

SAMSUNG

SM-C101

User Manual

About this manual

This device provides high quality mobile communication and entertainment using Samsung's high standards and technological expertise. This user manual is specially designed to detail the device's functions and features.

- 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 the final product, or from software provided by service providers or carriers, 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. Applications related to the content may not work properly depending on the device's specifications and the environment that it is used in.
- Available features and additional services may vary by device, software, or service provider.
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- 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.
- You may incur additional charges for data services, such as messaging, uploading and downloading, auto-syncing, or using location services. To avoid additional charges, select an appropriate data tariff plan. For details, contact your service provider.

- 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.

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

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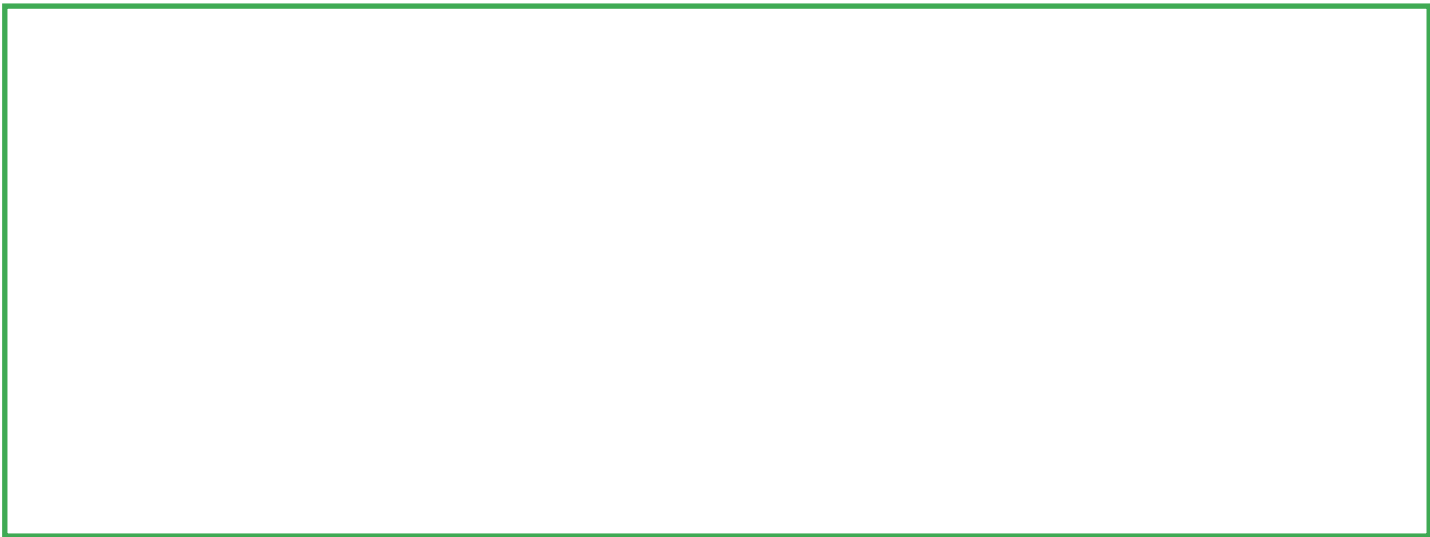


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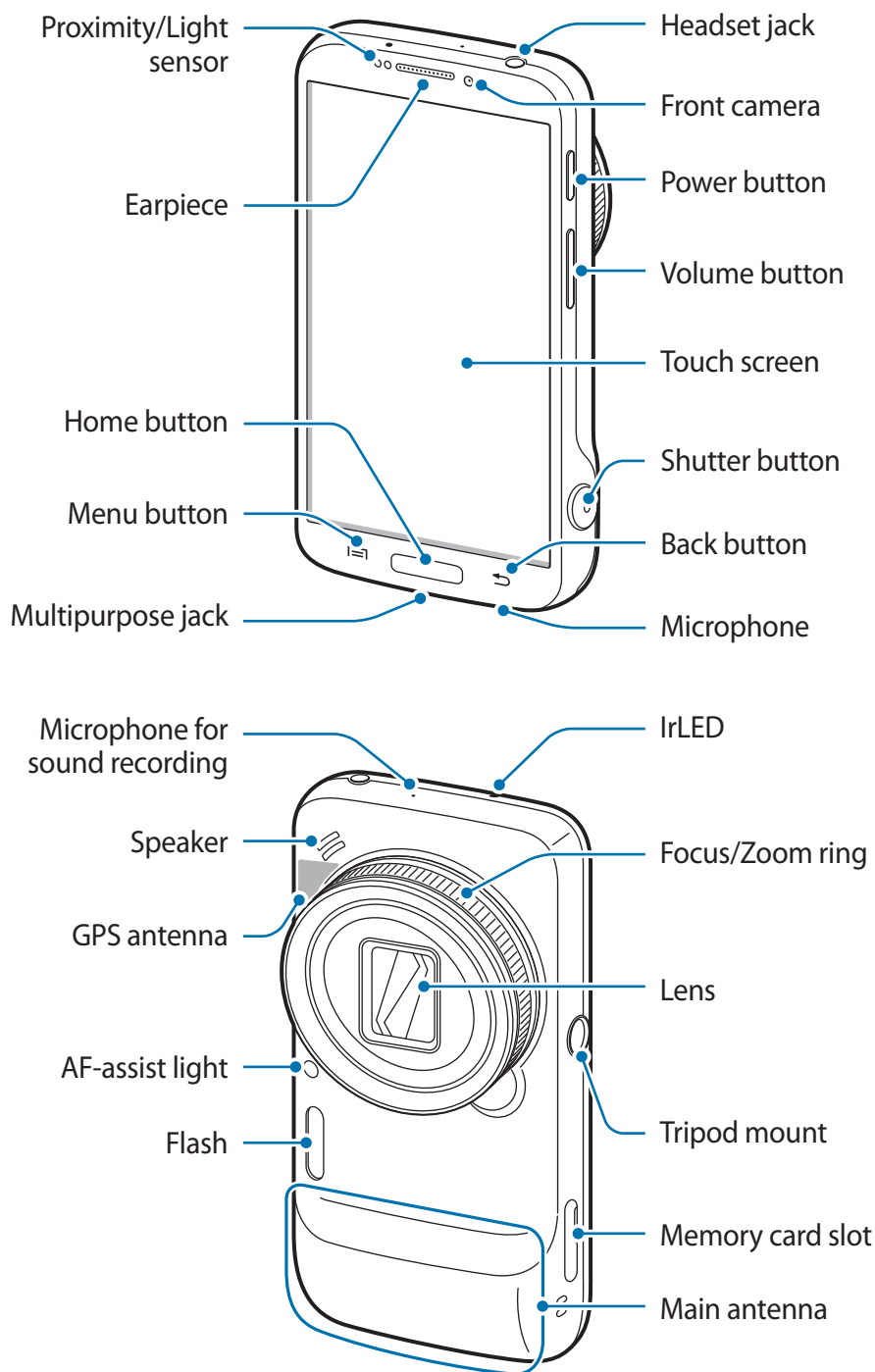
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Troubleshooting

Getting started

Device layout



The microphone at the top of the device is active only when you record voice memos or take videos.









- Do not cover the antenna area with your hands or other objects. 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.



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.

Buttons

Button	Function
 Power	<ul style="list-style-type: none"> • 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.
 Menu	<ul style="list-style-type: none"> • Tap to open a list of options available for the current screen. • Tap and hold on the Home screen to launch Google search.
 Home	<ul style="list-style-type: none"> • Press to return to the Home screen. • Press and hold to open the list of recent applications.
 Back	<ul style="list-style-type: none"> • Tap to return to the previous screen.
 Volume	<ul style="list-style-type: none"> • Press to adjust the device volume.
 Shutter	<ul style="list-style-type: none"> • On the Home screen, press and hold to turn the camera on. • 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.

Package contents

Check the product box for the following items:

- Device
- Battery
- Quick start guide



- The items supplied with the device and any available accessories may vary depending on the region or service provider.
- 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.
- You can purchase additional accessories from your local Samsung retailer. Make sure they are compatible with the device before purchase.
- Other accessories may not be compatible with your device.
- Use only Samsung-approved accessories. Malfunctions caused by using unapproved accessories are not covered by the warranty service.
- Availability of all accessories is subject to change depending entirely on manufacturing companies. For more information about available accessories, refer to the Samsung website.

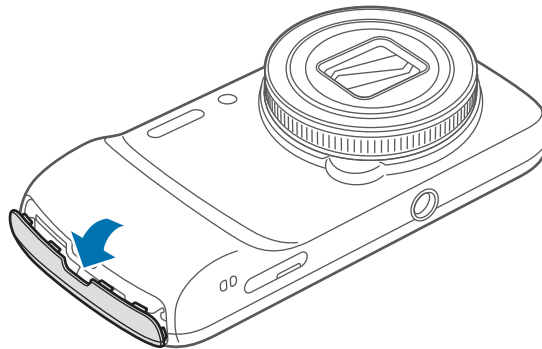
Installing the SIM or USIM card and battery

Insert the SIM or USIM card provided by the mobile telephone service provider, and the included battery.



Only microSIM cards work with the device.

1 Remove the battery cover.

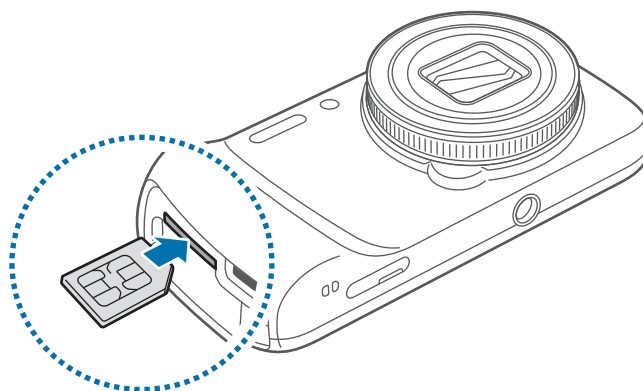


Be careful not to damage your fingernails when you remove the battery cover.



