csv, ppt, pptx, pps, ppsx, pot, potx, pdf, hwp, txt, asc, and rtf
Connecting with Samsung Kies

Samsung Kies is a computer application that manages media contents and personal information with Samsung devices. Download the latest Samsung Kies from the Samsung website.

1. Connect the device to the computer using the USB cable.
   Samsung Kies launches on the computer automatically. If Samsung Kies does not launch, double-click the Samsung Kies icon on the computer.

2. Transfer files between your device and the computer.
   Refer to the Samsung Kies help for more information.

Connecting as a media device

1. Connect the device to the computer using the USB cable.

2. Open the notifications panel, and then tap **Connected as a media device → Media device (MTP)**.
   Tap **Camera (PTP)** if your computer does not support Media Transfer Protocol (MTP) or not have any appropriate driver installed.

3. Transfer files between your device and the computer.
   - Do not disconnect the USB cable while transferring files. It may result in device malfunction or data loss.
   - Do not disconnect the USB cable while playing back files. You must stop playback before disconnecting.
   - Your device may not connect to the computer when you use a USB hub. Connect your device directly to the computer’s USB port.
Securing the device

Prevent others from using or accessing personal data and information stored in the device by using the security features. The device requires an unlock code whenever unlocking it.

Setting a pattern

On the Applications screen, tap Settings → My device → Lock screen → Screen lock → Pattern.

Draw a pattern by connecting four dots or more, and then draw the pattern again to verify it. Set a backup unlock PIN to unlock the screen when you forget the pattern.

Setting a PIN

On the Applications screen, tap Settings → My device → Lock screen → Screen lock → PIN.

Enter at least four numbers, and then enter the password again to verify it.

Setting a password

On the Applications screen, tap Settings → My device → Lock screen → Screen lock → Password.

Enter at least four characters including numbers and symbols, and then enter the password again to verify it.
Unlocking the device

Turn on the screen by pressing the Power button, and enter the unlock code.

⚠️ If the unlock code is forgotten, take the device to a Samsung Service Centre to reset it.

Upgrading the device

The device can be upgraded to the latest software.

⚠️ This feature may not be available depending on the region.

Upgrading over the air

The device can be directly upgraded to the latest software by the firmware over-the-air (FOTA) service.

On the Applications screen, tap Settings → More → About device → Software update → Update.

Upgrading with Samsung Kies

Launch Samsung Kies and connect the device to the computer. Samsung Kies automatically recognises the device and shows available updates in a dialogue box, if any. Click the Update button in the dialogue box to start upgrading. Refer to the Samsung Kies help for details on how to upgrade.

⚠️ Do not turn off the computer or the device, or disconnect the USB cable while the device is upgrading.

⚠️ While upgrading the device, do not connect other media devices to the computer. Doing so may interfere with the update process.
Camera: Basic functions

Launching Camera

Use this application to take photos or videos.
Tap Camera on the Applications screen. Alternatively, press the Shutter button.
Use Gallery to view photos and videos taken with the device. (p. 89)

- The camera automatically shuts off when unused.
- Make sure that the lens is clean. Otherwise, the device may not work properly in some modes that require high resolutions.

Camera etiquette

- Do not take photos or videos of other people without their permission.
- Do not take photos or videos where legally prohibited.
- Do not take photos or videos in places where you may violate other people's privacy.

Learning the preview screen

- Change shooting options quickly.
- Change the camera settings.
- Return to the Home screen.
- Focus frame
- Open Gallery to view photos and videos.
- Indicate the current camera settings.
- Indicate which shooting mode is in use.
- Take photos.
- Change the shooting mode.
- Start taking a video.
- Select among various effects that are available.
Learning icons

The icons displayed on the preview screen provide information about current shooting options and settings. The icons listed in the table below are the most common.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>🕒1/30s</td>
<td>Shutter speed</td>
</tr>
<tr>
<td>🕒F3.1</td>
<td>Aperture value</td>
</tr>
<tr>
<td>🕒1C</td>
<td>Exposure value</td>
</tr>
<tr>
<td>🕒ISO100</td>
<td>ISO sensitivity</td>
</tr>
<tr>
<td>🕒Timer</td>
<td>Timer</td>
</tr>
<tr>
<td>🕒Flash</td>
<td>Flash</td>
</tr>
<tr>
<td>🕒Voice recognition</td>
<td>Voice recognition</td>
</tr>
<tr>
<td>🕒Geotagging</td>
<td>Geotagging</td>
</tr>
<tr>
<td>🕒Share shot</td>
<td>Share shot</td>
</tr>
<tr>
<td>🕒Buddy photo share</td>
<td>Buddy photo share</td>
</tr>
<tr>
<td>🕒ChatON photo share</td>
<td>ChatON photo share</td>
</tr>
</tbody>
</table>

Closing Camera

In Shooting mode, tap 🏡 to close the camera application and return to the Home screen.
Taking photos

Half-press the Shutter button to focus on the subject. When the subject is in focus, the focus frame turns green. Press the Shutter button to take the photo.

Or, tap the image on the preview screen where the camera should focus. When the subject is in focus, the focus frame turns green. Tap 📷 to take the photo.

Taking videos

Tap 📹 to take a video. To stop recording, tap 🎥.

While recording, tap 📷 to take a photo.

While recording, tap where you want to focus to change the focus. To set the camera to focus automatically, tap 📷.

- You can take videos up to 20 minutes at one time.
- When using a memory card with a slow writing speed, the device may not be able to save the video properly. It may stop recording, or recorded video frames may become corrupted.
- Memory cards with slow writing speeds do not support high-resolution video. To record high-resolution video, use memory cards with faster writing speeds (micro SDHC Class10 or higher).
- The video frame size may appear smaller depending on video resolution and frame rate.
- If you set the image stabiliser option, the image stabiliser sound may be recorded.
- If the zoom function is activated when taking videos, the camera may record the noise of the zoom operating. To decrease the zoom noise, activate the quiet zoom feature. (p. 86)
- If you change the shooting angle of the camera suddenly while taking a video, the camera may not be able to record images accurately.
- If you tap the screen to change the focus manually while taking a video, the touch sound may be recorded.
Viewing photos and videos

To view taken photos or videos, tap the gallery icon. Scroll left or right to view the next or previous image. (p. 89)

Auto focus and auto exposure

You can adjust camera focus and exposure automatically by touching the screen. In Shooting mode, tap the desired area to focus on. The focus frame moves to the desired area and an icon appears at the upper right corner of the focus frame. Then, drag the frame to separate the AF frame and the AE frame. Drag each frame to the desired location. To lock the focus or the exposure, tap and hold the respective frame. The locked frame cannot be moved and is reset after shooting. To merge the AF frame and the AE frame, drag a frame to the other one to make them overlap.

Zooming in or out

Rotate the Zoom button clockwise or spread two fingers apart on the screen to zoom in. Rotate the Zoom button anti-clockwise or pinch your fingers together on the screen to zoom out.
• The zoom in/out effect is available when using the zoom feature while shooting video.
• When using the zoom function, the lens moves back and forth to adjust the focus before it sets the precise zoom ratio that you intend to use.
• To maintain a natural view angle, the zoom ratio increases in larger increments as it gets higher.

Taking photos or videos with voice commands
Use the voice recognition to take photos or videos with voice commands.
Tap 🎤→📸. Say a shooting command, such as Smile, Cheese, or Record video.
To check more voice commands for controlling the camera, tap 🎤→📸.

Taking photos or videos with filter effects
Use the filter effects to take unique photos or videos.
Tap 📸 and select a filter effect.
• **No effect**: Do not apply an effect.
• **Vignette**: This effect applies the retro-looking colours, high contrast, and strong vignette effect of Lomo cameras.
• **Greyscale**: This effect makes the image black and white.
• **Sepia**: This effect red-shifts the background scenery.
• **Vintage**: This effect gives the image a vintage look and feel.
• **Faded colours**: This effect fades the colour of the image.
• **Turquoise**: This effect applies a soft turquoise colour effect.
• **Tint**: This effect applies a colour tint effect.
• **Cartoon**: This effect applies a cartoon painting effect.
• **Moody**: This effect applies a mono cartoon painting effect.
• **Rugged**: This effect applies a rugged effect.
• **Oil pastel**: This effect applies a pastel painting effect.
• **Fisheye**: This effect blackens the edges of the frame and distorts objects to imitate the visual effect of a fisheye lens.

### Changing shooting options quickly

Tap 📷 to change shooting options quickly. The available options vary by mode.

• Configure settings for Camera.
• Activate or deactivate the flash.
• Use this to set delayed-time shots.
• Select a folder for saving photos or videos. To create a new folder, tap 📜.
• Activate or deactivate the voice recognition to take photos.
• Activate or deactivate the sharing options.

### Reducing camera shake

Use the Optical Image Stabiliser (OIS) feature to reduce or eliminate blurriness from camera shake.

Tap **MODE → Expert → P, A, S, or M** to access one of the expert modes.

In expert mode, tap 📷 → 📜 → **OIS (anti-shake)**, and select an option.

![Before correction](image1.png) ![After correction](image2.png)
Using face detection

Taking a smile shot

The camera automatically detects a smiling face, and releases the shutter.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap → → Face detection → Smile shot. Or, in beauty face mode, tap → → → → Face detection → Smile shot.
Aim the camera at a human subject, and press the Shutter button. When the camera detects a smiling face, the camera automatically takes the photo.

Detecting eye blinking

If the camera detects closed eyes, it automatically takes more photos in succession.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap → → Face detection → Blink detection.
Aim the camera at a human subject. When the camera detects a human face, a white frame appears around the face. If the eyes are closed at the exact moment when the Shutter button is pressed, a pop-up window appears on the screen.
Tips for taking clearer photos

Holding the camera correctly

Make sure not to block the screen, lens, flash, or microphone.

Make sure not to expose the lens to direct sunlight. This may discolour the image sensor, or cause it to malfunction.

Half-pressing the Shutter button

Press the Shutter button halfway down to adjust the focus. The camera adjusts the focus, exposure, and white balance automatically, and the focus frame turns green. The focus frame turns red if not focused.
Reducing camera shake
Set the Optical Image Stabiliser (OIS) option to reduce camera shake optically. (p. 55)

Keeping the subject in focus
Focusing on the subject may be difficult in the following conditions:

- When the contrast between the subject and background is low. For example, the subject is wearing clothing that is similar in colour to the background.
- The light 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 centre of the frame.
Using the focus lock

Half-press the Shutter button to focus. When the subject is focused, you can change the composition. When you are ready, press the Shutter button to take the photo.

When taking photos in low-light conditions

- Turn the flash on to take photos in low-light conditions. (p. 83)
- Adjust the ISO sensitivity. (p. 78)
When subjects are moving rapidly

Use the continuous shooting option to take photos of moving subjects. (p. 63)

To take several photos continuously, use memory cards with faster writing speeds (micro SDHC Class10 or higher).
Camera: Shooting modes

Auto

Use this to take photos with scene modes selected automatically by the camera. In this mode, the camera recognises surrounding conditions and automatically adjusts factors that contribute to exposure, including the shutter speed, aperture value, metering, and white balance. As the camera controls most of the functions, some shooting options are limited. This mode is useful for capturing quick snapshots with the least amount of adjustment.

Tap MODE → Auto.

To display an icon for a scene mode at the top right of the preview screen when you half-press the Shutter button, tap 📹 → 🕵 → 📚 → Detection display → On.

- The camera may detect different scenes, even the same subjects, depending on external factors, such as camera shake, lighting, and distance to the subject.
- If the camera does not recognise an appropriate scene mode, it uses the default settings for this mode.
- Even if it detects a face, the camera may not select a portrait mode depending on the subject’s position or lighting.
- In this mode, the camera consumes more battery power due to constant changing of settings when selecting appropriate modes.

Smart

Use this to take photos with predefined settings for various scenes.
**Smart mode suggest**

Use this to take photos with one of the smart modes that the camera automatically suggests.

Tap **MODE → Smart → Smart mode suggest**.