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

2 Insert the SIM or USIM card with the gold-coloured contacts facing upwards.

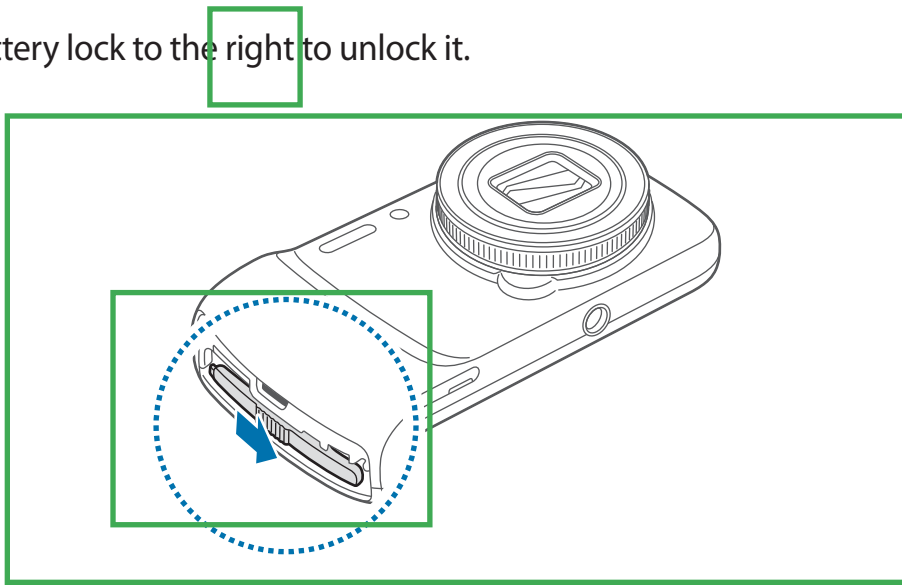


3 Push the SIM or USIM card into the slot until it locks in place.

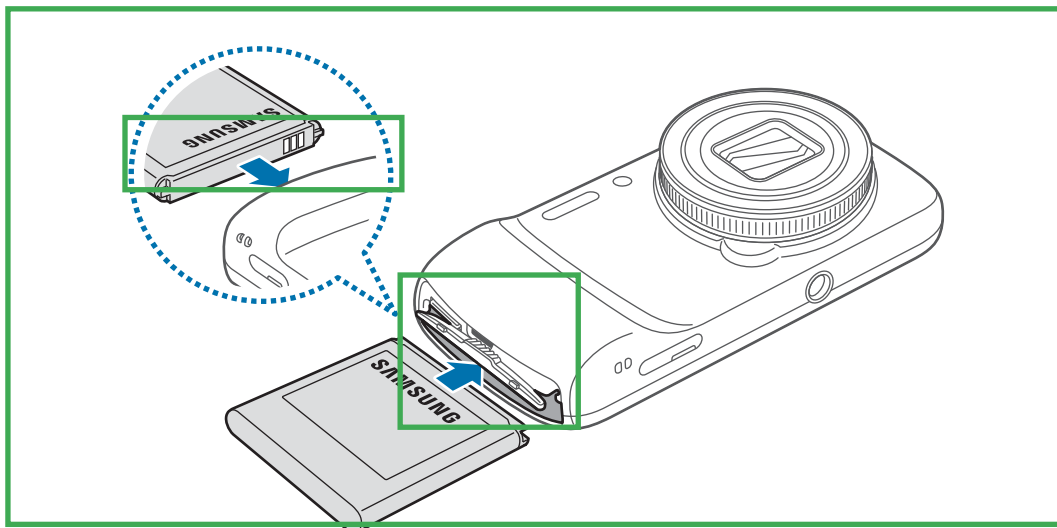


- Do not insert a memory card into the SIM card slot. If a memory card happens to be lodged in the SIM card slot, take the device to a Samsung Service Centre to remove the memory card.
- Use caution not to lose or let others use the SIM or USIM card. Samsung is not responsible for any damages or inconveniences caused by lost or stolen cards.

4 Slide the battery lock to the right to unlock it.

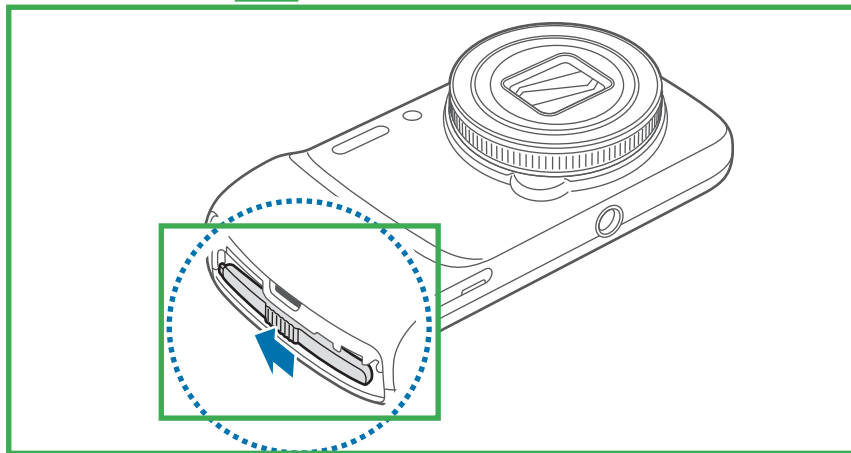


5 Insert the battery.

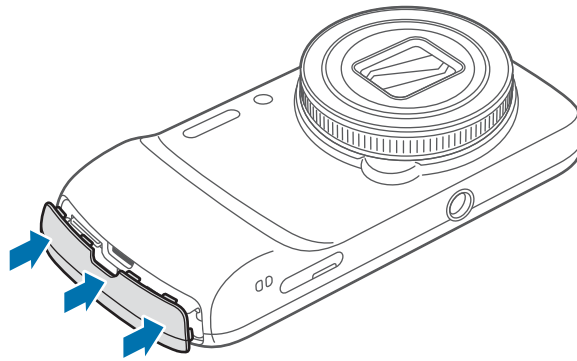


Make sure to properly align the battery's gold-coloured contacts when inserting the battery.

6 Slide the battery lock to the left to lock it.

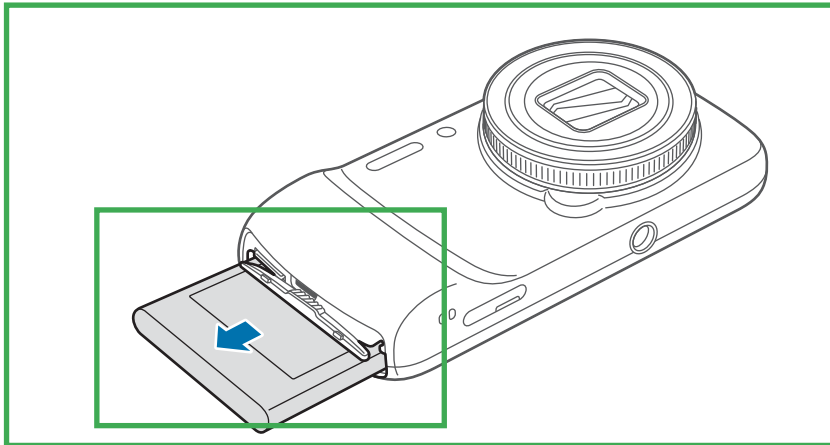


7 Replace the battery cover.

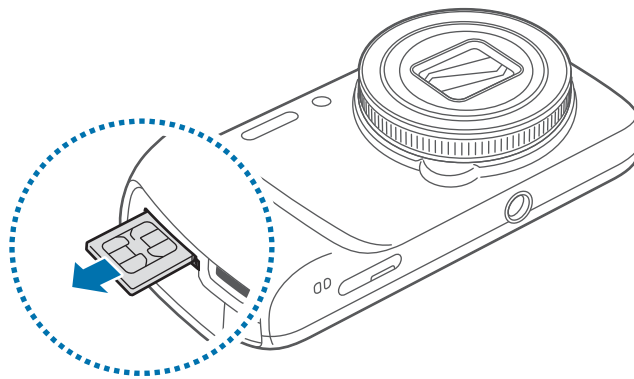


Removing the SIM or USIM card and battery

- 1 Remove the battery cover.
- 2 Slide the battery lock to the left to unlock it.
- 3 Pull out the battery.



- 4 Push the SIM or USIM card until it disengages from the device, and then pull it out.



Charging the battery

Use the charger to charge the battery before using it for the first time. A computer can be also used to charge the device by connecting them via the USB cable.



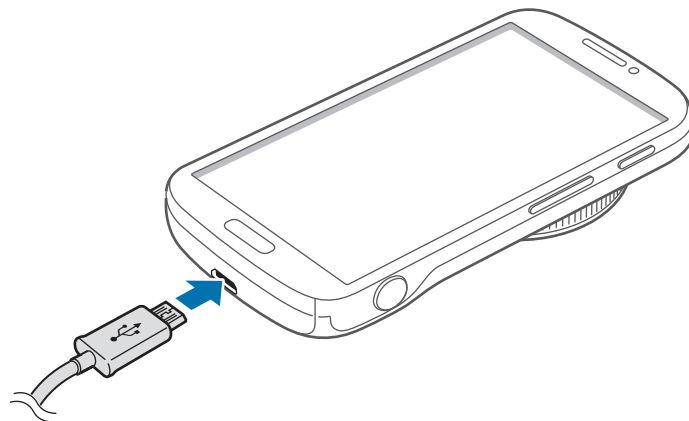
Use only Samsung-approved chargers, batteries, and cables. Unapproved chargers or cables can cause the battery to explode or damage the device.



- When the battery power is low, the device emits a warning tone and displays a low battery power message.
- 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.

Charging with the charger

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.

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 charger. 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 device should remain close to the electric socket 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

Your device accepts memory cards with maximum capacities of 32 GB. Depending on the memory card manufacturer and type, some memory cards may not be compatible with your device.

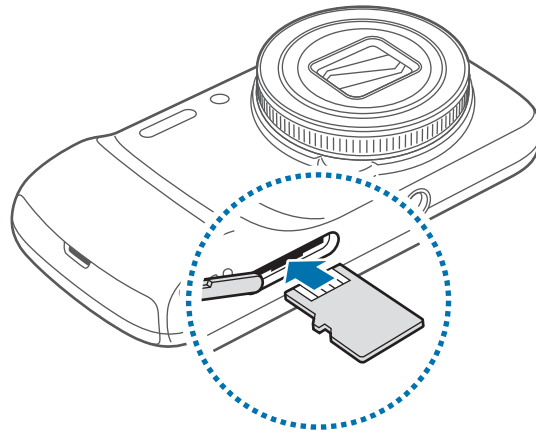


- Some memory cards may not be fully compatible with the device. Using an incompatible card may damage the device or the memory card, or corrupt the data stored in it.
- Use caution to insert the memory card right-side up.



- 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 under the internal memory.

- 1 Insert a memory card with the gold-coloured contacts facing upwards.
- 2 Push the memory card into the slot until it locks in place.



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.

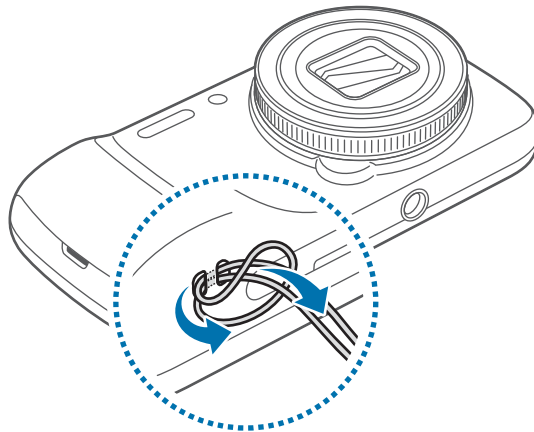
On the Home screen, tap **Apps** → **Settings** → **More** → **Storage** → **Format SD card** → **Format SD card** → **Erase everything**.



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

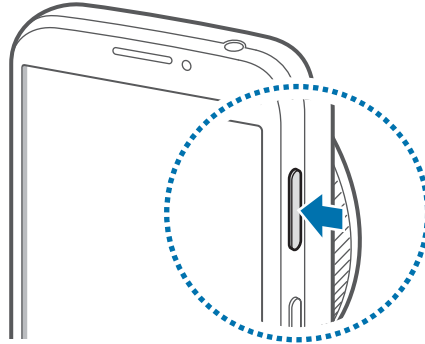
Slide a hand strap through the slot and hook it over the small projection.



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 on the device.



- 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**.

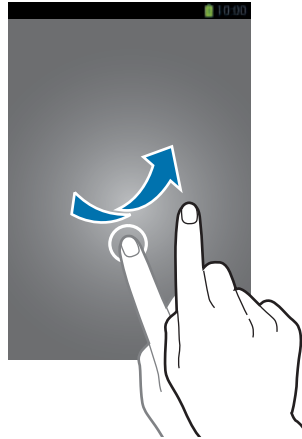
Holding the device

Do not cover the antenna area with your hands or other objects. This may cause connectivity problems or drain the battery.

Locking and unlocking the device

When not in use, lock the device to prevent unwanted operation. Pressing the Power button turns off the screen and puts the device into lock mode. The device automatically gets locked if it is not used for a specified period.

To unlock the device, press the Power button or the Home button and flick your finger in any direction within the unlock screen area at the lower part of the screen.



Adjusting the volume

Press the Volume button up or down to adjust the ringtone volume, or to adjust the sound volume when playing music or video.

Switching to silent mode

















Use one of the following methods:








- Press and hold the Volume button down 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.

Icon	Meaning
	No signal
	Signal strength
	Roaming (outside of normal service area)
	GPRS network connected
	EDGE network connected
	UMTS network connected
	HSDPA network connected
	HSPA+ network connected
	Wi-Fi connected
	Bluetooth feature activated
	GPS activated
	Call in progress
	Missed call
	Synced with the web
	Connected to computer
	No SIM or USIM card

Icon	Meaning
	New text or multimedia message
	Alarm activated
	Silent mode activated
	Vibration mode activated
	Flight mode activated
	Error occurred or caution required
	Battery power level

Using the touch screen

Use only fingers to use the touch screen.