Half-press the Shutter button, select a mode from the suggested list, and then press the Shutter button to take a photo. If you do not select a mode from the suggested list, the camera will take a photo in Auto mode.

To reset the selected mode, tap 🔄.

---

**Beauty face**

Use this to take photos with lightened faces for gentler images.

Tap **MODE → Smart → Beauty face**.

Press the Shutter button to take a photo. Tap a face, and adjust effects. To switch between the original and the adjusted photo, tap **Before & After**. Tap **Save** to save the photo.

To set the camera to automatically adjust effects, tap �<quote>🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍🔍
Continuous shot

Use this to take a series of photos of moving subjects.
Tap MODE → Smart → Continuous shot.
While holding the camera steady, press and hold the Shutter button to take several photos continuously.

To take several photos continuously, use memory cards with faster writing speeds (micro SDHC Class10 or higher).

Best face

Use this to take multiple group shots at the same time and combine them to create the best possible image.
Tap MODE → Smart → Best face.
Press the Shutter button to take multiple photos. To get the best shot, hold the camera steady and remain still while taking photos. Tap the yellow frame on each face, and choose the best individual face for the subject. After choosing a face for each individual, tap Save to merge the images into a single photo, and save it.
Colour bracket
Use this to take 3 photos with different colour effects continuously.
Tap MODE → Smart → Colour bracket.

Kids shot
Use this to play a funny sound to get a kid’s attention when shooting.
Tap MODE → Smart → Kids shot.
Half-press the Shutter button. The camera emits the attention sound. Press the shutter button to take 5 consecutive photos.
To change the attention sound, tap 🔊.

Landscape
Use this to take photos of blue skies and landscapes with richer colours.
Tap MODE → Smart → Landscape.

Dawn
Use this to take photos of the dawn sky in subtle colours.
Tap MODE → Smart → Dawn.

Snow
Use this to take brighter photos of snow scenery.
Tap MODE → Smart → Snow.
Macro
Use this to take photos of very close subjects.
Tap MODE → Smart → Macro.

Food
Use this to take photos of food in more colourful tones.
Tap MODE → Smart → Food.

Party/Indoor
Use this to take crisp indoor photos.
Tap MODE → Smart → Party/Indoor.
**Action freeze**

Use this to take photos of subjects moving at high speed.

Tap **MODE → Smart → Action freeze**.

![Action freeze example](image)

- Use in bright daylight is recommended.

**Rich tone(HDR)**

Use this to take photos without losing details in bright and dark areas. The camera automatically takes several photos with various exposure values, and then merges them into one photo. The photo taken at the original exposure value is saved also.

Tap **MODE → Smart → Rich tone(HDR)**.

While holding the camera steady, press the Shutter button to take multiple photos.

To set the device to save only the final result, tap → → → **Save as → Rich tone only**.

![Rich tone example](image)

Without effect  With effect
This feature may be affected by camera shake, lighting, movement of the subject, and shooting environment.

- The flash is disabled in this feature.
- When taking a photo of moving subjects, an afterimage may appear.
- Using a tripod is recommended.

**Panorama**

Use this to take wide panoramic photos.

Tap **MODE → Smart → Panorama**.

Press the Shutter button to take a photo, and then move the camera in one direction. When the blue frame aligns with the preview screen, the camera automatically takes another shot in the panoramic sequence. To stop shooting, tap 📷. Photos are automatically combined into one panoramic image.
• Avoid the following for best results:
  - Moving the camera too quickly or too slowly.
  - Moving the camera too little to take the next photo.
  - Moving the camera at irregular speeds.
  - Shaking the camera.
  - Changing the camera direction while taking a photo.
  - Taking photos in low-light conditions.
  - Taking photos of moving subjects.
  - Taking photos where the brightness or colour of the light changes.
  - Taking photos of a subject in front of unrecognisable backgrounds, such as empty skies or plain walls.

• Photos taken are automatically saved, and shooting is stopped under the following conditions:
  - Changing the distance from the subject while shooting.
  - Moving the camera too quickly.
  - Not moving the camera.

• The camera may stop taking photos due to composition or movement within the scene.

• The camera may not take the last scene entirely if you stop moving the camera at the exact position where you want the scene to end. To take the entire scene, move the camera slightly beyond the position you want the scene to end.

**Waterfall**

Use this to take photos of waterfalls.

Tap **MODE → Smart → Waterfall**.

The image may appear blurry due to the slow shutter speed when the camera takes photos. Make sure to use a tripod.
Animated photo

Use this to create a photo in which selected objects move by freezing or animating moving objects automatically detected by the camera.

Tap **MODE → Smart → Animated photo**.

Press the Shutter button to take a photo. Tap **Animate** or **Freeze**, and then rub the screen to animate or freeze the detected moving objects. Tap **Trim** to adjust the range to trim, or **Direction** to change the direction of the animation. Then, tap **Save** to save the photo.

Drama

Use this to take a series of photos and combine them to create an image that shows trails of the movement.

Tap **MODE → Smart → Drama**.

While holding the camera steady, press the Shutter button to take several photos continuously. Select photos to save, and then tap **Save**.

To get the best shot, follow these tips. The camera may not take photos properly in other shooting conditions.

- Hold the camera steady and remain still while taking photos.
- Take photos of a subject that is moving in one direction.
- Take photos with backgrounds that are free of moving objects.
- Avoid taking photos of a subject and background with similar colours.
- Avoid taking photos of a subject that is too close or too far away to fit within the screen or that is too long such as a bus or a train.
**Eraser**

Use this to erase moving objects in the background.

Tap **MODE → Smart → Eraser**.

Press the Shutter button to take a series of photos. The camera erases traces of movement from a moving object. To restore the original photo, tap **Show moving objects**, and then tap the highlighted area. Tap **Save** to save the photo.

- Hold the camera steady and remain still while taking photos.
- When taking photos of an object and background with similar colours, the camera may not recognise all of the movement.
- When taking photos of an object that is moving very little or moving a great deal, the camera may not recognise all of the movements.
- If there are multiple subjects moving in the background, the camera may not recognise all of the movement.

**Sound & shot**

Use this to take a photo with sound.

Tap **MODE → Smart → Sound & shot**.

The camera records 9 seconds of audio after taking a photo. To set the camera to record sound before or after taking a photo, tap ** análisis**.

**Interval**

Use this to set the interval and number of photos to take automatically for an extended period.

Tap **MODE → Smart → Interval**.

Set the interval and number of shots, tap **Set**, and then press the Shutter button or tap **Start**.

To save battery power, the device turns on and takes photos between intervals only.
**Silhouette**

Use this to take photos of dark shapes against a light background.  
Tap MODE → Smart → Silhouette.

> To maximise the silhouette effect, take photos at a location that is bright.

**Sunset**

Use this to take photos of the sunset.  
Tap MODE → Smart → Sunset.

**Night**

Use this to take photos in low-light conditions, without using the flash.  
Tap MODE → Smart → Night.  
While holding the camera steady, press the Shutter button to take 3 photos. Photos are automatically merged into a single photo.

> The image may appear blurry due to the slow shutter speed when the camera takes photos. Make sure to use a tripod.
**Fireworks**

Use this to take photos of fireworks.  
Tap **MODE → Smart → Fireworks**.

![Fireworks Image]

> The image may appear blurry due to the slow shutter speed when the camera takes photos. Make sure to use a tripod.

**Light trace**

Use this to take photos of the light trailing in low-light conditions.  
Tap **MODE → Smart → Light trace**.

![Light Trace Image]

> The image may appear blurry due to the slow shutter speed when the camera takes photos. Make sure to use a tripod.
Expert

Use this to take photos and videos with manual adjustment of various shooting options, including the shutter speed, aperture value, exposure value, and ISO sensitivity.

Adjusting major shooting options

Tap one of the major shooting options displayed at the top of the screen, and then drag left or right until the desired value is shown. To confirm the adjustment, tap an empty area on the screen or half-press the Shutter button.

Program mode

In this mode, the camera automatically adjusts the shutter speed and aperture value so that an optimal exposure value can be achieved. This mode is useful when you want to capture shots of constant exposure while being able to adjust other settings.

Tap MODE → Expert → P, and set the desired shooting options.
Aperture priority mode

In this mode, the camera automatically calculates shutter speed according to the aperture value you choose. You can adjust the depth of field (DOF) by changing the aperture value. This mode is useful for taking portraits and landscape shots.

Tap **MODE** → **Expert** → **A**, and set the desired shooting options.

In low-light settings, you may need to increase the ISO sensitivity to prevent blurry photos.
Shutter priority mode

In this mode, the camera automatically adjusts the aperture value according to the shutter speed you choose. This mode is useful for taking photos of fast-moving subjects or for creating tracer effects in a photo.

Tap **MODE → Expert → S**, and set the desired shooting options.

To compensate for the reduced amount of light allowed by fast shutter speeds, adjust the aperture and let in more light. If your photos are still too dark, increase the ISO sensitivity.

Manual mode

This mode lets you adjust the shutter speed and aperture value manually. In this mode, you can fully control the exposure of your photos. This mode is useful in controlled shooting environments, such as a studio, or when it is necessary to fine-tune camera settings. This mode is also recommended for shooting night scenes or fireworks.

Tap **MODE → Expert → M**, and set the desired shooting options.

- If you set a high ISO value or open the shutter for a long time, image noise may increase.
- Use a tripod and shutter release to prevent your camera from shaking.
- The longer you open the shutter, the longer it takes to save a photo. Do not turn the camera off while the camera saves a photo.
Camera: Shooting modes

**User mode**

Use this to create and save your own shooting mode by adjusting settings.

Tap **MODE → Expert → P / A / S / M**, and set the desired shooting options. Then, tap **Save as User mode** to save the current settings.

To access user mode, tap **MODE → Expert → USER**.

---

**My modes**

Use this to register your favourite shooting modes and select them conveniently. You can register up to 10 modes.

Tap **MODE → My modes → Edit**, and then select your favourite shooting modes. After completing your selection, tap **Done** to save it.
Camera: Shooting options and settings

Customising shooting options
Various shooting options are provided with your camera. With them, you can take more customised photos and videos.
Tap ☰ to access shooting options. Depending on the mode selected, you may tap ➡️ ☰. Select an option, and then save it.

• Available options and default settings may differ depending on the shooting mode and shooting conditions.
• Depending on the option selected, some settings may not be available.

EV (brightness)
The camera automatically sets the exposure by measuring the levels of light from the photo’s composition and the position of a subject. If the exposure set by the camera is higher or lower than you expected, you can adjust the exposure value manually.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap ☰ → ☰ → EV (brightness), and select an option.

Darker (-) Neutral (0) Brighter (+)
• If the appropriate exposure value cannot be decided, use the AE BKT option to take multiple photos with different exposure values.
• Taking photos with higher exposure value may result in blurry photos due to the slower shutter speed.

**ISO (sensitivity)**

The ISO sensitivity value represents the sensitivity of the camera to light. The higher the ISO sensitivity, the more sensitive the camera is to light. Consequently, by selecting a higher ISO sensitivity, you can take photos in dim or dark places at faster shutter speeds. However, this may increase electronic noise and result in a grainy photo.

Tap **MODE → Expert → P, A, S, or M** to access one of the expert modes.

In expert mode, tap **→ → ISO (sensitivity)**, and select an option.

**Examples**

<table>
<thead>
<tr>
<th>ISO 100</th>
<th>ISO 400</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="ISO 100" /></td>
<td><img src="image2.png" alt="ISO 400" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISO 800</th>
<th>ISO 3200</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="ISO 800" /></td>
<td><img src="image4.png" alt="ISO 3200" /></td>
</tr>
</tbody>
</table>

Increase the ISO value in places where flash use is prohibited. You can take a clear photo by setting a high ISO value without having to secure more light.
**WB (light source)**

White balance represents the light source that influences on the colour of a photo. The colour of a photo depends on the type and quality of the light source. If you want the colour of your photo to be realistic, select an appropriate lighting condition to calibrate the white balance, such as **Auto WB**, **Daylight**, **Cloudy**, **Tungsten**, or adjust colour temperature manually.