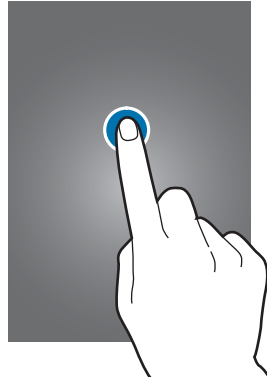


- Do not allow the touch screen to come into contact with other electrical devices. Electrostatic discharges can cause the touch screen to malfunction.
- Do not allow the touch screen to contact water. The touch screen may malfunction in humid conditions or when exposed to water.
- To avoid damaging the touch screen, do not tap it with anything sharp or apply excessive pressure to it with your fingertips.
- 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

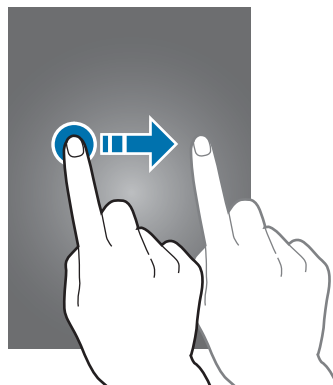
Tapping

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.



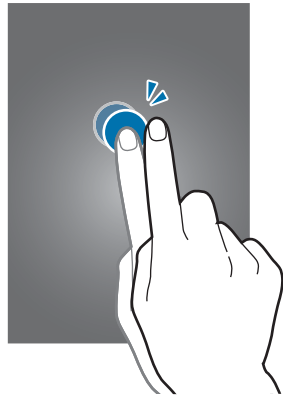
Dragging

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



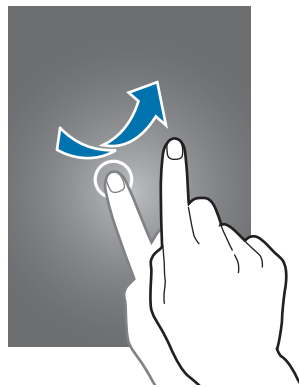
Double-tapping

Double-tap on a webpage, map, or image to zoom in a part. Double-tap again to return.



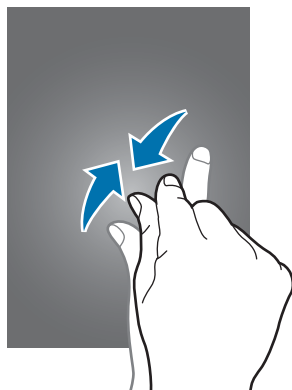
Flicking

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.



Pinching

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



Control motions

Simple motions allow easy control of the device.

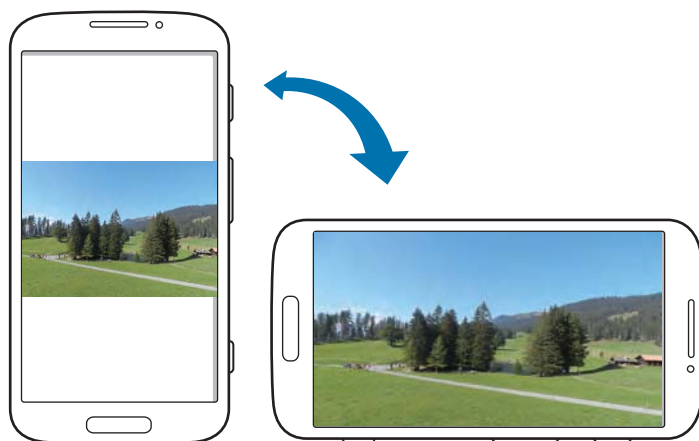
Before using motions, make sure the motion feature is activated. On the Home screen, tap **Apps** → **Settings** → **My device** → **Motions and gestures** → **Motion**, and then drag the **Motion** switch to the right.



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.

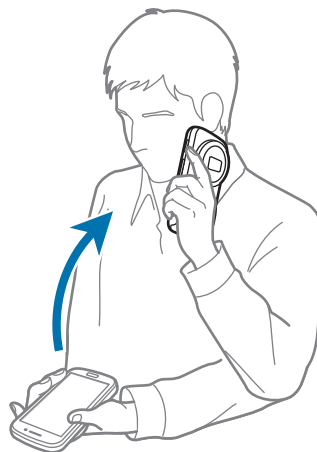
Picking up

When you pick up the device after it has been idle for some time or when the screen has turned off, it vibrates if you have missed calls or new messages.



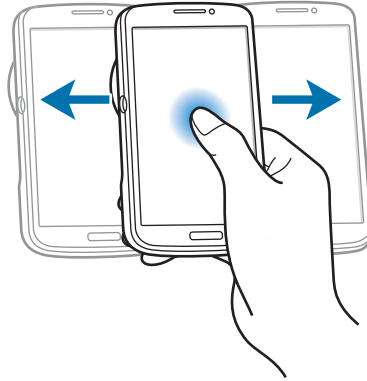
Holding to ear

While viewing call, message, or contact details, pick up and hold the device to your ear to make a call.



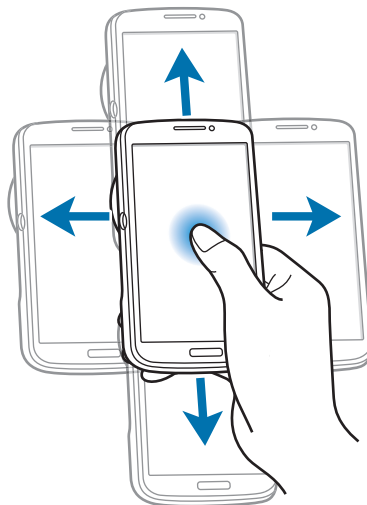
Panning to move

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.



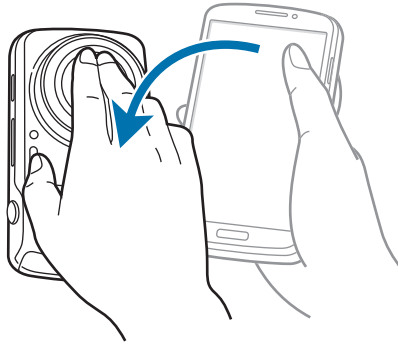
Panning to browse

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.



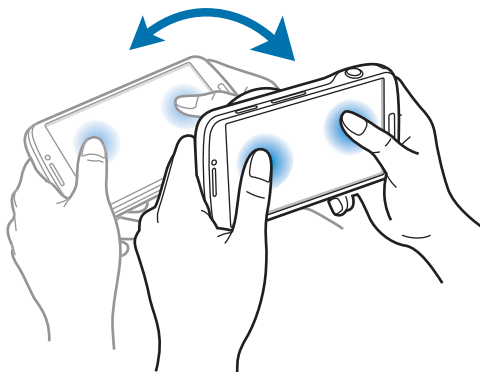
Turning over

Turn over the device to mute ringtone or pause media playback.



Tilting

Tap and hold two points on the screen, and then tilt the device back and forth to zoom in or out.



Activating glove mode

Activate this mode to use the touch screen with gloves on.

On the Home screen, tap **Apps** → **Settings** → **My device** → **Display**, and then tick **High touch sensitivity**.




- Use leather gloves for better recognition while touching the screen. Other types of material may not be recognised.
- For best results, tap the screen firmly while wearing gloves.
- Unintended touch inputs may occur without gloves in glove mode.

Notifications

Notification icons appear on the status bar at the top of the screen to report missed calls, new messages, 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.
- **Mobile data:** Activate or deactivate the data connection.

- **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**.
- **Power saving:** Activate or deactivate power-saving mode.
- **Screen Mirroring:** Activate or deactivate the screen mirroring feature.
- **Wi-Fi hotspot:** Activate or deactivate the Wi-Fi tethering feature.
- **NFC:** Activate or deactivate the NFC feature.
- **Driving mode:** Activate or deactivate driving mode.
- **Smart stay:** Activate or deactivate the smart stay feature.
- **Sync:** Activate or deactivate auto-syncing of applications.
- **Flight mode:** Activate or deactivate flight mode.



The available options may vary depending on the region or service provider.

To rearrange the options on the notifications panel, open the notifications panel, tap  → , tap and hold an item, and then drag it 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, shortcuts to applications, 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

Customise the Home screen by adding widgets, folders, or pages.

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:** Create a new page.

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 at the top of the screen.

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 .

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.



- Some widgets connect to web services. Using a web-based widget may result in additional charges.
- The widgets available may vary depending on the region or service provider.

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.

Using the setting shortcut widget

On the Home screen, tap **Apps** → **Widgets**, and then tap and hold **Settings Shortcut** to open a list of setting options. Select a setting option to add it to the Home screen as a shortcut.

Locked screen

The locked screen prevents the device from unwanted operation when not in use and also allows you to add convenient widgets.

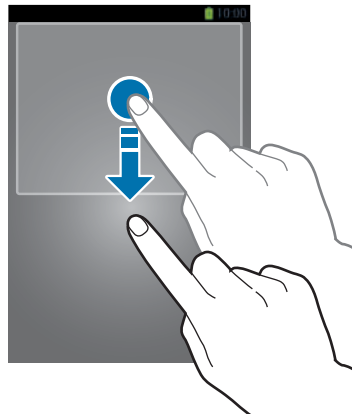
Adding widgets

To use widgets when the screen is locked, on the Applications screen, tap **Settings** → **My device** → **Lock screen**, and then tick **Multiple widgets**.



You cannot use widgets on the locked screen in easy mode or when the security features are activated..

Drag the widgets panel down to expand it. Scroll right to the last page, tap , and then select a widget to add to the locked screen.



Rearranging panels

Moving a panel

Drag the widgets panel down, scroll left or right, tap and hold a panel preview, and then drag it to a new location.

Removing a panel

Drag the widgets panel down, scroll left or right, tap and hold a panel preview, and then drag it to the rubbish bin at the top of the screen.

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

Press and hold the Home button 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.

Press and hold the Home button, tap , and then tap **End** next to an application to close it. To close all running applications, tap **End all**. Alternatively, press and hold the Home button, 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. Select a category to view tips.

To sort categories by an alphabetical order, tap .

To search for keywords, tap .

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.

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

Changing the keyboard layout


Tap  → **Portrait keyboard types**, and then tap **Qwerty keyboard** or **3x4 keyboard**.



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.

If the device does not recognise your words correctly, tap the underlined text and select an alternative word or phrase from the dropdown list.

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. 138)

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 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**.

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, mp4, 3gp, 3ga, wma, ogg, oga, aac, and flac
- Image: bmp, gif, jpg, and png
- Video: 3gp, mp4, avi, wmv, flv, and mkv
- Document: doc, docx, xls, xlsx, ppt, pptx, pdf, and txt

Connecting with Samsung Kies

Samsung Kies is a computer application that manages media libraries, contacts, and calendars, and syncs them 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 with Windows Media Player

Ensure that Windows Media Player is installed on the computer.

- 1 Connect the device to the computer using the USB cable.
- 2 Open Windows Media Player and sync music files.

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.

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 face unlock

On the Applications screen, tap **Settings** → **My device** → **Lock screen** → **Screen lock** → **Face unlock**.

Fit your face in the frame to be captured. Then, set a backup unlock PIN or pattern to unlock the screen in case the face unlock fails.

Setting a face and voice unlock

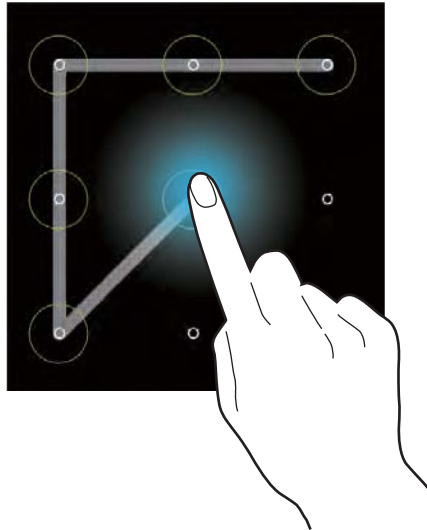
On the Applications screen, tap **Settings** → **My device** → **Lock screen** → **Screen lock** → **Face and voice**.