You can also adjust colour for the preset light sources so that the colours of the photo match the actual scene under mixed lighting conditions.

Tap **MODE → Expert → P, A, S, or M** to access one of the expert modes.

In expert mode, tap → → **WB (light source)**, and then select an option.

- **Auto WB**: Use automatic settings depending on the lighting conditions.
- **Daylight**: Use this for sunny days. This option results in photos closest to the natural colours of the scene.
- **Cloudy**: Use this for cloudy days or in shadows. Photos taken on cloudy days tend to be more bluish than on sunny days. This option offsets that effect.
- **Fluorescent_H**: Use this when shooting under a daylight fluorescent lamp, especially for white fluorescent light.
- **Fluorescent_L**: Use this when shooting under a daylight fluorescent lamp, especially for white fluorescent light of very white hues.
- **Tungsten**: Use this under incandescent bulbs or halogen lamps. Incandescent tungsten bulbs tend to have a reddish hue. This option offsets that effect.
- **Custom set**: Use this to set a custom white balance. You can manually set the white balance by tapping , and then shooting a white sheet of paper. Fill the spot metering circle with the paper and set the white balance.
- **Colour temperature**: Use this to manually adjust the colour temperature of the light source. Colour temperature is a measurement in degrees Kelvin that indicates the specific type of light source. You can get a warmer photo with a higher value and a cooler photo with a lower value. Tap , and then drag the slider or tap or to adjust the value.
Customising preset white Balance options

You can also customise preset white Balance options.

Tap next to a white balance option. Tap the arrows or tap an area on the screen to adjust the value on the coordinates.

- G: Green
- B: Blue
- A: Amber
- M: Magenta

Examples

Auto WB  Daylight
Fluorescent  Tungsten
Metering

The metering mode refers to the method the camera measures the quantity of light. The camera measures the amount of light in a scene, and in many of its modes, uses the measurement to adjust various settings. For example, if a subject looks darker than its actual colour, the camera takes an overexposed photo of it. If a subject looks lighter than its actual colour, the camera takes an underexposed photo of it.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap → Metering, and then select an option.

- **Multi**: The camera calculates the amount of light in multiple areas. When light is sufficient or insufficient, the camera adjusts the exposure by averaging the overall brightness of the scene. This mode is suitable for general photos.
- **Spot**: The camera calculates the amount of light in the centre. When you take a photo in conditions where there is a strong backlight behind a subject, the camera adjusts the exposure to shoot a subject correctly.
- **Centre-weighted**: The camera calculates a broader area than the camera does in spot mode. It sums up the amount of light in the centre portion of the shot (60–80 %) and that of the rest of the shot (20–40 %).

Drive mode

Use this option to set the shooting method. Continuous shots are recommended for shooting the rapid motion of fast moving subjects, such as racing cars.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap → Drive mode, and select an option.

- **Single shot**: Use this to take a single photo.
- **Continuous shot**: Use this to take a series of photos of moving subjects.
- **AE BKT**: Use the auto exposure bracketing option to take 3 consecutive photos with different exposure values (one a step lighter, the original, and one a step darker). Use a tripod to prevent blurry photos. You can adjust the interval range in AE Bracket set. (p. 85)

- Saving photos may take longer depending on the memory card’s capacity and performance when taking photos continuously.
- Using a tripod is recommended when taking photos continuously.
Save as User mode

Use this to save the current settings as your own shooting mode.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap → → Save as User mode.

Photo size

As you increase the resolution, your photo 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. Select a low resolution for photos that will be displayed in a digital picture frame or uploaded to the web.
Tap (or → → Photo size, and select an option.

Quality

Use this option to select a higher photo quality for better photos. Selecting a higher photo quality also increases the file size.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap → → Quality, and select an option.

Adjust image

Use this option to adjust the colour, saturation, sharpness, or contrast of your photos.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap → → Adjust image, and drag the slider or tap or for each value.

Auto contrast

Use this option to improve contrast automatically in photos with backlit subjects or high contrast between subjects and backgrounds.
Tap MODE → Expert → P, A, S, or M to access one of the expert modes.
In expert mode, tap → → Auto contrast, and select an option.
Flash

To take a realistic photo of a subject, the amount of light should be constant. When the light source varies, you can use a flash and supply a constant amount of light. Press the Flash release button to open the flash. Tap 📷 (or 📷 → 📷 → 📷 → Flash), and select an option.

- **Off**: Use this to turn the flash off.
- **Auto**: Use this to automatically use the flash. The flash fires when the subject or background is dark.
- **Auto & red-eye**: Use this to prevent a red glow in the subject’s eyes.
- **Fill in**: Use this to always use the flash.
- **Slow sync**: Use this to keep details of the background.
- **Red-eye fix**: Use this to correct a red glow in the subject’s eyes.

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

- If light from the flash is reflected, or if a substantial amount of dust is in the air, tiny spots may appear in the photo.

Timer

Use this option for delayed-time shots.

Tap 📷 (or 📷 → 📷 → 📷 → Timer), and select an option.

Press the Shutter button to start the timer. The camera takes photos after a specified length of time. Press the Shutter button to cancel the timer.
Focus

Use this option to select a focus mode appropriate to the subject.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap MODE → Expert → P, A, S, or M to access one of the expert modes.

- **Auto focus**: Use this to capture a still subject. When you half-press the Shutter button, the focus fixes in the focus area. The area turns green when the focus is achieved.
- **Macro**: Use this to capture very close objects.

AF area

Use this option to change the positions of the focus area.

Generally, cameras focus on the nearest subject. When there are a lot of subjects, however, unwanted subjects can be in focus. To prevent unwanted subjects from being in focus, change the focus area so that a desired subject is in focus. You can get a clearer and sharper photo by selecting an appropriate focus area.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap MODE → Expert → P, A, S, or M to access one of the expert modes.

- **Centre AF**: Use this to focus on the centre of the frame.
- **Multi AF**: Use this to focus on multiple areas. The photo is divided into two or more areas, and the camera obtains focus points of each area and displays a green rectangle in places where focus is set correctly. It is recommended for scenery photos.

One touch shot

Use this option to take a photo with the touch of your finger.

Tap (or ) → One touch shot, and select an option.

As you tap on the subject, the camera focuses on the subject and takes a photo automatically.
Face detection

Use this option to select a face detection mode.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap MODE → Expert → Face detection, and select an option. Or, in beauty face mode, tap MODE → Expert → Face detection, and select an option.

- **Off**: Use this to turn this option off.
- **Normal**: Use this to measure exposure on a human face.
- **Smile shot**: Use this to recognise and helps taking people's smiling faces. (p. 56)
- **Blink detection**: Use this to detect closed eyes and automatically takes additional photos. (p. 56)

- When a face is detected, the camera tracks the face automatically.
- This feature may not be effective in the following conditions:
  - The subject is too far from the camera.
  - The lighting 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.

AE Bracket set

Use this option to adjust the exposure interval range of the bracketed photos.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap MODE → Expert → AE Bracket set, and select an option.
OIS (anti-shake)

Use the Optical Image Stabiliser (OIS) option to reduce or eliminate blurriness from camera shake.

Tap MODE → Expert → P, A, S, or M to access one of the expert modes.

In expert mode, tap → OIS (anti-shake), and select an option.

- This feature may not function properly in the following conditions:
  - When you move the camera to follow a moving subject.
  - If the camera is shaking too much.
  - When the shutter speed is slow (for example, when taking photos in low-light conditions).
  - If the battery power is low.
  - When you take close-up photos.

- Using this feature with a tripod may blur photos because of vibration from the OIS sensor. Deactivate this feature when using a tripod.

- The display may be blurry if the camera is hit or dropped. When this happens, restart the device.

Video recording options

Tap (or ) → , and configure the settings for video recording.

- **Movie size**: Select a resolution for videos. Use higher resolution for higher quality. Higher resolution videos take up more memory.

- **Multi motion**: Set the playback speed of videos.

  If you select an option other than x1, sound will not be recorded.

- **Sound**: Use this to decrease zoom noise or mute sounds when taking videos.

- **Windcut**: Remove some surrounding noise in addition to wind noise.
**Sharing options**

Share photos as they are taken by setting sharing options. Tap (or →) → and select an option.

- **Share shot**: Send a photo directly to another device via Wi-Fi Direct.

  You cannot use this feature when the **Signature** setting is activated.

- **Buddy photo share**: Set the camera to recognise a person’s face that you have tagged in a photo and send it to that person.

- **ChatON photo share**: Send a photo directly to another device via ChatON.

  You cannot use this feature when the **Signature** setting is activated.

- **Remote viewfinder**: Set a mobile device to control the camera remotely.

**Camera settings**

Tap (or →) → and configure the settings for Camera.

- **Power-on mode**: Select the default camera mode that launches when the device is turned on.

- **Signature**: Use this to add a signature to the image.

  You cannot use this feature when the **Date/time Imprint** setting is activated.

- **GPS tag**: Attach a GPS location tag to the photo. Activate this feature when taking photos to create albums in **Story Album**.

  - To improve GPS signals, avoid shooting in locations where the signal may be obstructed, such as between buildings or in low-lying areas, or in poor weather conditions.
  - Your location may appear on your photos when you upload them to the Internet. To avoid this, deactivate the GPS tag setting.
• **Date/time Imprint:** Use this to imprint the time and date on photos.

⚠️ You cannot use this feature when the **Signature** setting is activated.

• **Voice control:** Activate or deactivate the voice recognition to take photos or videos.
• **Guidelines:** Display a guide to help you compose a scene.
• **Description:** Display mode descriptions.
• **Storage:** Select the memory location for storage.
• **Contextual filename:** Set the camera to add contextual tags, such as location information, to filenames.

⚠️ To use **Contextual filename**, you must activate the **GPS tag** setting.

• **Auto brightness:** Set the camera to automatically adjust the brightness of the display.
• **Review:** Briefly display photos or videos taken.
• **Auto screen off:** Set the length of time the device waits before turning off the display’s backlight.
• **Beep:** Activate or deactivate beep sounds.
• **Camera function volume:** Adjust the camera volume, such as beep or shutter sounds.
• **AF lamp:** Use this to activate the AF-assist light in low-light conditions.
• **Reset:** Reset the camera settings.
Media

Gallery

Use this application to view images and videos.

Tap Gallery on the Applications screen.

- Some file formats are not supported depending on the software installed on the device.
- Some files may not play properly depending on the encoding method used.
- This application may not be available depending on the region.

Viewing images

Launching Gallery displays available folders. When another application, such as Email, saves an image, the Download folder is automatically created to contain the image. Likewise, capturing a screenshot automatically creates the Screenshots folder. Select a folder to open it.

In a folder, images are displayed by creation date. Select an image to view it in full screen. Scroll left or right to view the next or previous image.

Zooming in and out

Use one of the following methods to zoom in an image:

- Double-tap anywhere to zoom in.
- Spread two fingers apart on any place to zoom in. Pinch to zoom out, or double-tap to return.

Viewing images using the motion feature

Use the motion feature to execute a function with particular motion.

On the Applications screen, tap Settings → My device → Motion, drag the Motion switch to the right, and then turn on features by ticking.

To stop using a motion feature, deselect features.
Playing videos

Video files show the icon on the preview. Select a video to watch it and tap.

Trimming segments of a video

Select a video and tap →Trim. Move the start bracket to the desired starting point, move the end bracket to the desired ending point, and then save the video.

Editing images

When viewing an image, tap and use the following functions:

- **Edit**: Edit the image.
- **Slideshow**: Start a slideshow with the images in the current folder.
- **Favourite**: Add the image to favourites.
- **Photo frame**: Use this to add a frame and a note to an image. The edited image is saved in the Photo frame folder.
- **Photo note**: Use this to write a note on the back of the image. Tap to edit the note.
- **Signature**: Add a signature to the image. Signatures are saved in the My Signature folder.
- **Copy to clipboard**: Copy to clipboard.
- **Rotate left**: Rotate anticlockwise.
- **Rotate right**: Rotate clockwise.
- **Crop**: Resize the blue frame to crop and save the image in it.
- **Buddy photo share**: Send the image to a person whose face is tagged in the image.
- **Print**: Print the image via a USB or Wi-Fi connection. Some printers may not be compatible with the device.
- **Rename**: Rename the file.
- **Set as**: Set the image as wallpaper or a contact image.
- **Settings**: Change the Gallery settings.
Modifying images

When viewing an image, tap → Edit → Photo Wizard and use the following functions:

- **Rotate**: Rotate the image.
- **Crop**: Crop the image.
- **Colour**: Adjust the brightness, contrast, or saturation of the image.
- **Effect**: Apply effects to the image.
- **Portrait**: Correct red-eye, adjust and retouch faces, or make background blurry.
- **Sticker**: Attach stickers.
- **Drawing**: Draw on the image.
- **Frame**: Apply frames to the image.

Favourite files

When viewing a file, tap → Favourite to add the file to the favourites list.

Deleting files

Use one of the following methods:

- In a folder, tap → Select item, select files by ticking, and then tap .
- When viewing a file, tap .

Sharing files

Use one of the following methods:

- In a folder, tap → Select item, select files by ticking, and then tap < to send them to others.
- When viewing a file, tap < to send it to others or share it via social network services.
Setting as wallpaper
When viewing an image, tap → Set as to set the image as wallpaper or to assign it to a contact.

Tagging faces
When viewing an image, tap → Settings, and then tick Face tag. A yellow frame appears around the recognised face on an image. Tap the face, tap Add name, and then select or add a contact.

When the face tag appears on an image, tap the face tag and use available options, such as sending emails.

Face recognition may fail depending on the face angle, face size, skin colour, facial expression, light conditions, or accessories the subject is wearing.

Using Tag Buddy
When viewing an image, tap → Settings → Tag buddy, and then drag the Tag buddy switch to the right to display a contextual tag (weather, location, date, and person’s name) when opening an image.

Organising with folders
Create a folder to organise images or videos stored in the device. You can copy or move files from one folder to another.

To create a new folder, tap . Enter a name for the folder, tap OK, and then tick images or videos. Tap and hold any selected image or video, drag it to the new folder, and then tap . Tap Copy to copy or Move to move.
Paper Artist

Use this application to make images look like illustrations with fun effects or frames.

Tap **Paper Artist** on the Applications screen.

⚠️ This application may not be available depending on the region.

Use artistic tools to edit an image. The edited image is saved in the **Gallery → Paper Pictures** folder.
Video

Use this application to play video files.
Tap Video on the Applications screen.

- Some file formats are not supported depending on the device's software.
- Some files may not play properly depending on the encoding method used.
- This application may not be available depending on the region.

Playing videos

Select a video to play.

- Search for other devices to play the file.
- Move forwards or backwards by dragging the bar.
- Change screen ratio.
- Restart the current video or skip to the previous video. Tap and hold to move backwards quickly.
- Adjust the volume.
- Skip to the next video. Tap and hold to move forwards quickly.
- Reduce the size of the video screen.
- Pause and resume playback.

Deleting videos

Tap ➔ Delete, select videos by ticking, and then tap Delete.

Sharing videos

Tap ➔ Share via, select videos by ticking, tap Done, and then select a sharing method.
Using Popup Video player

Use this feature to use other applications without closing the video player. While watching videos, tap \[\text{ }\] to use the pop-up player.

Spread two fingers apart on the screen to enlarge the player or pinch to reduce it. To move the player, drag the player to another location.

Video Editor

Use this application to edit videos and apply various effects.

Tap Video Editor on the Applications screen.

- Some file formats are not supported depending on the device’s software.
- Some files may not play properly depending on the encoding method used.
- Some features are not supported depending on the selected theme.
- This application may not be available depending on the region.

Creating videos

Set a frame theme. To add media files, tap the icon corresponding to the desired media type at the bottom left pane of the screen, and then tap a file. Repeat file insertion as needed, and then tap Done to finish.

To delete a frame, tap and hold the frame, and then drag it to the rubbish bin.

To rearrange frames, tap and hold a frame, and then drag it to a new location.

Tap \[\text{ }\] and add a transition effect between frames.

To save, tap \[\text{ }\] → Save.

To export the video as a file, tap Export.
Inserting text in a video
Select a frame to edit, enter text by using text insertion options at the right pane, tap Done, and then save the video.

Trimming segments of a video
Select a frame to split, move the start bracket to the desired starting point, move the end bracket to the desired ending point, tap Done, and then save the video.

Splitting videos
Select a frame to split, drag it to the split point, tap Split → Done and then save the video.

Applying effects to a video
Select a frame to edit, select an effect option at the left pane, tap Done, and then save the video.

Story Album
Use this application to create your own digital album to keep your stories by organising the images neatly and automatically.
Tap Story Album on the Applications screen.
To start Story Album, you need to download and install the application. Tap OK, and then follow the on-screen instruction.

This application may not be available depending on the region.
Creating story albums

Create story albums by selecting images from Gallery or images sorted by tag information. Tap [+], and then select an option.

Creating albums from Gallery

Tap From Gallery, select a folder, select images, and then tap ✓. Enter a title for the album, select a theme and a cover image, and then tap Create album.

Creating albums by tag information

Create albums by sorting photos by tag information, such as the location where an image was taken, subjects, or time.

Tap By tag information, and then set the following tag options:

- **Location**: Specify a location. The device sorts images from the location. To use location tags, activate the GPS tag setting in Camera before taking photos. (p. 87)
- **People**: Select people from tagged images. The device sorts images taken with the people. To use people tags, add tags to images in Gallery. (p. 92)
- **Time**: Specify a period of time. The device sorts images taken during the period you set.

After the setting is finished, tap Find pictures. Enter a title for the album, select a theme and a cover image, and then tap Create album.
Viewing story albums

Select a story album. The cover image appears on the first page. Scroll left or right to view images in the story album.

On a page of the album, tap  and use the following functions. The available options vary depending on the page.

- **Edit title**: Rename the album.
- **Add content**: Add more content to the album.
- **Remove content**: Delete content in the album.
- **Edit**: Change the page layout or edit the images on the current page.
- **Change theme**: Change the theme for the page layout.
- **Change cover image**: Change the cover image of the album.
- **Slideshow**: Start a slideshow with the images in the current album.
- **Share via**: Send the album to others.
- **Export**: Export the album to other storage locations.
- **Print**: Print the album via a USB or Wi-Fi connection. Some printers may not be compatible with the device.
- **Order photo book**: Place an order for a printed album.
- **Delete page**: Delete the page.

Editing images

Tap the image of the page in an album.

- Add a caption.
- Select among various effects that are available.
- Send the image to others.
- Delete the image.
Tap ‡, and then use the following functions:

- **Slideshow**: Start a slideshow or change the slideshow settings.
- **Set as cover**: Set the image as an album cover image.
- **Rotate left**: Rotate the image anticlockwise.
- **Rotate right**: Rotate the image clockwise.

### Creating albums with recommended photos

When you take multiple photos in a location, the device suggests creating a new album based on the location. This feature helps you create photo albums conveniently when you have daily events or travel.

### Setting your home city

Set your home city to let the device recognise whether you are at home or travelling. The device suggests creating event or travel albums based on your location. For example, when taking photos outside of the home city, the device suggests creating a travel album.

Tap ‡ → **Settings** → **Home city**, and then select a setting method.

### Setting a minimum number of photos

Tap ‡ → **Settings**, and then drag the switch next to an album type under **Suggestions** to the right. Select the album type, and then set the minimum number of photos.

When you take photos that meet the criteria you set, the device will suggest creating an album.

The device will recommend creating story albums when you surpass the preset specified number of photos in a single day.

### Creating an event or travel album

Tap ‡ → **From suggestions**. Select an album, enter a title for the album, and then tap **Create album**.

---

99
Xtremera

Use this application to capture star trails or moving lights.
Tap Xtremera on the Application screen.

This application may not be available depending on the region.

In Shooting mode, use the following functions:
- : Access the Home screen.
- : Move back.
- : Change camera options.
- : Take a photo.
- : View photos.
- : Change shooting options.

Capturing star trails

Create images of star trails by taking photos continuously and merging them together.
Tap Star Trail → Shoot, set the shoot duration, and then tap . Mount the camera on a tripod. Move the camera in the direction of the arrow to locate the North Star, and then press the Shutter button to start taking photos.

You can activate or deactivate the North Star location feature by tapping the Find Polaris, ON or OFF buttons.
Highlighting subjects or capturing moving lights

Highlight subjects or capture moving lights by setting a long exposure.

**Highlighting subjects**

Tap **Light Art → Highlighting → Shoot**. Mount your camera on a tripod and press the Shutter button to start taking a photo. Illuminate the subject that you want to highlight with a light source, such as a flashlight. The longer the light source is illuminated, the brighter the highlighted area will be.

**Capturing light trails**

Tap **Light Art → Light Painting → Shoot**. Mount your camera on a tripod and press the Shutter button to start taking a photo. Move a light source, such as a flashlight, to draw a light trail.

**Capturing lights in pendulum motion**

Tap **Light Art → Pendulum → Shoot**. Tie a light source, such as a flashlight, to a fixed point and let it swing above the ground. Place your camera on a level surface with the lens facing towards the swinging subject. Press the Shutter button to start taking a photo.

**Music**

Use this application to listen to music.

Tap **Music** on the Applications screen.

- Some file formats are not supported depending on the device’s software version.
- Some files may not play properly depending on the encoding method used.
- This application may not be available depending on the region.
Playing music

Select a music category, and then select a song to play.

Search for other devices to play the file.

Adjust the volume.

Set the file as your favourite song.

Change the repeat mode.

Open the playlist.

Skip to the next song. Tap and hold to move forwards quickly.

Pause and resume playback.

Restart the currently-playing song or skip to the previous song. Tap and hold to move backwards quickly.

To listen to songs at equal volume levels, tap → Settings → Smart volume.

When Smart volume is activated, the volume may end up louder than the device volume level. Use caution to avoid long-term exposure to loud sounds to prevent damage to your hearing.

Creating playlists

Make an own selection of songs.

Tap Playlists, and then tap → Create playlist. Enter a title and tap OK. Tap Add music, select songs to include, and then tap Done.

To add the currently-playing song to a playlist, tap → Add to playlist.
YouTube

Use this application to watch videos from the YouTube website.
Tap YouTube on the Applications screen.

This application may not be available depending on the region.

Watching videos

Tap 🔍, and then enter a keyword. Select one of the returned search results to watch a video.

Add the video to the playlist.
Access playback options for the current video.
Send the URL to others.

Switch to floating screen mode to search for other videos.
Pause or resume playback.
Move forwards or backwards by dragging the bar.

Sharing videos

Select the video to view, tap ⏯️, and then select a sharing method.

Uploading videos

Tap ☐️ → Uploads → ↑, select a video, enter information for the video, and then tap ↑.
Communication

Contacts

Use this application to manage contacts, including phone numbers, email addresses, and others.

Tap Contacts on the Applications screen.

This application may not be available depending on the region.

Managing contacts

Tap Contacts.

Creating a contact

Tap + and enter contact information.

- : Add an image.
- +/ - : Add or delete a contact field.

Editing a contact

Select a contact to edit, and then tap .

Deleting a contact

Select a contact to delete, and then tap → Delete.
**Searching for contacts**

Tap **Contacts**.

Use one of the following search methods:

- Scroll up or down the contacts list.
- Use the index at the right side of the contacts list for quick scrolling, by dragging a finger along it.
- Tap the search field at the top of the contacts list and enter search criteria.

Once a contact is selected, take one of the following actions:

- 👩🏻‍💻: Add to favourite contacts.
- 📧: Compose an email.

**Displaying contacts**

Tap **Contacts**.

By default, the device shows all saved contacts on the device or another account. Tap ⬇️ → **Contacts to display**, and then select a location where contacts are saved.

**Moving contacts**

Tap **Contacts**.

**Moving contacts to Google**

Tap ⬇️ → **Merge accounts** → **Merge with Google**. Contacts moved to Google Contacts appear with 👩🏻‍💻 in the contacts list.