Fit your face in the frame to be captured and then set a voice command. Then, set a backup unlock PIN or pattern to unlock the screen in case the face and voice unlock fails.

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 or the Home 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 or service provider.

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 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.

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**.

Communication

Phone


Use this application to make or answer a call.

Tap **Phone** on the Applications screen.

Making calls

Making a call

Use one of the following methods:

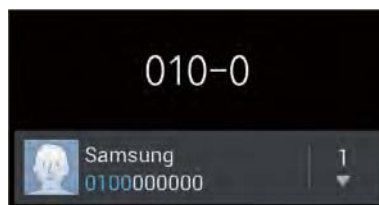
- **Keypad:** Enter the number using the keypad, and then tap .
- **Logs:** Make a call from the history of incoming and outgoing calls and messages.
- **Favourites:** Make a call from the list of favourite contacts.
- **Contacts:** Make a call from the contacts list.

Speed dial numbers

For speed dial numbers, tap and hold the corresponding digit.

Number prediction


When entering numbers on the keypad, automatic predictions appear. Select one of these to make a call.



Finding contacts




Enter a name, phone number, or email address to find a contact in the contacts list. As characters are entered, predicted contacts appear. Select one to place a call to it.

Making an international call

Tap and hold **0** until the + sign appears. Enter the country code, area code, and phone number, and then tap .

During a call

The following actions are available:

- : Select an equaliser option for use during a call.
- : Deactivate the noise reduction feature that removes background noise so that the other party can hear you more clearly.
- : Increase the volume.
- **Hold**: Hold a call. Or press and hold the headset button. Tap **Unhold** to retrieve the held call, or press and hold the headset button.
- **Add call**: Dial a second call.
- **Keypad**: Open the keypad.
- **End call**: End the current call.
- **Speaker**: Activate the speakerphone. Keep the device away from your ears when using the speakerphone.
- **Mute**: Turn off the microphone so that the other party cannot hear you.
- **Headset**: Switch to a Bluetooth headset if it is connected to the device.
- **Swap**: Switch between two calls.
- **Merge**: Make a multiparty call when connected to two calls. Repeat this to add more parties. This feature is available only if the multiparty call service is active.

- ☰ → **Contacts**: Open the contacts list.
- ☰ → **Memo**: Create a memo.
- ☰ → **Message**: Send a message.
- ☰ → **Transfer**: Connect the first party to the second party. This disconnects you from the conversation.
- ☰ → **Manage conference call**: Have a private conversation with one party during a multiparty call or disconnect one party from the multiparty call.

Adding contacts

To add a phone number to the contacts list from the keypad, enter the number and tap **Add to contacts**.

Viewing call logs

Tap **Logs** to view the history of incoming and outgoing calls.

To filter a call log, tap ☰ → **View by**, and then select an option.

Fixed dialling number

The device can be set to restrict outgoing calls only to numbers with specified prefixes. Those prefixes are stored in the SIM or USIM card.

Tap ☰ → **Call settings** → **Additional settings** → **Fixed Dialling Numbers** → **Enable FDN**, and then enter the PIN2 supplied with the SIM or USIM card. Tap **FDN list** and add numbers.

Call barring

The device can be set to prevent certain calls from being made. For example, international calling can be disabled.

Tap ☰ → **Call settings** → **Additional settings** → **Call barring**, select a call type, select a call barring option, and then enter a password.

Receiving calls


Answering a call

When a call comes in, drag  outside the large circle, or press the headset button.


If the call waiting service is active, another call can be made. When the second call is answered, the first call is put on hold.

Rejecting a call


When a call comes in, drag  outside the large circle, or press and hold the headset button.

To send a message when rejecting an incoming call, drag the reject message bar upwards. To create the rejection message, tap  → **Call settings** → **Set up call reject messages**.

Automatically rejecting calls from unwanted numbers

Tap  → **Call settings** → **Call rejection** → **Auto reject mode** → **Auto reject numbers**, and then tap **Auto reject list**. Tap **Create**, enter a number, assign a category, and then tap **Save**.

Missed calls

If a call is missed,  appears on the status bar. Open the notifications panel to view the list of missed calls.

Call waiting

Call waiting is a service provided by the service provider. A user can use this service to suspend a current call and switch to an incoming call. This service is not available for video calls.

To make use of this service, tap  → **Call settings** → **Additional settings** → **Call waiting**.

Call forwarding

The device can be set to send incoming calls to a specified number.

Tap  → **Call settings** → **Additional settings** → **Call forwarding**, and then select a call type and condition. Enter a number and tap **Enable**.

Ending a call

Tap **End call** to end a call. Or press the headset button.










Video calls

Making a video call

Enter the number or select a contact from the contacts list, and then tap  to make a video call.

During a video call

The following actions are available:

- **Switch camera:** Switch between the front and rear camera.
- **Mute:** Turn off the microphone so that the other party cannot hear you.
- **End call:** End the current call.
-  → **Hide me:** Hide your image from the other party.
-  → **Outgoing image:** Select an image to show it to the other party.
-  → **Keypad:** Open the keypad.
-  → **Switch to headset:** Switch to a Bluetooth headset if it is connected to the device.
-  → **Speaker off:** Deactivate the speakerphone feature.
-  → **Animated emotions:** Apply emotional icons to your image.
-  → **Theme view:** Apply decorative icons to your image.
-  → **Enable cartoon view:** Change the view mode to the cartoon view.
-  → **Dual camera:** Use the front and rear cameras so that the other party can see you and your surroundings.



Video calling with dual camera mode will be provided for up to 3 minutes. After 3 minutes the device will turn off the rear camera for optimal performance.

Tap and hold the other party's image to access the following options:

- **Capture image:** Capture the other party's image.
- **Record video:** Take a video of the other party's images.



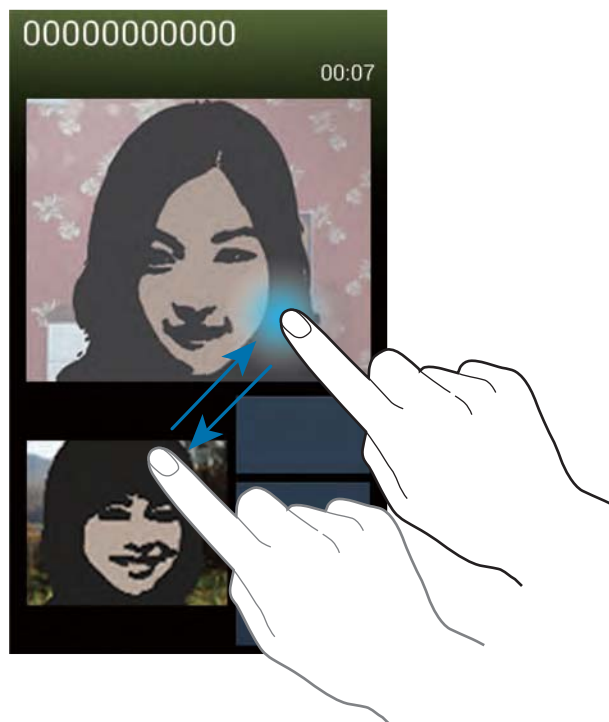
It is illegal in many countries to record a call without the other party's prior permission.

Tap and hold your image to access the following options:

- **Switch camera:** Switch between the front and rear camera.
- **Outgoing image:** Select an image to show it to the other party.

Swapping images

Drag an image of either party onto the other party's image to swap the images.



Contacts




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

Tap **Contacts** on the Applications screen.

Managing 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

Tap  → **Delete**.

Setting a speed dial number






Tap  → **Speed dial setting**, select a speed dial number, and then select a contact for it. To remove a speed dial number, tap and hold it, and then tap **Remove**.

Searching for 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.
-  / : Make a voice or video call.
- : Compose a message.
- : Compose an email.

Displaying contacts

By default, the device shows all saved contacts on the device, the SIM or USIM card, or another account.

Tap  → **Contacts to display**, and then select a location where contacts are saved.

Moving 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

Importing contacts

Tap  → **Import/Export** → **Import from SIM card**, **Import from SD card**, or **Import from USB storage**.


Exporting contacts

Tap  → **Import/Export** → **Export to SIM card**, **Export to SD card**, or **Export to USB storage**.

Sharing contacts

Tap  → **Import/Export** → **Share namecard via**, select contacts, tap **Done**, and then select a sharing method.

Favourite contacts

Tap , 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.
- **Help:** Access help information about using contacts.


Contact 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.
- **Help:** Access help information about using contacts.


Sending a message or email to a group's members

Select a group, tap  → **Send message** or **Send email**, select members, and then tap **Done**.

Business card

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 in **ME**, and then tap  to edit.

Tap  → **Share namecard via**, and then select a sharing method.

Messaging


Use this application to send text messages (SMS) or multimedia messages (MMS).

Tap **Messaging** on the Applications screen.




You may incur additional charges for sending or receiving messages while you are outside your home service area. For details, contact your service provider.



Sending messages

Tap , add recipients, enter a message, and then tap .


Use the following methods to add recipients:


- Enter a phone number.
- Tap , select contacts, and then tap **Done**.

Use the following methods to make a multimedia message:

- Tap  and attach images, videos, contacts, memos, events, and others.
- Tap  → **Add subject** to enter a subject.

Translating and sending messages

To use the translating feature while composing a message, tap  → **Translate**, drag the **Translate** switch to the right, set a language pair, and then tap **OK**.

Tap  to translate the message, and then tap **Done**. The translated message will replace the message of the source language.

Viewing incoming messages

Incoming messages are grouped into message threads by contact.

Select a contact to view the person's message.

Listening to a voice message

Tap and hold **1** on the keypad, and then follow the instructions from your service provider.

Email

Use this application to send or view email messages.

Tap **Email** on the Applications screen.



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 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 bottom 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, memos, events, and others.

Tap  to insert images, events, 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**. The device will send the message at the specified time and date.

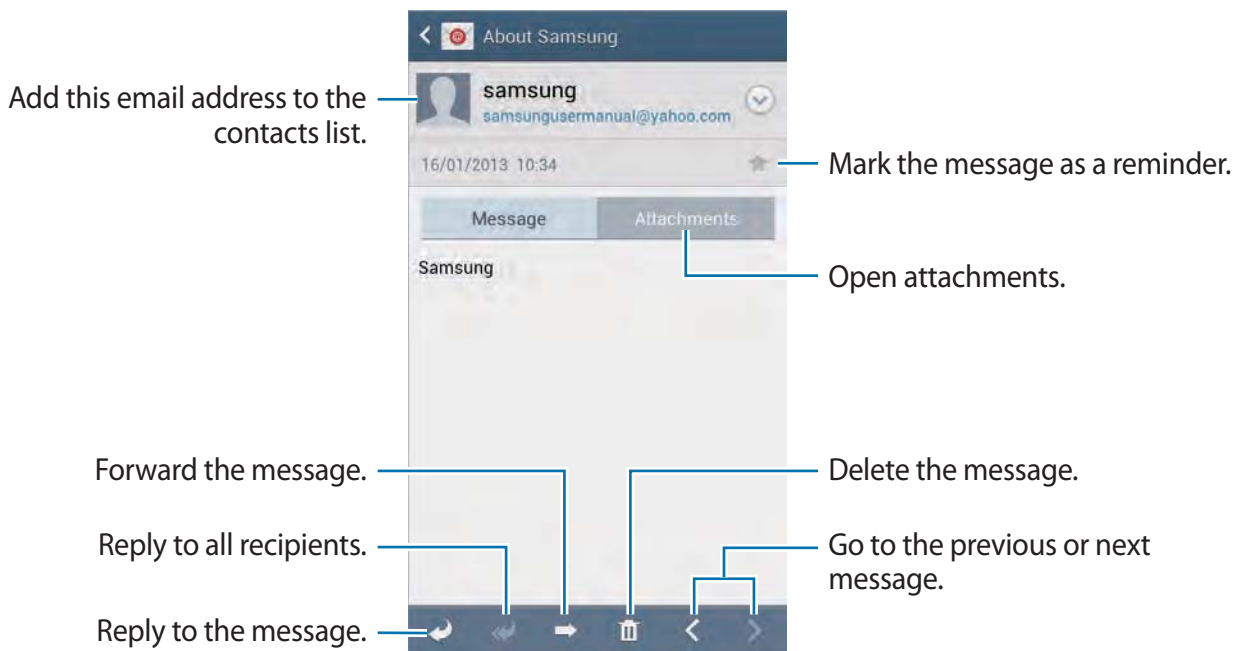


- If the device is turned off at the scheduled time, is not connected to the network, or the network is unstable, the message will not be sent.
- This feature is based on the time and date set on the device. The time and date may be incorrect if you move across time zones and the network does not update 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 **Save** 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 or service provider.
- This application may be labelled differently depending on the region or service provider.