**Moving contacts to Samsung**

Tap ⬇️ → **Merge accounts** → **Merge with Samsung**. Contacts moved to Samsung Contacts appear with 📧 in the contacts list.
Importing and exporting contacts
Tap Contacts.

Importing contacts
Tap Contacts → Import/Export, and then select an import option.

Exporting contacts
Tap Contacts → Import/Export, and then select an export option.

Sharing contacts
Tap Contacts → Share namecard via, select contacts, tap Done, and then select a sharing method.

Favourite contacts
Tap Favourites.
Tap Favourites, and then take one of the following actions:

• Search: Search for contacts.
• Add to favourites: Add contacts to favourites.
• Remove from favourites: Remove contacts from favourites.
• Grid view / List view: View contacts in grid or list form.
Contact groups

Tap Groups.

Adding contacts to a group

Select a group, and then tap +. Select contacts to add, and then tap Done.

Managing groups

Tap ➕, and then take one of the following actions:

• Create: Make a new group.
• Search: Search for contacts.
• Change order: Tap and hold ➕ next to the group name, drag it up or down to another position, and then tap Done.
• Delete groups: Select user-added groups, and then tap Delete. Default groups cannot be deleted.

Sending an email to a group’s members

Select a group, tap ➕ → Send email, select members, and then tap Done.

Business card

Tap Contacts.

Create a business card and send it to others.

Tap Set up my profile, enter details, such as phone number, email address, and postal address, and then tap Save. If user information has been saved when you set up the device, select the business card, and then tap to edit.

To share the business card with others, tap ➕ → Share namecard via, and then select a sharing method.
Email

Use this application to send or view email messages.
Tap Email on the Applications screen.

This application may not be available depending on the region.

Setting up email accounts

Set up an email account when opening Email for the first time.
Enter the email address and password. Tap Next for a private email account, such as Google Mail, or tap Manual setup for a company email account. After that, follow the on-screen instructions to complete the setup.
To set up another email account, tap → Settings → Add account.

Sending messages

Tap the email account to use, and then tap at the top of the screen. Enter recipients, subject, and message, and then tap .
Tap to add a recipient from the contacts list.
Tap to attach images, videos, contacts, and others.
Tap to insert images, contacts, location information, and others into the message.

Sending scheduled messages

While composing a message, tap → Schedule sending. Tick Schedule sending, set a time and date, and then tap Done.

• If the device is turned off at the scheduled time, is not connected to the network, or the network is unstable, the message will not be sent.
• This feature is based on the time and date set on the device. The time and date may be incorrect if you move across time zones and the network does not update the information.
Reading messages

Select an email account to use, and new messages are retrieved. To manually retrieve new messages, tap 🔄.

Tap a message to read.

- Tap the attachment tab to open attachments, and then tap 📀 to save it.

Google Mail

Use this application to quickly and directly access the Google Mail service.

Tap Google Mail on the Applications screen.

- This application may not be available depending on the region.
- This application may be labelled differently depending on the region.

Sending messages

In any mailbox, tap 📰, enter recipients, a subject, and a message, and then tap ➤.

- Tap ➡️ Attach picture to attach images.
- Tap ➡️ Attach video to attach videos.
- Tap ➡️ Add Cc/Bcc to add more recipients.
Communication

Tap → **Save draft** to save the message for later delivery.
Tap → **Discard** to start over.
Tap → **Settings** to change the Google Mail settings.
Tap → **Send feedback** to report your opinions for application development.
Tap → **Help** to access help information for the Google Mail.

**Reading messages**

Tap a message to read.

- Delete this message.
- Keep this message for long-term storage.
- Add this email address to the contacts list.
- Preview attachment.
- Mark the message as unread.
- Add a label to this message.
- Forward this message to others.
- Reply to all recipients.
- Reply to this message.
- Mark the message as a reminder.

---

The screen may differ depending on the selected account.

**Labels**

Google Mail does not use actual folders, but uses labels instead. When Google Mail is launched, it displays messages labelled Inbox.

Tap 📄 to view messages in other labels.

To add a label to a message, tap and hold a message, tap 🔄 → **Change labels**, and then select the label to assign.
Hangouts

Use this application to chat with others.
Tap Hangouts on the Applications screen.

This application may not be available depending on the region.

Select a friend from the friends list or enter data to search and select a friend from the results to start chatting.

Google+

Use this application to stay connected with people via Google's social network service.
Tap Google+ on the Applications screen.

This application may not be available depending on the region.

Tap All to change the category, and then scroll up or down to view posts from your circles. Tap to use other social network features.

G+ Photos

Use this application to share images or videos via Google's social network service.
Tap G+ Photos on the Applications screen.

This application may not be available depending on the region.

Tap → to select images or videos, and then use one of the following:

- Share: Share the images or videos.
- : Share the image via Hangouts.
- : Delete the images or videos.
- : Create a new album and copy the images or videos.
ChatON

Use this application to chat with any device.
Tap ChatON on the Applications screen.

![Note] This application may not be available depending on the region.

Create a buddies list by entering phone numbers or Samsung account email addresses, or by selecting buddies from the list of suggestions.
Tap Chat → Start chat and select a buddy to start chatting.
Web & network

Internet

Use this application to browse the Internet.
Tap Internet on the Applications screen.

This application may not be available depending on the region.

Viewing webpages

Tap the address field, enter the web address, and then tap Go.
Tap to share, save, or print the current webpage while viewing a webpage.

Opening a new page

Tap → New window.
To go to another webpage, tap and tap the page to select it.

Searching the web by voice

Tap the address field, tap speak a keyword, and then select one of the suggested keywords that appear.

This feature may not be available depending on the region.

Bookmarks

To bookmark the current webpage, tap → Bookmark this page.
To open a bookmarked webpage, tap and then select one.
History
Tap → History to open a webpage from the list of recently-visited webpages. To clear the history, tap → Clear history.

Links
Tap and hold a link on the webpage to open it in a new page, save, or copy. To view saved links, use Downloads. (p. 135)

Sharing webpages
To share a webpage address with others, tap → Share page. To share a part of a webpage, tap and hold the desired text, and then tap Share via.

Chrome
Use this application to search for information and browse webpages. Tap Chrome on the Applications screen.

This application may not be available depending on the region.

Viewing webpages
Tap the address field, and then enter a web address or search criteria.

Opening a new page
Tap → New tab. To go to another webpage, tap → a webpage.

Searching the web by voice
Tap the address field, tap , speak a keyword, and then select one of the suggested keywords that appear.
Syncing with other devices

Sync open tabs and bookmarks to use with Chrome on another device, when you are logged in with the same Google account.

To view open tabs on other devices, tap → Other devices. Select a webpage to open.
To view bookmarks, tap ★.

Bluetooth

Bluetooth creates a direct wireless connection between two devices over short distances. Use Bluetooth to exchange data or media files with other devices.

- Samsung is not responsible for the loss, interception, or misuse of data sent or received via the Bluetooth feature.
- Always ensure that you share and receive data with devices that are trusted and properly secured. If there are obstacles between the devices, the operating distance may be reduced.
- Some devices, especially those that are not tested or approved by the Bluetooth SIG, may be incompatible with your device.
- Do not use the Bluetooth feature for illegal purposes (for example, pirating copies of files or illegally tapping communications for commercial purposes). Samsung is not responsible for the repercussion of illegal use of the Bluetooth feature.
- This feature may not be available depending on the region.

To activate Bluetooth, on the Applications screen, tap Settings → Connections → Bluetooth, and then drag the Bluetooth switch to the right.
### Pairing with other Bluetooth devices

On the Applications screen, tap **Settings → Connections → Bluetooth → Scan**, and detected devices are listed. Select the device you want to pair with, and then accept the auto-generated passkey on both devices to confirm.

### Sending and receiving data

Many applications support data transfer via Bluetooth. An example is **Gallery**. Open **Gallery**, select an image, tap **→ Bluetooth**, and then select one of the Bluetooth devices. After that, accept the Bluetooth authorisation request on the other device to receive the image. The transferred file is saved in the **Bluetooth** folder. If a contact is received, it is added to the contacts list automatically.

### Samsung Link

Use this application to play contents saved on remotely-located devices or web storage services over the Internet. You can play and send multimedia files on your device to another device or web storage service.

To use this application, you must sign in to your Samsung account and register two or more devices. The registration methods may vary depending on the device type.

Tap **Samsung Link** on the Applications screen.

This application may not be available depending on the region.

When opening this application, all the content from your registered devices and storage services will appear. You can browse and play them.
Sending files
Send files to other devices or upload them to web storage services.
Tap ☰ to select a device or web storage and scroll left or right to select a media category.
Then, tap 📄, select files, and then tap ➡.

Sharing files
Tap ☰ to select a device or web storage and scroll left or right to select a media category.
Then, tap 📄, select files, tap ☐, and then select a sharing method.

Playing files on a remote device
Tap ☰ to select a device or web storage and scroll left or right to select a media category.
Then, tap 📄, select files, tap ☐, and then select a device.

- Supported file formats may differ depending on connected devices as a media player.
- Some files may be buffered while playing depending on the network connection.

Managing contents on a web storage service
Select a web storage service, and then view and manage your files.
To transfer files between your device and a web storage service, tap 📄, select files, and then tap ➡.
To register web storage services to the device, tap ☰ → Add storage, and then select a web storage service.
Group Play

Use this application to enjoy moments with your friends by sharing and playing content. Create or join a Group Play session, and then share content, such as images or documents. Tap **Group Play** on the Applications screen.

- This application may not be available depending on the region.
- While using this application, you cannot access the Internet through the Wi-Fi network.

**Creating a group for Group Play**

When you create a Group Play session, other devices can join the session and share the content.

When you use a password for a Group Play session, other devices must enter the password to join the session. To use a password, tick **Set group password**.

Tap **Create group**, set a password, and then use the following features:

- **Share images**: Select images to share.
- **Share documents**: Select documents to share.
- **Play games and more**: Play online games with friends.
Joining Group Play

Join a Group Play session created by another device.
Tap **Join group**, select a Group Play session to join, and then enter the password for the group if necessary.

Using additional features in a Group Play session

While sharing content with other devices, use the following features:
Tap and write a note or draw on the screen. All participants can see what you create.
Tap to view all shared images in mosaic layout.
Tap or to select more images or documents.
Tap to view the group participants.
Application & media stores

Play Store

Use this application to purchase and download applications and games that are able to run on the device.

Tap Play Store on the Applications screen.

This application may not be available depending on the region.

Installing applications

Browse applications by category, or tap to search with a keyword.

Select an application to view information. To download it, tap INSTALL. If there is a charge for the application, tap the price, and follow the on-screen instructions to complete the purchase process.

• When a new version is available for any installed application, an update icon appears at the top of the screen to alert you to the update. Open the notifications panel and tap the icon to update the application.

• To install applications that you downloaded from other sources, on the Applications screen, tap Settings → More → Security → Unknown sources.

Uninstalling applications

Uninstall the applications purchased from Play Store.

Tap → My apps, select an application to delete in the list of installed applications, and then tap UNINSTALL.
Samsung Apps

Use this application to purchase and download dedicated Samsung applications. For more information, visit apps.samsung.com.

Tap Samsung Apps on the Applications screen.

This application may not be available depending on the region.

Installing applications

Browse applications by category.

To search for an application, tap at the top of the screen, and then enter a keyword in the search field.

Select an application to view information. To download it, tap Free. If there is a charge for the application, tap the price, and follow the on-screen instructions to complete the purchase process.

When a new version is available for any installed application, an update icon appears at the top of the screen to alert you to the update. Open the notifications panel and tap the icon to update the application.

Play Books

Use this application to read and download book files.

Tap Play Books on the Applications screen.

This application may not be available depending on the region.
Application & media stores

Play Movies
Use this application to watch, download, and rent movies or TV shows.
Tap Play Movies on the Applications screen.

This application may not be available depending on the region.

Play Music
Use this application to listen to music from the device or stream music from the Google cloud service.
Tap Play Music on the Applications screen.

This application may not be available depending on the region.