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.

Tap  → **Save draft** to save the message for later delivery.

Tap  → **Discard** to start over.

Reading messages

Mark the message as a reminder.

Add this email address to the contacts list.

Preview attachment.

Keep this message for long-term storage.

Delete this message.



Reply to this message.

Reply to all recipients or forward this message to others.

Mark the message as unread.

Add a label to this message.

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, select the message, tap , and then select the label to assign.

Talk

Use this application to chat with others via Google Talk.

Tap **Talk** on the Applications screen.



This application may not be available depending on the region or service provider.

Public profile

Tap the account ID at the top of the friends list to change the availability status, image, or status message.

Adding friends

Tap , enter the email address of the friend to add, and then tap **DONE**.

Chatting with friends

Select a friend from the friends list, enter a message in the field at the bottom of the screen, and then tap .

To add a friend to chat, tap  → **Add to chat**.

To end the chat, tap  → **End chat**.

Switching between chats

Scroll left or right.

Deleting chat history

Chats are automatically saved. To delete the chat history, tap ☰ → **Clear chat history**.

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 or service provider.

Tap **All circles** to change the category, and then scroll up or down to view posts from your circles.

Tap  to use other social network features.

Messenger

Use this application to chat with others via Google+ instant messaging service.

Tap **Messenger** on the Applications screen.



This application may not be available depending on the region or service provider.

Select a friend from the friends list, enter a message in the field at the bottom of the screen, and then tap ►.

ChatON

Use this application to chat with any device. To use this application, you must sign in to your Samsung account.

Tap **ChatON** on the Applications screen.



This application may not be available depending on the region or service provider.

Create a buddies list by entering phone numbers or Samsung account email addresses, or by selecting buddies from the list of suggestions. Alternatively, tap **Contact sync** to manually sync contacts from the device.

Tap **Chats** → **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.

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.

To change the search engine, tap the address field, and then tap the search engine icon next to the web address.

Opening a new page

Tap  → **New window**.



To go to another webpage, tap , scroll up or down, and tap the page to select it.

Bookmarks

To bookmark the current webpage, tap  → **Add bookmark**.

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. 134)

Sharing webpages

To share a webpage address with others, tap  → **Share via**.

To share a part of a webpage, tap and hold the desired text, and then tap  → **Share**.

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 or service provider.

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.

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.

Screen Mirroring

Use this feature to connect your device to a large screen with an AllShare Cast dongle or HomeSync and then share your contents. You can also use this feature with other devices that support the Wi-Fi Miracast feature.




- This feature may not be available depending on the region or service provider.
- Miracast-enabled devices that do not support High-bandwidth Digital Content Protection (HDCP) may not be compatible with this feature.
- Some files may be buffered during playback, depending on the network connection.
- To save energy, deactivate this feature when not in use.
- If you specify a Wi-Fi frequency, AllShare Cast dongles or HomeSync may not be discovered or connected.
- If you play videos or games on a TV, select an appropriate TV mode to get the best experience.

On the Applications screen, tap **Settings** → **Connections** → **Screen Mirroring**, and then drag the **Screen Mirroring** switch to the right. Select a device, open or play a file, and then control the display with the keys on your device. To connect to a device using a PIN, tap and hold the device name to enter the PIN.

AllShare Play

Use this application to play contents saved on various devices over the Internet. You can play and send any file on any 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 as file servers. The registration methods may vary depending on the device type. To get more details, tap  → **Settings** → **Customer support**.

Tap **AllShare Play** on the Applications screen.




This application may not be available depending on the region or service provider.

Sending files

Select a device or web storage, select a file, and then tap .

Sharing files

Select a device or web storage, select a file, tap , and then use the following options:

- **Group Play:** Share screens with multiple devices that are connected to the same Wi-Fi network.
- **Facebook / Twitter / Flickr / Picasa:** Upload files to a social network site.


Playing files on a remote device

Select a device or web storage, select a file, 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.

Using the Group Play feature

Share screens with multiple devices that are connected to the same Wi-Fi network. Select a media category, select files by ticking, and then tap  → **Group Play**. A new group for Group Play is created and the files are shared with other devices that joined the Group Play.

Managing contents on a web storage server

Select a web storage server, and then view and manage your files.

Group Play

Use this application to share screens with multiple devices. Create or join a Group Play session, and then share images, documents, or music.

Tap **Group Play** on the Applications screen.



- This application may not be available depending on the region or service provider.
- While using this application, you cannot use the Internet.

Creating a group for Group Play

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

- **Share music:** Select music files to share. You can connect two or more devices and use them to achieve a sound effect.
- **Share pictures:** Select images to share.
- **Share documents:** Select documents to share.
- **Play games:** Play online games with friends.

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  to select more images or documents.

Tap  to view the group participants.

Joining Group Play

- Tap **Join group**, and then select a Group Play session to join. Select a media category and the content that is currently being shared will appear on the device.
- Activate the NFC feature, and touch the back of your device to the back of another device that is opening a session.

NFC

Your device allows you to read near field communication (NFC) tags that contain information about products. You can also use this feature to make payments and buy tickets for transportation or events after downloading the required applications.



The device contains a built-in NFC antenna. Handle the device carefully to avoid damaging the NFC antenna.



If the screen is locked, your device will not read NFC tags or receive data.

To activate the NFC feature, on the Applications screen, tap **Settings** → **Connections** → **NFC**. Drag the **NFC** switch to the right.

Reading information from an NFC tag

Place the NFC antenna area on the back of your device near an NFC tag. The information from the tag will appear.

Sending data via Android Beam

Use the Android Beam feature to send data, such as webpages and contacts, to NFC-enabled devices.

On the Applications screen, tap **Settings** → **Connections** → **NFC**. Drag the **Android Beam** switch to the right.

Select an item, touch the back of your device to the back of the other device, and then tap your device's screen.

WatchON


Use this application to connect to a TV to watch your favourite shows and movies.


Tap **WatchON** on the Applications screen.

You must first connect the device to a network and ensure that the device's infrared port is facing the TV.

Connecting to a TV

Connect to a TV to display the device's screen onto a large surface and control the TV remotely with the device.

Select a country and a region. Tap  → **Set Up Now**, and then follow the on-screen instructions to register the TV to the device. The steps vary depending on the options you choose.

To connect to other devices, tap  → **Settings** → **My room** → **Add devices**.

Watching TV

Select from the TV programme suggestions based on your choice when registering a TV or select a category at the top of the screen. Select a TV programme and then tap **Watch now**. The selected programme will show up on the connected TV.

Tap  and open the control panel to control the TV.

Setting programme reminders

Tap the time at the bottom of the screen and select a time for a TV programme you want to watch. Select a programme, tap **Reminder**, and then set an alarm time to remind you of the TV programme.

Camera: Basic functions

Launching Camera

Use this application to take photos or videos.

Tap **Camera** on the Applications screen.

Use **Gallery** to view photos and videos taken with the device. (p. 106)

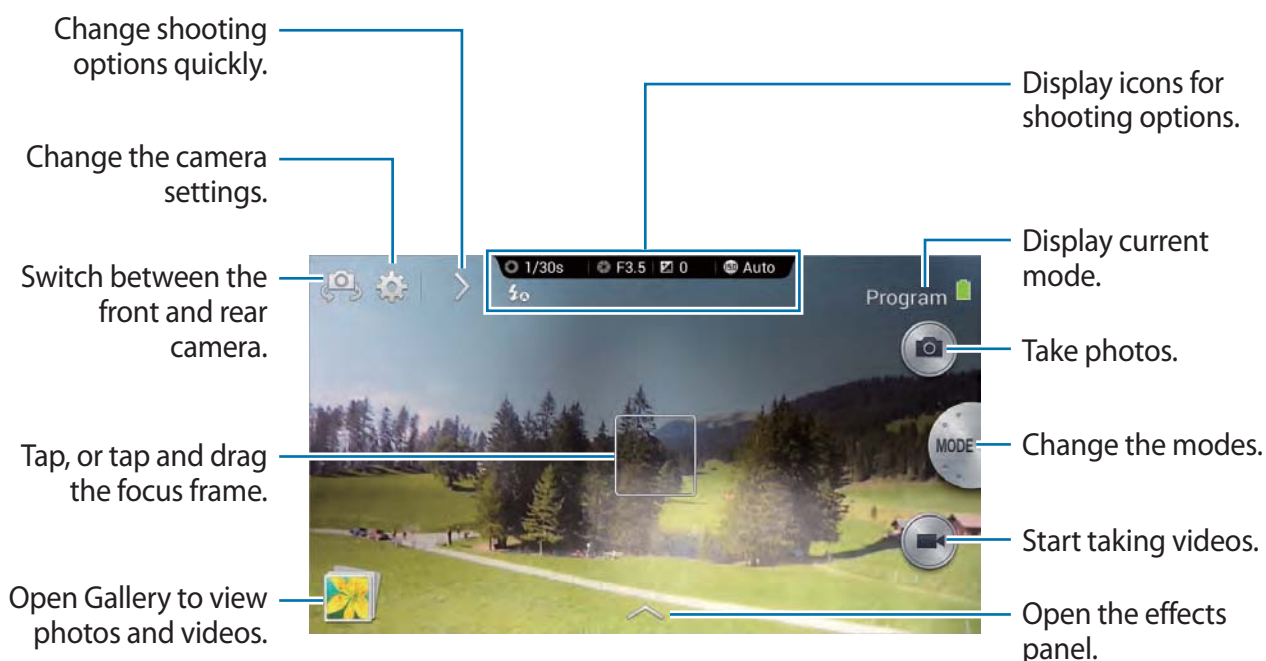


The camera automatically shuts off when unused.

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




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.

Icon	Meaning
	Shutter speed
	Aperture value
	Exposure value
	ISO sensitivity
	Timer
	Flash
	Macro
	Metering
	White balance
	Continuous shooting
	Bracket mode
	Voice control
	Geotagging
	Share shot
	Buddy photo share
	ChatON photo share
	Remote viewfinder


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



- You can take videos up to 25 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 device may record the noise of the zoom operating. To decrease the zoom noise, activate the quiet zoom feature. (p. 104)
- If you change the shooting angle of the camera suddenly while taking a video, the device may not be able to record images accurately.

Viewing photos and videos

To view taken photos or videos, tap the image viewer. Scroll left or right to view the next or previous image. (p. 106)

Zooming in and out



Rotate the focus/zoom ring clockwise or anticlockwise to zoom in or out.



- The zoom function may not be available when shooting at the highest resolution.
- The zoom in/out effect is available when using the zoom feature while shooting a video.

Taking photos with voice commands

Use the voice control to take photos with voice commands.

Tap  → .

Say a shooting command, such as Smile, Cheese, or Capture.

Taking photos or videos with filter effects








Use the filter effects to take unique photos or videos.

Tap  and select a filter effect. The available options vary by mode.

- **No effect:** No 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 an oil 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.
- : Activate or deactivate the GPS feature.
- : Access help information about using the camera.
- : Activate or deactivate the voice control 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.

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



Before correction



After correction

Using face detection

Taking a smile shot

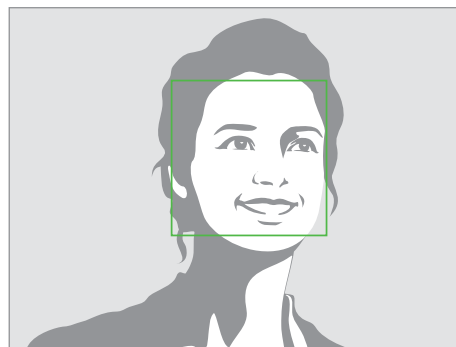
The device automatically detects a smiling face, and releases the shutter.

In expert mode, tap  →  → **Focus area** → **Smile shot**.

Aim the device at a human subject, and press the Shutter button. When the device detects a smiling face, the device automatically takes the photo.





Face detected



Smile detected

Detecting eye blinking

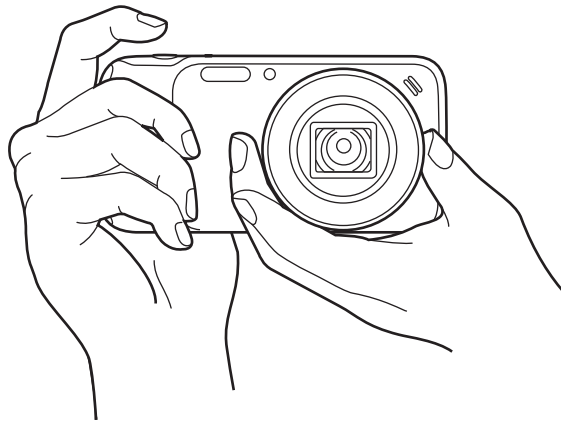
If the device detects closed eyes, it automatically takes more photos in succession.

In expert mode, tap  →  → **Focus area** → **Blink detection**.

Aim the device at a human subject. When the device 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, the device automatically takes more photos in succession.

Tips for taking clearer photos

Holding the camera correctly



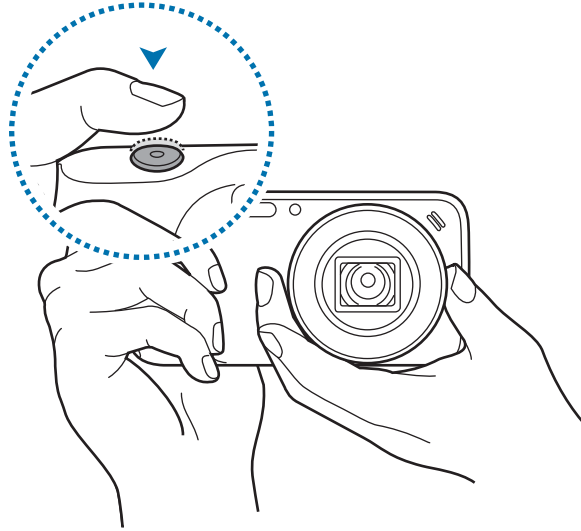
Make sure not to block the screen, lens, flash, or microphone.



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 automatically, and the focus frame turns green. The focus frame turns red if not focused.



Reducing camera shake

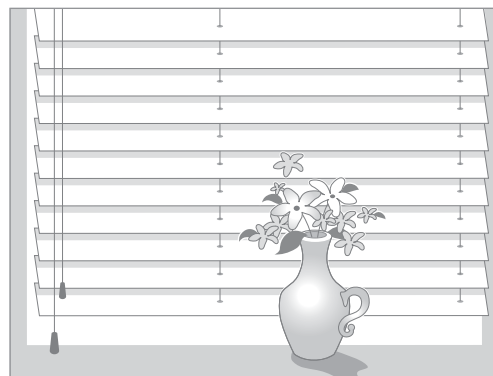
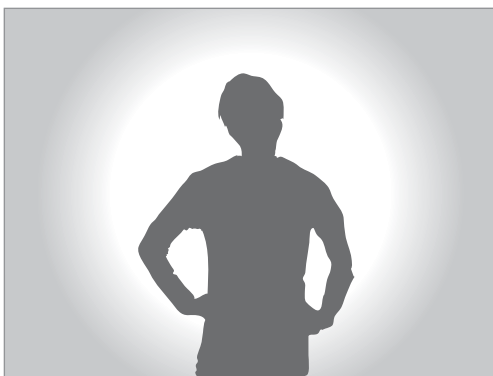
Set the Optical Image Stabiliser (OIS) option to reduce camera shake optically. (p. 75)



Keeping the subject in focus

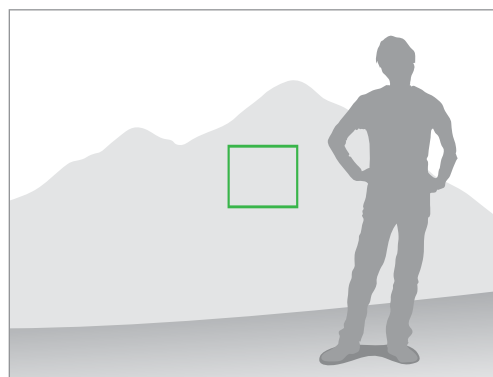
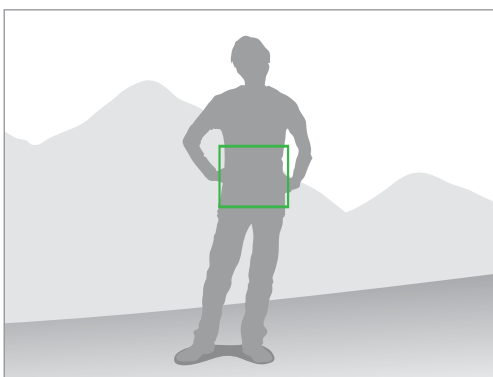
Focusing on the subject may be difficult in the following conditions:

- 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.



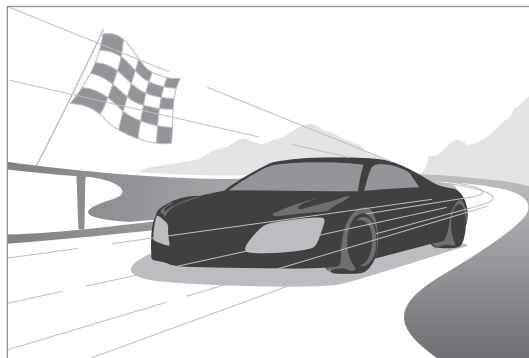
When taking photos in low-light conditions

- Turn the flash on to take photos in low-light conditions. (p. 100)
- Adjust the ISO sensitivity. (p. 96)



When subjects are moving rapidly

Use the continuous shooting option to take photos of moving subjects. (p. 83)






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**.

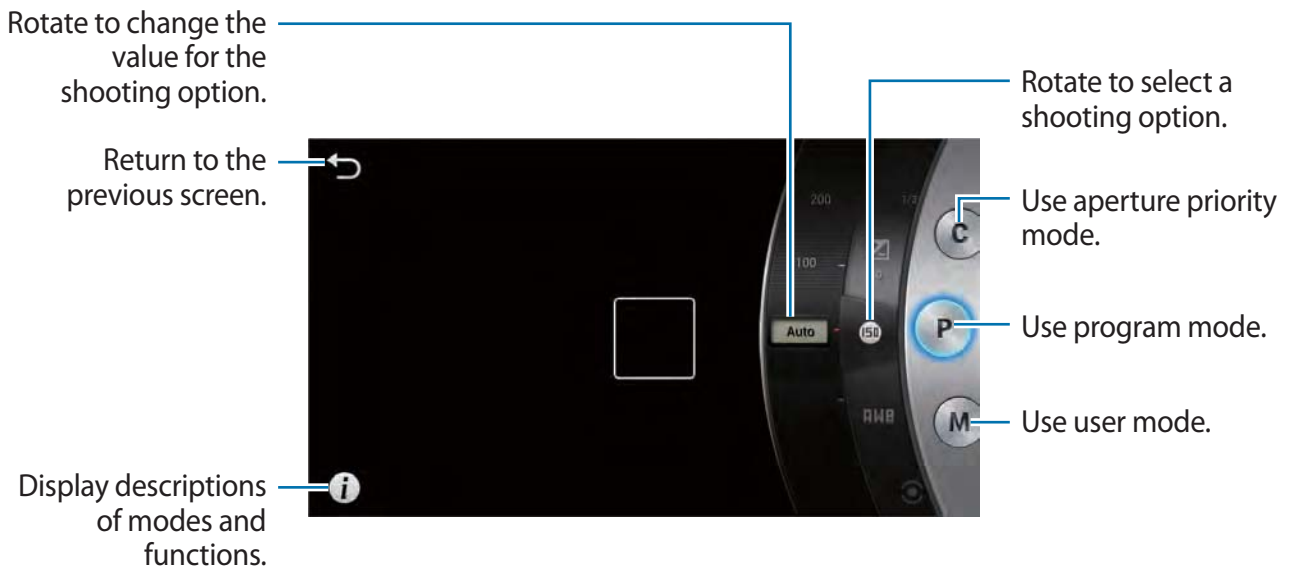
To display an icon for a scene mode at the top right of the preview screen when you half-press the Shutter button, tap  →  →  → **Detection display** → **On**.



- 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.

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.



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** → **C**, and set the desired shooting options.



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

About aperture

The aperture is a hole that lets light into the camera, and widening or narrowing the aperture controls the amount of light that enters. The photo is brighter when the aperture value is smaller, and darker when the aperture value is larger.



Small aperture value



Large aperture value

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.

Smart

Use this to take photos with predefined settings for various scenes.

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, and the camera automatically adjusts the photo, and then saves it.

Best photo

Use this to take multiple photos in a short time, and then choose the best photos among them.

Tap **MODE** → **Smart** → **Best photo**.

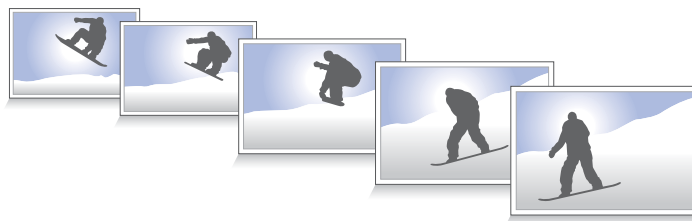
Press the Shutter button to take multiple photos. When **Gallery** opens, tap and hold thumbnails of photos to save, and then tap **Save**.

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. When **Gallery** opens, 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.



Baby

Use this to play a funny sound to get a baby's attention when shooting.

Tap **MODE** → **Smart** → **Baby**.

Press the Shutter button. The camera emits the attention sound and takes multiple photos when it detects a smiling face.

To change the attention sound, tap > → ⚙️ → 📷 → **Attention sound**.

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**.



- Hold the camera steady to prevent blurry photos.
- Turn the flash off if the distance to the subject is too close.

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**.



Use in bright daylight is recommended.

Rich tone

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.

Tap **MODE** → **Smart** → **Rich tone**.

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



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, press the Shutter button again. 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 are automatically saved, and shooting is stopped under 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.

Cinema photo

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

Tap **MODE** → **Smart** → **Cinema 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 file.

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.



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 viewfinder or that is too long such as a bus or a train.

Eraser

Use this to erase the movements of moving subjects 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 subject. To restore the erased moving objects, tap **Show moving objects**, tap the highlighted area, and then tap **Save**.



To get the best shot, follow these tips.

- Hold the camera steady and remain still while taking photos.
- Avoid taking photos of a subject and background with similar colours.
- When taking photos of a subject 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 a few seconds of audio before taking a photo.



While taking photos in this mode, sound is recorded by the internal microphone.

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 multiple 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**.



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**.



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

Smart Suggest

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

Tap **MODE** → **Smart** → **Smart Suggest**.

Half-press the Shutter button, select a mode from the suggested list, and then press the Shutter button to take a photo.

My mode




Use this to register your favourite shooting modes and select them conveniently.

Tap **MODE** → **My mode** → **Add**, and then select your favourite shooting modes. After completing your selection, tap **Done** to save it.

Camera: Shooting options and settings

Changing 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 may differ depending on the shooting mode, the lens you are using, and the 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 / M / C**. Rotate the shooting options dial to **EV (brightness)**, and adjust the exposure value.