Play Newsstand
Use this application to purchase or subscribe to newspapers or magazines.
Tap Play Newsstand on the Applications screen.

This application may not be available depending on the region.

Play Games
Use this application to download and play games.
Tap Play Games on the Applications screen.

This application may not be available depending on the region.
Utilities

S Memo

Use this application to create a memo using images and voice recordings. Tap S Memo on the Applications screen.

This application may not be available depending on the region.

Composing memos

Create memos with enriched content by drawing sketches with your finger or adding images or voice memos.

Tap + to write or draw on the screen, or tap + to enter text with the keyboard.
When jotting down a memo, tap  once more to change the pen type, line thickness, or pen colour.

When erasing the handwritten memo, tap  once more to change the eraser size or tap Clear all to clear the memo.

To change the sheet background, tap → Change background.
To add tags, tap → Add tag.

**Inserting multimedia files or a voice recording**
Tap to insert multimedia files. Tap to insert a voice recording.

**Browsing memos**
Browse memo thumbnails by scrolling up or down.
To search for a memo, tap → Search.
To delete memos, tap → Delete.
To sort memos by date, title, tag, or others, tap → Sort by.
To change the view mode, tap → List view.
To create a memo by importing a file, tap → Import.
To export memos as another file format, tap → Export.
To create a folder, tap → Create folder.
To change the order of memos, tap → Change order.
To move memos to another folder, tap → Move.
To copy memos, tap → Copy.
To change the S Memo settings, tap → Settings.
To back up or restore memos to or from a storage location, tap → Backup and restore.

**Viewing a memo**

Tap the memo thumbnail to open it.
To delete the memo, tap → Delete.
To send the memo to others, tap → Share via.
To export the memo as another file format, tap → Export.
To add the memo as your favourites list, tap → Add to Favourites.
To save the memo as an event, tap → Create event.
To set the memo as wallpaper or to assign it to a contact, tap → Set as.
To print the memo via a USB or Wi-Fi connection, tap → Print. Some printers may not be compatible with the device.
To edit the memo, tap 
To play the voice recording, tap .
**S Planner**

Use this application to manage events and tasks.

Tap **S Planner** on the Applications screen.

This application may not be available depending on the region.

**Creating events or tasks**

Tap **New**, and then use one of the following methods:

- **Add event**: Enter an event with an optional repeat setting.
- **Add task**: Enter a task with an optional priority setting.

To add an event or task more briefly, tap a date to select it and tap it again.

Enter a title and specify which calendar to use or sync with. Then tap **Edit event details** or **Edit task details** to add more details, such as how often the event repeats, when it has an advance alert, or where it takes place.

To add a location to the event, enter the location in the **Location** field, tap next to the field, and then pinpoint the precise location by tapping and holding on the map that appears.

To attach an image, tap **Images**, and then take a photo or select one of the existing images.
Syncing with Google Calendar

On the Applications screen, tap **Settings → Accounts → Google** under **My accounts** → a Google account → **Sync Calendar**. To manually sync for updating, on the Applications screen, tap **S Planner → Sync**.

To display synced event or tasks, tap **Calendars → Display**, tick the Google account, and then tap **Done**.

Changing calendar type

Select one from among different types of calendars including year, month, week, and others at the right side of the screen. A pinch gesture can be used to change calendar type. For example, pinch to change from the monthly calendar to the yearly calendar, or spread apart to change the monthly calendar to the weekly calendar.

Searching for events

Tap **Search**, and then enter a keyword to search for.

To view today’s events, tap **Today** at the top of the screen.

Deleting events

Tap **Delete**, select events, and then tap **Delete**.

Sharing events

Select an event, tap **Share via**, and then select a sharing method.
Dropbox

Use this application to save and share files with others via the Dropbox cloud storage. When you save files to Dropbox, your device automatically syncs with the web server and any other computers that have Dropbox installed.

Tap Dropbox on the Applications screen.

⚠️ This application may not be available depending on the region.

When running Dropbox for the first time, tap Start to activate it. Follow the on-screen instructions to complete the setup.

Once Dropbox is activated, photos and videos taken with the device’s camera are uploaded to Dropbox automatically. To view the uploaded photos or videos, tap ⬅️. To share or delete files or create albums, tap ✅, and then select files.

To upload files to Dropbox, tap ➡️ → ➕ → Upload here → Photos or videos or Other files. While viewing images or videos, tap ✯ to add it to the favourites list. To open files in the favourites list, tap ✯.

Cloud

Use this feature to sync files or back up settings and application data with your Samsung account or Dropbox.

On the Applications screen, tap Settings → Accounts → Cloud.

⚠️ This feature may not be available depending on the region.

Syncing with the Samsung account

Tap your Samsung account or Sync settings to sync files.

Backing up or restoring data

Tap Backup or Restore to back up or restore data with your Samsung account.
Syncing with Dropbox

Tap Link Dropbox account, and then enter the Dropbox account. Follow the on-screen instructions to complete the setup.

Once you sign in, tap Allow and the device automatically syncs files with Dropbox whenever you make some changes.

Drive

Use this application to save and share files with others via the Google Drive service by selecting files from the device, or creating or scanning documents. When you save files to Google Drive, your device automatically syncs with the web server and any other computers that have Google Drive installed.

Tap Drive on the Applications screen.

This application may not be available depending on the region.

Uploading files

Tap Upload, select one of the files saved on the device, and then upload it to Google Drive. To create a new document, or scan an image or document and upload it, tap Create or Scan.

Viewing files

Select a file to open it.

While viewing a file, tap ☰ and use one of the following icons:

• 🗂️: Share the file with others.
• 📍: Move the file to another folder.
• ⌨️: Make the file available offline.
• ☰️: Access additional options.
• ★: Mark the file as important.
Clock

Use this application to set alarms, check the time of many major cities in the world, measure the duration of an event, set a timer, or use as the desk clock.

Tap Clock on the Applications screen.

This application may not be available depending on the region.

Alarm Setting alarms

Tap Create alarm, set a time for the alarm to go off, select days for the alarm to repeat, and then tap Save.

• More → Location alarm: Set a location. The alarm goes off only when you are in the location.

• More → Snooze: Set an interval and the number of times for the alarm to repeat after the preset time.

• More → Smart alarm: Set a time for the alarm to go off before the preset time.
**Utilities**

**Stopping alarms**
Drag ✗ outside the large circle to stop an alarm. Drag ✅ outside the large circle to repeat the alarm after a specified length of time.

**Deleting alarms**
Tap and hold the alarm, and then tap **Delete**.

**World clock**

**Creating clocks**
Tap **Add city**, and then enter a city name or select a city from the cities list.
To apply summer time, tap and hold a clock, and then tap **DST settings**.

**Deleting clocks**
Tap and hold the clock, and then tap **Delete**.

**Stopwatch**
Tap **Start** to time an event. Tap **Lap** to record lap times.
Tap **Reset** to clear lap time records.

**Timer**
Set the duration, and then tap **Start**.
Drag ✗ outside the large circle when the timer goes off.

**Desk clock**
Tap ✏️ to view in full screen.
Calculator

Use this application for simple or complex calculations.
Tap Calculator on the Applications screen.

This application may not be available depending on the region.

To see the calculation history, tap to hide the keypad.
To clear the history, tap → Clear history.

S Voice

Use this application to command the device by voice to perform various features.
Tap S Voice on the Applications screen. Alternatively, tap twice.

This application may not be available depending on the region.

Here are several examples of spoken commands:

• Open music
• Launch calculator
• Check schedule

Tips for better voice recognition

• Speak clearly.
• Speak in quiet places.
• Do not use offensive or slang words.
• Avoid speaking in dialectal accents.

The device may not recognise your commands or may perform unwanted commands depending on your surroundings or how you speak.
**Google**

Use this application to search not only the Internet, but also applications and their contents on the device as well.

Tap **Google** on the Applications screen.

![Note] This application may not be available depending on the region.

**Searching the device**

Tap the search field, and then enter a keyword. Alternatively, tap ![Mic], and then speak a keyword.

**Search scope**

To select what applications to search, tap ![Menu] → **Settings** → **Phone search**, and then tick the items to search for.

**Google Now**

Launch Google search to view Google Now cards that show the current weather, public transit info, your next appointment, and more when you are most likely to need it.

Join Google Now when opening Google search for the first time. To change Google Now settings, tap ![Menu] → **Settings** → **Google Now**.

**Voice Search**

Use this application to search webpages by speaking.

Tap **Voice Search** on the Applications screen.

![Note] This application may not be available depending on the region.

Speak a keyword or phrase when **Speak now** appears on the screen.
My Files

Use this application to access all kinds of files stored in the device, including images, videos, songs, and sound clips.

Tap My Files on the Applications screen.

This application may not be available depending on the region.

Managing files

Select a folder to open it. To go back to the parent folder, tap \hspace{1em}. To return to the root directory, tap \hspace{1em}.

In a folder, tap \hspace{1em}, and then use one of the following options:

- Select all: Select all files or folders to apply the same option to them at once.
- Create folder: Create a folder.
- Search: Search for files or folders.
- View by: Change the view mode.
- Sort by: Sort files or folders.
- Settings: Change the file manager settings.

Adding shortcuts to folders

Add a shortcut of frequently-used folders to the root directory. Tap \hspace{1em} \rightarrow Add shortcut, enter a shortcut name, select a folder, and then tap Set here.
Downloads

Use this application to see what files are downloaded through the applications. Tap Downloads on the Applications screen.

This application may not be available depending on the region.

Select a file to open it with an appropriate application. To sort the files by size, tap Sort by size. To sort the files by date, tap Sort by date.
Travel & local

Maps
Use this application to pinpoint the location of the device, search for places, or get directions. Tap Maps on the Applications screen.

⚠️ This application may not be available depending on the region.

Searching for locations
Search for locations by entering an address or a keyword. Once the location is found, select a location to view the detailed information. Refer to the help for more information.

Getting directions for a destination
Tap 📍 to set starting and ending locations, and then select a travel method. The device shows the routes to get to the destination.
About Settings

Use this application to configure the device, set application options, and add accounts. Tap Settings on the Applications screen.

Some options may not be available depending on the region.

Connections

Wi-Fi

Activate the Wi-Fi feature to connect to a Wi-Fi network and access the Internet or other network devices.

To use options, tap .

- **Advanced**: Customise Wi-Fi settings.
- **WPS push button**: Connect to a secured Wi-Fi network with a WPS button.
- **WPS PIN entry**: Connect to a secured Wi-Fi network with a WPS PIN.

If you use the camera in a country other than the one where it was purchased, the 5 GHz Wi-Fi feature may not function properly, due to differences in radio frequencies. Available radio frequencies may differ by country.

Setting Wi-Fi sleep policy

On the Settings screen, tap Connections → Wi-Fi → Advanced → Keep Wi-Fi on during sleep.
Setting Network notification

The device can detect open Wi-Fi networks and display an icon on the status bar to notify when available.

On the Settings screen, tap Connections → Wi-Fi → Advanced and tick Network notification to activate this feature.

Wi-Fi Direct

Wi-Fi Direct connects two devices directly via a Wi-Fi network without requiring an access point.

On the Settings screen, tap Connections → Wi-Fi → Wi-Fi Direct.

Bluetooth

Activate the Bluetooth feature to exchange information over short distances.

To use more options, tap 📱.

- **Visibility timeout**: Set duration that the device is visible.
- **Received files**: View received files via the Bluetooth feature.

Data usage

Keep track of your data usage amount.

- **Data usage cycle**: Enter monthly reset date to monitor your data usage.

To use more options, tap 📱.

- **Auto sync data**: Activate or deactivate auto-syncing of applications. You can select what information to sync for each account in Settings → Accounts.
- **Mobile hotspots**: Select Wi-Fi hotspots to prevent applications that are running in the background from using them.
More networks
Customise settings to control networks.

Flight mode
This disables all wireless functions on your device. You can use only non-network services.

Smart network
This disables all data network functions on your device when the screen is turned off, and disconnects applications, such as SNS applications or Email. When the screen is turned on, all new notifications that were not received while the screen was off are retrieved.