Darker (-)



Neutral (0)



Brighter (+)



- When taking a photo, if the appropriate exposure value cannot be decided, use the bracketed photo option to take multiple photos with different exposure values.
- Taking photos with higher exposure value may result in blurry photos, due to slower shutter speed.

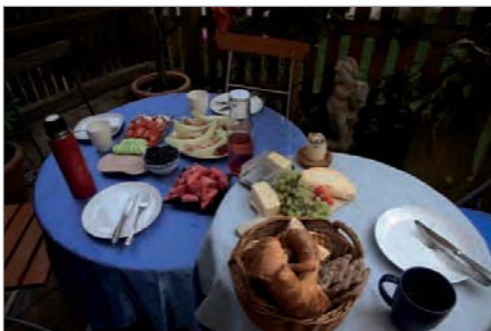
ISO (sensitivity)

The ISO sensitivity value represents the sensitivity of 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 / M**. Rotate the shooting options dial to **ISO (sensitivity)**, and select an ISO sensitivity.

Examples



ISO 100



ISO 400



ISO 800



ISO 3200



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.

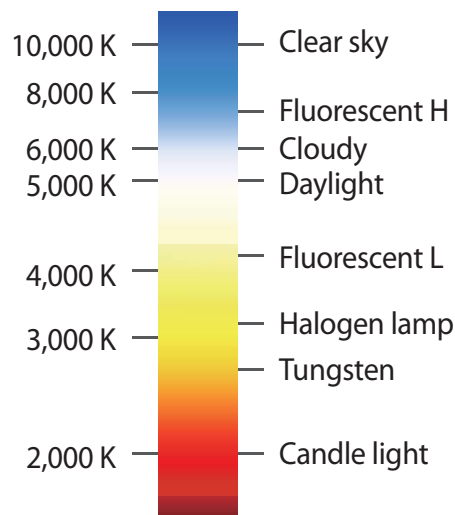
WB (light source)

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, 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  →  → **WB (light source)**, and then select an option.

- **Auto:** 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 under daylight fluorescent or 3-way fluorescent lights.
- **Fluorescent_L:** Use this under white fluorescent lights.
- **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. Aim the lens at a piece of white surface, and then press the Shutter button.
- **K:** 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. As the colour temperature increases, the colour distribution becomes cooler. Alternatively, as the colour temperature decreases, the colour distribution becomes warmer. Tap +/- to adjust the colour temperature.



Examples



Auto WB



Daylight



Fluorescent daylight



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.



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

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.

In expert mode, tap  →  → **Drive**, 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 three consecutive photos with different exposure values (the original, one a step darker, and one a step lighter). Use a tripod to prevent blurry photos as the camera takes three photos continuously.



- Saving photos may take longer depending on memory card capacity and performance when taking photos continuously.
- Using a tripod is recommended when taking photos continuously.

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.

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.
- **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.

Focus mode

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

In expert mode, tap  →  → **Focus mode**, and select an option.

- **Auto focus (normal):** 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.
- **Manual focus:** Use this to manually focus on a subject by rotating the focus ring on the lens.

Focus 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.

In expert mode, tap  →  → **Focus area**, and select an option.

- **Center 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.

Face detection

Use this option to select a face detection mode.

In expert mode, tap  →  → **Focus area**, and select an option.

- **Normal:** Use this to measure exposure on a human face.
- **Smile shot:** Use this to recognise and helps taking people's smiling faces. (p. 75)
- **Blink detection:** Use this to detect closed eyes and automatically takes additional photos. (p. 76)



- 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.

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.



In expert mode, tap  →  → **Quality**, and select an option.





Image Adjust

Use this option to adjust the colour, saturation, sharpness, or contrast of your photos.

In expert mode, tap  →  → **Image Adjust**, and drag the slider or tap +/- for each value.

Timer

Use this option to take photos with a delay of time.

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.

OIS (anti-shake)

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

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

- **Off:** Use to turn this option off.
- **On:** Use this to always apply the OIS feature.



Without OIS correction



With OIS correction







- This feature may not function properly in the following conditions:
 - When moving 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 taking 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 device 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.
- **Sound:** Use this to decrease zoom noise when taking videos.

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

Camera settings

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

- **Shutter Sound:** Adjust the auto focus sound.
- **Beep:** Activate or deactivate beep sounds.
- **Description:** Display mode descriptions.
- **Guidelines:** Display viewfinder guides to help composition when selecting subjects.
- **Display brightness:** Set the brightness of the screen.
- **Auto screen off:** Set the length of time the device waits before turning off the display's backlight.
- **Review:** Briefly display photos or videos taken.
- **Date/time Imprint:** Use this to imprint the date and/or the time on the photos when taking them.

- **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.
- **Voice control:** Activate or deactivate the voice control to take photos.
- **AF lamp:** Use this to activate the AF-assist light in low-light conditions.
- **Power-on mode:** Select the default camera mode that launches when the device is turned on.
- **Storage:** Select the memory location for storage.
- **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.

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** → **Motions and gestures** → **Motion**, drag the **Motion** switch to the right, and then turn on the switch for each feature.

To stop using a motion feature, turn off the switch for the feature.

Playing videos

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

Editing images

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




- **Edit:** Launch **Paper Artist** application.
- **Details:** View image details.
- **Slideshow:** Start a slideshow with the images in the current folder.
- **Favourite:** Add the image to favourites.
- **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.
- **Set as:** Set the image as wallpaper or a contact image.
- **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. The device is only compatible with some Samsung printers.
- **Rename:** Rename the file.
- **Scan for nearby devices:** Search for devices that have media sharing activated.
- **Settings:** Change the Gallery settings.

Favourite images

When viewing an image, tap  → **Favourite** to add the image to the favourites list.




Deleting images

Use one of the following methods:


- In a folder, tap  → **Select item**, select images by ticking, and then tap .
- When viewing an image, tap .

Sharing images


Use one of the following methods:

- In a folder, tap  → **Select item**, select images by ticking, and then tap  to send them to others.
- When viewing an image, 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

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 making calls or sending messages.



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

Video

Use this application to play video files.

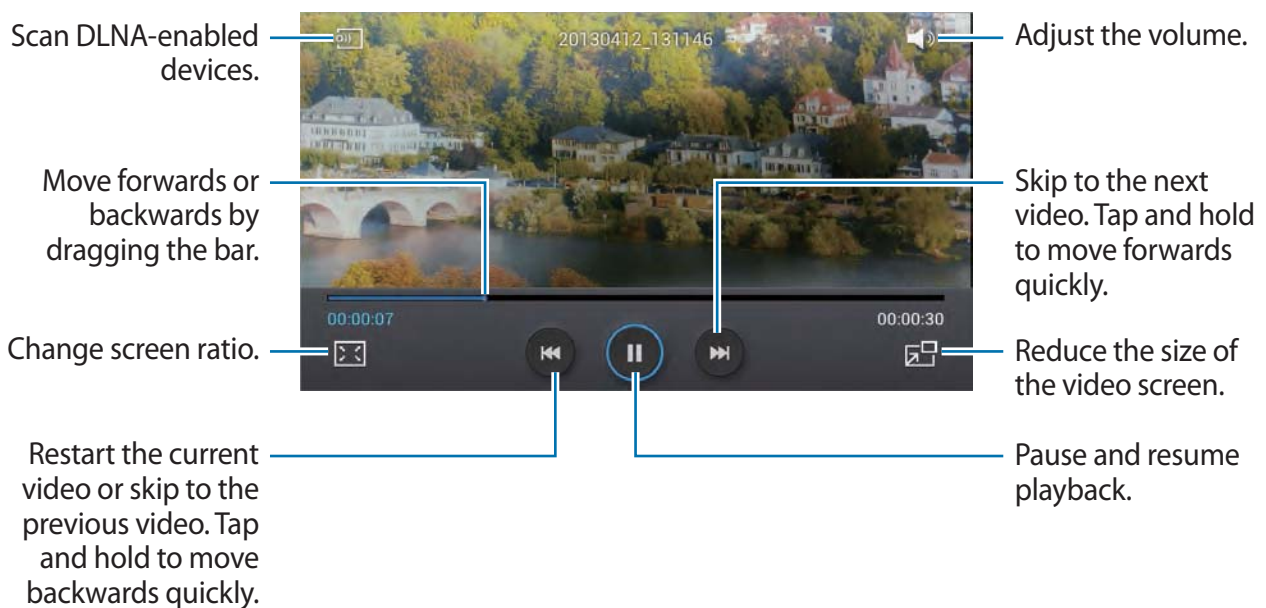
Tap **Video** on the Applications screen.



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

Playing videos

Select a video to play.




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  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.

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.


Creating story albums

Tap **Create album** → **By tag information** to create a story album automatically. Select criteria, and then tap **Find pictures**. Enter a title for the album, select a theme, and then tap **Create album**.

To create it manually, tap **Create album** → **From Gallery**.

Creating recommended albums

When you take photos at one location, the device automatically sorts your photos into albums based on your specified criteria and suggests making the new albums.

Tap  → **Settings** → **Home city**, and then set a method for recognising your location. Select an album type and set a minimum number of photos.

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

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



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

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.

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

- **Add content:** Add more content to the current page.
- **Remove content:** Delete content on the current page.
- **Change theme:** Change the theme for the page layout.
- **Slideshow:** Start a slideshow with the images in the current album.
- **Share via:** Send the album to others.
- **Print:** Print the album via a USB or Wi-Fi connection. The device is only compatible with some Samsung printers.
- **Order photo book:** Place an order for a printed album.
- **Export:** Export the album to other storage locations.
- **Delete album:** Delete the album.


Editing images


Tap the image of the page in an album.

To add a caption, tap .

To send the image to others, tap .

To delete the image, tap .

To apply effects to the image, tap .

To start a slideshow, tap  → **Slideshow** → **Start slideshow**.

To set the image as an album cover image, tap  → **Set as cover**.

To rotate the image anticlockwise, tap  → **Rotate left**.

To rotate the image clockwise, tap  → **Rotate right**.

Music

Use this application to listen to music.

Tap **Music** on the Applications screen.

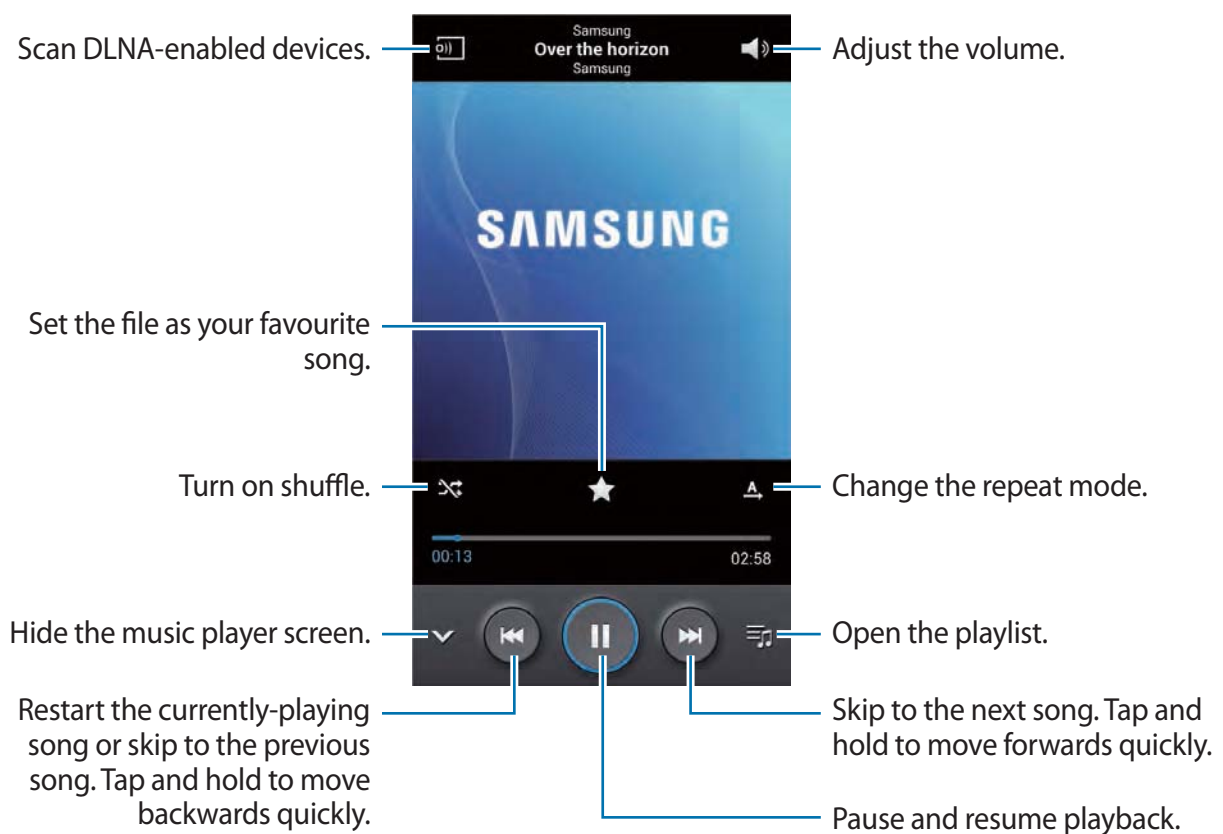


- Some file formats are not supported depending on the device's software version.
- Some files may not play properly depending on the encoding method used.