💡 You can save battery power by turning on this feature.

VPN
Set up and connect to virtual private networks (VPNs).

Nearby devices
- **Shared contents**: Set the device to share your content with other devices.
- **Allowed devices list**: View the list of devices that can access your device.
- **Not-allowed devices list**: View the list of devices that are blocked from accessing your device.
- **Download to**: Select a memory location for saving media files.
- **Upload from other devices**: Set the device to accept uploads from other devices.
Settings

My device

Lock screen
Change settings for the locked screen.

Display
Change the settings for the display.

• Wallpaper:
  - Home screen: Select a background image for the Home screen.
  - Lock screen: Select a background image for the locked screen.
  - Home and lock screens: Select a background image for the Home screen and the locked screen.
• Notification panel: Customise the items that appear on the notifications panel.
• Page buddy: Set the device to open contextual pages based on your actions.
• Screen mode:
  - Adapt display: Use this mode for optimising the display according to the display settings.
  - Dynamic: Use this mode to make the display tone more vivid.
  - Standard: Use this mode for normal surroundings.
  - Movie: Use this mode for dim surroundings, such as in a dark room.
• Brightness: Set the brightness of the display.
• Auto rotate screen: Set the content to rotate automatically when the device is turned.
• Screen timeout: Set the length of time the device waits before turning off the display’s backlight.
• Daydream: Set the device to launch a screensaver when your device is charging.
• Font style: Change the font type for display text.
• Font size: Change the font size.
• Display battery percentage: Set the device to display the remaining battery life.
Sound
Change settings for various sounds on the device.

- **Volume**: Adjust the volume level for music and videos, system sounds, and notifications.
- **Default notification sound**: Select a ringtone for events, such as incoming emails.
- **Touch sounds**: Set the device to sound when selecting an application or option on the touch screen.
- **Screen lock sound**: Set the device to sound when locking or unlocking the touch screen.
- **Vibration feedback**: Set the device to vibrate when touching keys.
- **Key-tap sound**: Set the device to sound when a key is touched.
- **Audio output**: Select a sound output format to use when connecting your device to optional HDMI devices. Some devices may not support the surround sound setting.

Blocking mode
Select which notifications will be blocked in blocking mode.

Hands-free mode
Set the device to read contents aloud and specify applications to use in hands-free mode.

Accessory
Change settings for accessories.

- **Dock sound**: Set the device to play a sound when your device is connected to or removed from an optional desktop dock.
- **Audio output mode**: Set the device to use the dock speaker when your device is connected to an optional desktop dock.
- **Desk home screen display**: Set the device to show the desk clock when your device is connected to an optional desktop dock.
- **Audio output**: Select a sound output format to use when connecting your device to optional HDMI devices. Some devices may not support the surround sound setting.
Accessibility

Accessibility services are special features for those with certain physical disabilities. Access and alert the following settings to improve accessibility to the device.

- **Auto rotate screen**: Set the interface to rotate automatically when you rotate the device.
- **Screen timeout**: Set the length of time the device waits before turning off the display’s backlight.
- **Speak passwords**: Set the device to read aloud passwords you enter with TalkBack.
- **Show shortcut**: Add a shortcut to Accessibility on the quick menu that appears when you press and hold the Power button.
- **TalkBack**: Activate TalkBack, which provides voice feedback.
- **Font size**: Change the font size.
- **Magnification gestures**: Set the device to zoom in and out by tapping the screen three times.
- **Negative colours**: Reverse the display colours to improve visibility.
- **Colour adjustment**: Adjust the colour scheme for the screen when the device determines that you are colour blind or having difficulty reading content.
- **Accessibility shortcut**: Set the device to activate TalkBack when you press and hold the Power button, and then tap and hold the screen with two fingers.
- **Text-to-speech options**:
  - **Preferred TTS engine**: Select a speech synthesis engine. To change the settings for speech synthesis engines, tap 📺.
  - **Speech rate**: Select a speed for the text-to-speech feature.
  - **Listen to an example**: Listen to the spoken text for an example.
- **Mono audio**: Enable mono sound when listening to audio with one earbud.
- **Turn off all sounds**: Mute all device sounds.
- **Assistant menu**: Set the device to show the assistive shortcut icon that helps you access functions supported by external buttons or features on the notifications panel. You can also edit the menu on the shortcut icon.
- **Tap and hold delay**: Set the recognition time for tapping and holding the screen.
Language and input

Change the settings for text input. Some options may not be available depending on the selected language.

Language

Select a display language for all menus and applications.

Default

Select a default keyboard type for text input.

Samsung keyboard

To change the Samsung keyboard settings, tap 📌.

The available options may vary depending on the region.

• Select input languages: Select languages for text input.
• Numbers and symbols: Change the keyboard layout.
• Predictive text: Activate predictive text mode to predict words based on your input and show word suggestions. You can also customise the word prediction settings.
• Auto replacement: Set the device to correct misspelled and incomplete words by tapping the space bar or punctuation mark.
• Auto capitalisation: Set the device to automatically capitalise the first character after a final punctuation mark, such as a full stop, question mark, or exclamation mark.
• Auto spacing: Set the device to automatically insert a space between words.
• Auto-punctuate: Set the device to insert a full stop when you double-tap the space bar.
• None: Set the device to deactivate the keyboard swipe feature.
• Continuous input: Set the device to enter text by sweeping on the keyboard.
• Cursor control: Enable the smart keyboard navigation feature to move the cursor by scrolling the keyboard.
• Sound: Set the device to sound when a key is touched.
• Character preview: Set the device to display a large image of each character tapped.
• Tutorial: Access help information for using the Samsung keyboard.
• Reset settings: Reset Samsung keyboard settings.
Google voice typing

To change the voice input settings, tap 📊.

- **Choose input languages**: Select input languages for text input.
- **Block offensive words**: Set the device to prevent the device from recognising offensive words in voice inputs.
- **Offline speech recognition**: Download and install language data for offline voice input.

Voice recogniser

Select a voice recognition engine.

This feature appears once you use a voice recognition application.

Voice search

For Samsung voice recognition, use the following options:

- **Language**: Select a language for the voice recognition.
- **Open via the home key**: Set the device to launch S Voice by tapping 🏡 twice.
- **Use location data**: Set the device to use location information for voice search results.
- **Hide offensive words**: Hide offensive words from voice search results.
- **Help**: Access help information for S Voice.
- **About**: View version information.
- **Wake up command**: Set the device to start voice recognition by saying a wake up command while using S Voice.
- **Check missed events**: Set the device to check missed events when S Voice is launched by pressing the headset button.
- **Home address**: Enter your home address to use location information with the voice command feature.
- **Log in to Facebook**: Enter your Facebook account information to use Facebook with S Voice.
- **Log in to Twitter**: Enter your Twitter account information to use Twitter with S Voice.
For Google voice recognition, use the following options:

- **Language**: Select a language for the voice recognition.
- **Speech output**: Set the device to provide voice feedback to alert you to the current action.
- **Block offensive words**: Hide offensive words from voice search results.
- **Offline speech recognition**: Download and install language data for offline voice input.
- **Bluetooth headset**: Set the device to allow a voice search with a Bluetooth headset, when it is connected to the device.

### Text-to-speech options

- **Preferred TTS engine**: Select a speech synthesis engine. To change the settings for speech synthesis engines, tap 🗣️.
- **Speech rate**: Select a speed for the text-to-speech feature.
- **Listen to an example**: Listen to the spoken text for an example.

### Pointer speed

Adjust the pointer speed for the mouse or trackpad connected to your device.

### Motion

Activate the motion recognition feature and change the settings that control motion recognition on your device.

- **Tilt to zoom**: Set the device to zoom in or out while viewing images in Gallery or browsing webpages, when you tap and hold two points with your fingers and then tilt the device back and forth.
- **Pan to move icon**: Set the device to move an item to another page when tapping and holding the item and then panning the device to the left or right.
- **Pan to browse images**: Set the device to scroll through an image by moving the device in any direction when the image is zoomed in.
- **Sensitivity settings**: Adjust the reaction speed for each motion.
- **Learn about motions**: View the tutorial for controlling motions.
Settings

- **Palm swipe to capture**: Set the device to capture an image of the screen when you sweep your hand to the left or right across the screen.
- **Palm touch to mute/pause**: Set the device to pause or mute media playback when you touch the screen with your palm.
- **Learn about hand motions**: View the tutorial for controlling hand motions.

Voice control
Change settings to control options by voice commands.

 Accounts

Add account
Add email or SNS accounts.

Cloud
Change settings for syncing data or files with your Samsung account or Dropbox cloud storage.

Backup and reset
Change the settings for managing settings and data.
- **Back up my data**: Set the device to back up settings and application data to the Google server.
- **Backup account**: Set up or edit your Google backup account.
- **Automatic restore**: Set the device to restore settings and application data when the applications are reinstalled on the device.
- **Factory data reset**: Reset settings to the factory default values and delete all data.
More

Location services

Change settings for location information permissions.

- **Access to my location**: Set the device to allow applications to use your current location information.
- **Use GPS satellites**: Set the device to use the GPS satellite for finding the current location.
- **Use wireless networks**: Set the device to allow location data collection or to determine the location of your device via Wi-Fi network.
- **My places**: Set up profiles that will be used for specific locations when you use GPS, Wi-Fi, or Bluetooth features to find your current location.

Security

Change settings for securing the device.

- **Encrypt device**: Set a password to encrypt data saved on the device. You must enter the password each time you turn on the device.
  
  Charge the battery before enabling this setting because it may take more than an hour to encrypt your data.

- **Encrypt external SD card**: Set the device to encrypt files on a memory card.
  
  If you reset your device to the factory defaults with this setting enabled, the device will not be able to read your encrypted files. Disable this setting before resetting the device.

- **Make passwords visible**: Set the device to display passwords as they are entered.
• **Device administrators**: View device administrators installed on the device. You can allow device administrators to apply new policies to the device.

• **Unknown sources**: Choose to install applications from any source. If not chosen, download applications only from **Play Store**.

• **Verify apps**: Set this to allow Google to check the application for harmful behaviour before installing it.

• **Storage type**: Set a storage type for credential files.

• **Trusted credentials**: Use certificates and credentials to ensure secure use of various applications.

• **Install from device storage**: Install encrypted certificates stored on the USB storage.

• **Clear credentials**: Erase the credential contents from the device and reset the password.

### Application manager

View and manage the applications on your device.

### Battery

View the amount of battery power consumed by your device.

### Power

Change settings for power.

• **Auto power off**: Set the length of time the device waits before turning off.

• **Power saving mode**: Activate power-saving mode and change the settings for power-saving mode.

• **Fast power-on**: Activating this causes the device to start quickly for the next 24 hours.
Settings

Storage
View memory information for your device and memory card, or format a memory card.

⚠ Formatting a memory card permanently deletes all data from it.

.storage_info
The actual available capacity of the internal memory is less than the specified capacity because the operating system and default applications occupy part of the memory. The available capacity may change when you upgrade the device.

Date and time
Access and alter the following settings to control how the device displays the time and date.

⚠ If the battery remains fully discharged or removed from the device, the time and date is reset.

- Set date: Set the current date manually.
- Set time: Set the current time manually.
- Select time zone: Set the home time zone.
- Use 24-hour format: Display time in 24-hour format.
- Select date format: Select a date format.

About device
Access device information and update device software.

Google Settings
Use this application to configure settings for some features provided by Google.
Tap Google Settings on the Applications screen.
Appendix

Troubleshooting

Before contacting a Samsung Service Centre, please attempt the following solutions. Some situations may not apply to your device.

The subject’s eyes appear red

Red eyes occur when the subject’s eyes reflect light from the camera flash. Set the flash option to Auto & red-eye or Red-eye fix. (p. 83)

Photos have dust spots

If dust particles are present in the air, you may capture them in photos when you use the flash.

• Turn the flash off or avoid taking photos in a dusty place.
• Adjust the ISO sensitivity. (p. 78)

Photos are blurred

Blurring can occur if you take photos in low-light conditions or hold the device incorrectly.

• Half-press the Shutter button to ensure the subject is focused.
• Set the image stabiliser option.
• Use a tripod to prevent your device from shaking.
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 take a clear picture and may result in device shake.

- Set Night in smart mode.
- Turn the flash on. (p. 83)
- Adjust the ISO sensitivity. (p. 78)
- Use a tripod to prevent your device 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.
- Set the flash option to Fill in. (p. 83)
- Adjust the exposure value. (p. 77)
- Set the metering option to Spot if a subject is in the centre of the frame.

When you cannot take photos or videos

- Your storage may be full. Delete unnecessary files, or insert a new memory card.
- Format the memory card.
- The memory card may be defective. Purchase a new card.
- Ensure that the device is turned on.
- Charge the battery.
- Ensure that the battery is inserted. (p. 21)

When the flash is not functional

- The flash option may be set to Off. (p. 83)
- In some modes, the flash is disabled.
When the flash fires unexpectedly
The flash may fire unexpectedly due to static electricity. The device is not malfunctioning.

When the colours in the photo do not match the actual scene
Select an appropriate white balance option to suit the light source. (p. 79)

When the photo is too bright or dark
- Turn the flash off or on. (p. 83)
- Adjust the ISO sensitivity. (p. 78)
- Adjust the exposure value. (p. 77)

The lens barrel does not retract even when the power is off
When you turn the power off while holding the lens barrel, the lens barrel may not be able to retract into the body. If this happens, do not force the lens barrel into the body. Take the device to your local Samsung Service Centre.

When you turn on your device or while you are using the device, it prompts you to enter the password
When the device lock feature is enabled, you must enter the password you set for the device.

Your device does not turn on
- When the battery is completely discharged, your device will not turn on. Charge the battery completely before turning on the device.
- The battery may not be inserted properly. Insert the battery again.
- Wipe both gold-coloured contacts and insert the battery again.
The touch screen responds slowly or improperly

- If you attach a protective cover or optional accessories to the touch screen, the touch screen may not function properly.
- If you are wearing gloves, if your hands are not clean while touching the touch screen, or if you tap the screen with sharp objects or your fingertips, the touch screen may malfunction.
- The touch screen may malfunction in humid conditions or when exposed to water.
- Restart your device to clear any temporary software bugs.
- Ensure that your device software is upgraded to the latest version.
- If the touch screen is scratched or damaged, visit a Samsung Service Centre.

Your device freezes or has fatal errors

If your device freezes or hangs, you may need to close applications or reinsert the battery and turn on the device to regain functionality. If your device is frozen and unresponsive, press and hold the Power button for 7 seconds to reboot.

If this does not solve the problem, perform a factory data reset. On the Applications screen, tap Settings → Accounts → Backup and reset → Factory data reset → Reset device → Erase everything. Before performing the factory data reset, remember to make backup copies of all important data stored on the device.

If the problem is still not resolved, contact a Samsung Service Centre.

The internet is often disconnected

Ensure that you are not blocking the device’s internal antenna.

The battery icon is empty

Your battery is low. Recharge or replace the battery.
The battery does not charge properly (For Samsung-approved chargers)

- Ensure that the charger is connected properly.
- If the battery terminals are dirty, the battery may not charge properly or the device may turn off. Wipe both gold-coloured contacts and try charging the battery again.
- The batteries in some devices are not user-replaceable. To have the battery replaced, visit a Samsung Service Centre.

The battery depletes faster than when first purchased

- When you expose the battery to very cold or very hot temperatures, the useful charge may be reduced.
- Battery consumption increases when you use some applications, such as games or the Internet.
- The battery is consumable and the useful charge will get shorter over time.

Your device is hot to the touch

When you use applications that require more power or use applications on your device for an extended period of time, your device may feel hot to the touch. This is normal and should not affect your device’s lifespan or performance.

Error messages appear when launching the camera

Your device must have sufficient available memory and battery power to operate the camera application. If you receive error messages when launching the camera, try the following:

- Charge the battery or replace it with a battery that is fully charged.
- Free some memory by transferring files to a computer or deleting files from your device.
- Restart the device. If you are still having trouble with the camera application after trying these tips, contact a Samsung Service Centre.
Photo quality is poorer than the preview

- The quality of your photos may vary, depending on the surroundings and the photography techniques you use.
- If you take photos in dark areas, at night, or indoors, image noise may occur or images may be out of focus.

Error messages appear when opening multimedia files

If you receive error messages or files do not play, when opening multimedia files on your device, try the following:

- Free some memory by transferring files to a computer or deleting files from your device.
- Ensure that the music file is not Digital Rights Management (DRM)-protected. If the file is DRM-protected, ensure that you have the appropriate licence or key to play the file.
- Ensure that your device supports the file type.
- Your device supports photos and videos captured with the device. Photos and videos captured by other devices may not work properly.
- Your device supports multimedia files that are authorised by providers of additional services. Some content circulated on the Internet, such as ringtones, videos, or wallpapers, may not work properly.

Another Bluetooth device is not located

- Ensure that the Bluetooth wireless feature is activated on your device.
- Ensure that the Bluetooth wireless feature is activated on the device you wish to connect to.
- Ensure that your device and the other Bluetooth device are within the maximum Bluetooth range (10 m).

If the tips above do not solve the problem, contact a Samsung Service Centre.
A connection is not established when you connect the device to a computer

- Ensure that the USB cable you are using is compatible with your device.
- Ensure that you have the proper driver installed and updated on your computer.
- If you are a Windows XP user, ensure that you have Windows XP Service Pack 3 or higher installed on your computer.
- Ensure that you have Samsung Kies or Windows Media Player 10 or higher installed on your computer.

Your device cannot find your current location

GPS signals may be obstructed in some locations, such as indoors. Set the device to use Wi-Fi network to find your current location in these situations.

Data stored on the device has been lost

Always make backup copies of all important data stored on the device. Otherwise, you cannot restore data if it is corrupted or lost. Samsung is not responsible for the loss of data stored on the device.

A small gap appears around the outside of the device case

- This gap is a necessary manufacturing feature and some minor rocking or vibration of parts may occur.
- Over time, friction between parts may cause this gap to expand slightly.
Using or storing the device

Inappropriate places to use or store the device

- Avoid exposing the device to very cold or very hot temperatures.
- Avoid using your device in areas with extremely high humidity, or where the humidity changes drastically.
- Avoid exposing the device to direct sunlight and storing it in hot, poorly-ventilated areas, such as in a car during summer time.
- Protect your device and the display from impact, rough handling, and excessive vibration to avoid serious damage.
- Avoid using or storing your device in dusty, dirty, humid, or poorly-ventilated areas to prevent damage to moving parts and internal components.
- Do not use your device near fuels, combustibles, or flammable chemicals. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the device or its accessories.
- Do not store the device where there are mothballs.

Using on beaches or shores

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

Storing for extended period of time

- When you store the device 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.
- The present date and time can be initialized when the device is turned on after the device and battery have been separated for a prolonged period.
Using the device with caution in humid environments

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

Other cautions

- Do not swing your device by the strap. This may cause injury to yourself or others or damage to your device.
- Do not paint your device, as paint can clog moving parts and prevent proper operation.
- Turn off the device when not using it.
- Your device consists of delicate parts. Avoid impacts to the device.
- Protect the display from external force by keeping it in the case when not in use. Protect the device from scratches by keeping it away from sand, sharp implements, or loose change.
- Do not use the device if the screen is cracked or broken. Broken glass or acrylic could cause injury to your hands and face. Take the device to a Samsung service centre to have it repaired.
- Never place devices, 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 discolour the image sensor or cause it to malfunction.
- Protect your lens from fingerprints and scratches. Clean your lens with a soft, clean, debris-free lens cloth.
- The device may turn off if impacted from the outside. This is to protect the memory card. Turn on the device to use it again.
• While you use the device, it may heat up. This is normal and should not affect your device’s lifespan or performance.

• When you use the device in low temperatures, it may take some time to turn on, the colour of the display may be changed temporarily, or after-images may appear. These conditions are not malfunctions and they will correct themselves when the device is returned to milder temperatures.

• Paint or metal on the outside of the device may cause allergies, itchy skin, eczema, or swelling for people with sensitive skin. If you experience any of these symptoms, stop using the device immediately and consult a doctor.

• Do not insert foreign objects into any of your device’s compartments, slots, or access points. Damage due to improper use may not be covered by your warranty.

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

• Do not disassemble or puncture the battery, as this can cause explosion or fire.

• Wipe your device or charger with a towel or an eraser.

• Clean the battery terminals with a cotton ball or a towel.

• Do not use chemicals or detergents. Doing so may discolour or corrode the outside the device or may result in electric shock or fire.

• Avoid disturbing others when using the device in public.

Cautions when using memory cards

• Avoid memory cards to very cold or very hot temperatures (below 0 °C or above 40 °C). 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 device and memory card.

• Do not use memory cards that have been formatted by other devices or by a computer. Reformat the memory card with your device.

• Turn off the device when you insert or remove the memory card.
Appendix

- Do not remove a card while the device is transferring or accessing information, as this could result in loss of data and/or damage to the card or device.
- 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 temperature, high humidity, or corrosive substances.
- Do not touch gold-coloured contacts or terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.
- 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 in your device.
- 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 device 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 device for an extended period, the memory card may become warm. This is normal and does not indicate a malfunction.
- Use a memory card that meets the standard requirements.

⚠️ The manufacturer is not responsible for any loss of data.
About the battery

Use only Samsung-approved batteries.

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 your manufacturer.
- Use only authentic, manufacturer-recommend battery chargers and charge the battery only by the method described in this user manual.
- Do not place the battery near heating devices or expose 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 or above.
- Do not allow the battery to come in contact with moisture or liquids.
- Battery shall not be exposed to 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 method described in this user manual. The battery can ignite or explode if not charged properly.

Notes about using the battery

• Avoid exposing batteries to very cold or very hot temperatures (below 0 °C or above 40 °C). Extreme temperatures can reduce the charging capacity of your batteries.
• When you use the device for an extended period, the area around the battery chamber may become warm. This does not affect the normal use of the device.
• 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, 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 device when storing it for an extended period. Installed batteries may leak or corrode over time and cause serious damage to your device. Storing the device 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 device 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.
• Follow all instructions in this manual to ensure the longest lifespan of your device and battery. Damages or poor performance caused by failure to follow warnings and instructions can void your manufacturer’s warranty.
• Your device may wear out over time. Some parts and repairs are covered by the warranty within the validity period, but damages or deterioration caused by using unapproved accessories are not.
Cautions about using the battery

Protect batteries, chargers, and memory cards from damage.
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 battery is not charging, make sure that the battery is inserted correctly.
- If the device is not charging properly, the battery may not fully charge. Turn off the device before charging the battery.
- Do not use your device 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 device.
- If you connect the device to an external power source when the battery is depleted, using high energy-consuming functions will cause the device to turn off. To use the device normally, recharge the battery.
- Using the flash or recording videos depletes the battery quickly. Charge the battery fully.
- Overcharging batteries may shorten battery life. After charging is finished, disconnect the cable from your device.
- Do not bend or damage the AC 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 devices on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when they are overheated.

Malware and viruses

To protect your device from malware and viruses, follow these usage tips. Failure to do so may result in damages or loss of data that may not be covered by the warranty service.

- Do not download unknown applications.
- Do not visit untrusted websites.
- Delete suspicious messages or email from unknown senders.
- Set a password and change it regularly.
- Deactivate wireless features, such as Bluetooth, when not in use.
- If the device behaves abnormally, run an antivirus program to check for infection.
- Run an antivirus program on your device before you launch newly-downloaded applications and files.
- Install antivirus programs on your computer and run them regularly to check for infection.
- Do not edit registry settings or modify the device's operating system.
- Ensure that your device software and antivirus programs are upgraded to the latest version.
Cleaning the device

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

Do not press on the lens cover, or use a blower brush on the lens cover.

Never use benzene, thinners, or alcohol to clean the device. These solutions can damage the camera or cause it to malfunction.
Some content may differ from your device depending on the region or software version, and is subject to change without prior notice.