Playing music

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


Tap the album image at the bottom of the screen to open the music player screen.



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.

To set a personalised sound while listening to songs with a headset, tap  → **Settings** → **Adapt Sound** → **On**. When you turn the volume up to level 14 or higher, the adapt sound option is not applied to music playback. If you turn the volume down to level 13 or lower, the option is reapplied.

Setting a song as ringtone

To use the currently-playing song as ringtone, tap  → **Set as** → **Phone ringtone**.


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**.

Playing music by mood

Play music grouped by mood. The playlist is automatically created by the device. When a new song is added, tap **Music square** →  → **Library update**.

Tap **Music square** and select a cell of mood. Or select multiple cells by dragging your finger.

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 or service provider.


Watching videos

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

Rotate the device to landscape orientation to display full screen.



Sharing videos

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

Uploading videos

Select your account, tap , select a video, enter information for the video, and then tap .

Flipboard

Use this application to access your personalised magazines.

Tap **Flipboard** on the Applications screen.





This application may not be available depending on the region or service provider.

To start your Flipboard, flick up on the greeting page, tap **Get Started**, select news topics, and then tap **Done**.

Select a cover story or a topic, flick through the Flipboard pages, and then select an article to read.

While reading an article, use the following icons:

-  : Go to the previous page.
-  : Set the article as your likes in Facebook.
-  : Add the article to the favourites list in Twitter.
-  : View others' comments about the article.
-  : Share the article via Twitter.
-  : Share the article with others.

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 or service provider.

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 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 Hub

Use this application to purchase and download multimedia content. You can also manage the content on the device.

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

Purchasing multimedia content

Select a service category, select media content, and then complete the purchase process.

Managing content on the device

Select a service category, scroll left, and then manage content on the device.

Samsung Apps

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


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



This application may not be available depending on the region or service provider.

Installing applications

Browse applications by category. Tap  to select a 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 **Get** or **Buy**.



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 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 or service provider.

Play music by selecting a music category or share songs with others by uploading them to the Google cloud storage.

Utilities


S Memo

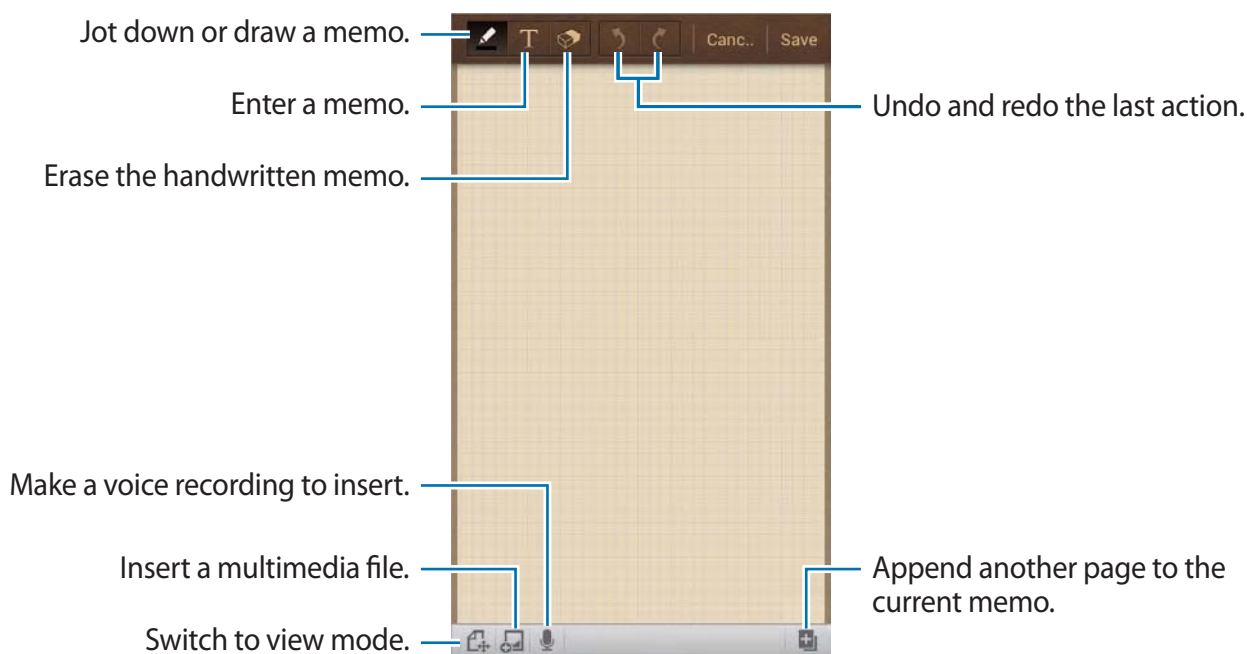
Use this application to create a memo using images and voice recordings.


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


Composing memos

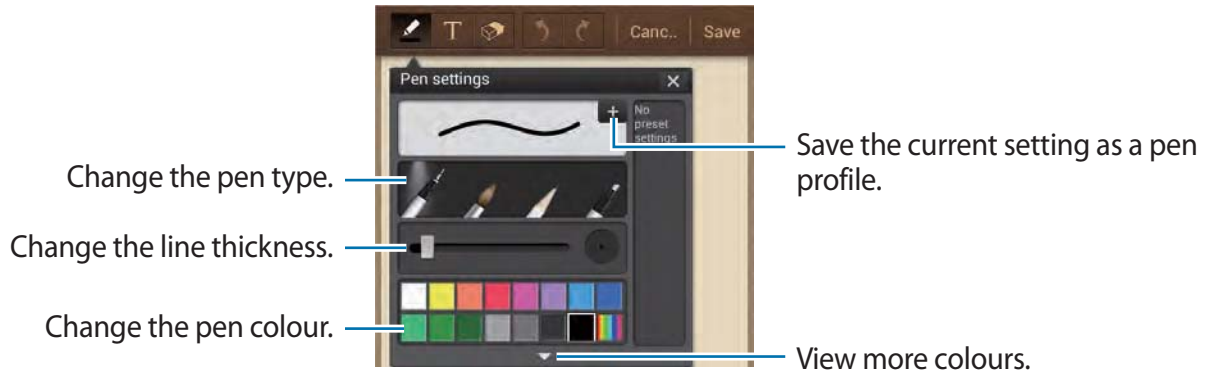
Create memos with enriched content by drawing sketches with your finger or adding images or voice memos.


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 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 move memos to another folder, tap  → **Move**.


To copy memos, tap  → **Copy**.

To change the S Memo settings, tap  → **Settings**.

To access help information for S Memo, tap  → **Help**.

Viewing a memo

Tap the memo thumbnail to open it.

To delete memos, tap  → **Delete**.


To send the memo to others, tap  → **Share via**.

To save the memo as an image file or a PDF file, 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 a widget or wallpaper for the Home screen, tap  → **Set as**.

To print the memo via a USB or Wi-Fi connection, tap  → **Print**. The device is only compatible with some Samsung printers.

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.

Creating events or tasks


Tap **+**, 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.

Attach a map showing the location of 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.

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  → **Settings** → **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, and spread apart to change yearly calendar back to monthly 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

Select a date or event, 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 or service provider.

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.

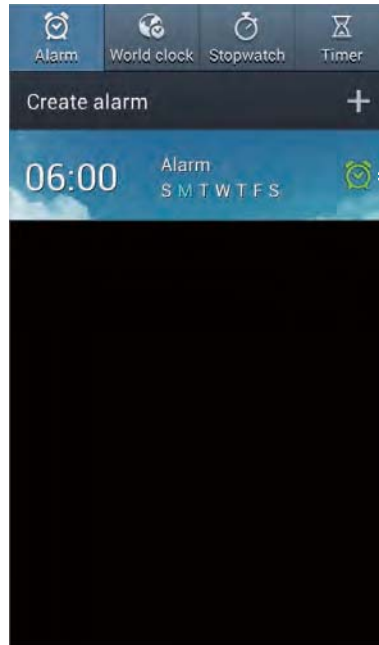
To upload files to Dropbox, tap  →  → **Upload here** → **Photos or videos** or **Other files**. To open files in Dropbox, select a file.

While viewing images or videos, tap  to add it to the favourites list. To open files in the favourites list, tap .

Clock

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

Tap **Clock** on the Applications screen.



Turn this alarm on or off.



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**.

- **Location alarm:** Set a location. The alarm goes off only when you are in the location.
- **Snooze:** Set an interval and the number of times for the alarm to repeat after the preset time.
- **Smart alarm:** Set a time for the alarm to go off before the preset time.

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.

Rotate the device to landscape orientation to display the scientific calculator. If **Screen rotation** is disabled, tap  → **Scientific calculator**.

To see the calculation history, tap  to hide the keypad.

To clear the history, tap  → **Clear history**.

To change the character size for the history, tap  → **Text size**.

S Health

Use this application to monitor your health.

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

Setting profile

Tap **Next**, read and agree to the terms and conditions, and then tap **Next**. Enter your physical statistics and then tap **Start**.




Based on your physical statistics, the device calculates your basal metabolic rate (BMR) and recommends a daily caloric intake. The recommendation may not be accurate for all ages, body compositions, or nutritional needs.

Checking your health information

You can view your information on the health board screen. Select one of the following to view details:


- **Calories burnt:** View how many calories you have burned.
- **Calorie intake:** View how many calories you have ingested.

Managing calories

Tap  → **Walking mate** to count your steps, or tap **Exercise mate** and enter your exercise history. You can view consumed calories. To view exercise history on a graph, tap the icon at the bottom right.



- You may experience a brief delay while the walking mate monitors your steps and then displays your step count.
- If you use the walking mate while travelling by car or train, vibration may affect your step count.

Tap  → **Food tracker** and enter the foods you have eaten. You can view your calorie intake. To view calorie history on a graph, tap the icon at the bottom right.

Managing vital statistics

Tap  → **Weight**, and then enter a value.

You can view current statistics. To view statistic history on a graph, tap the icon at the bottom right.

To add menus to the S Health menu bar, tap  → **Settings** → **Add more features**.

Configuring settings for S Health

Tap  → **Settings**, and then select one of the following:

- **Edit profile:** Edit your physical statistics.
- **Security:** Set a PIN to lock or unlock S Health.
- **Unit settings:** Set unit options.
- **Add more features:** Select and download additional menus that appear on the S Health menu bar.
- **Calories burnt shortcut:** Set a menu to move when you tap **Calories burnt** on the health board screen.

- **Compatible products:** View and manage device connections.
- **Reset data:** Reset S Health data.
- **Terms of use:** View the terms and conditions, including personal information and data retention policies.
- **About S Health:** View information about S Health.


S Translator

Use this application to translate text into other languages.

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

Using S Translator


Set the source and target languages, enter text in the input field, and then tap .


To add a language pair to your favourites list, tap .

To send a language pair to others, tap .

Starting a conversation with the translator

Tap the buttons at the bottom of the screen to communicate with another person via spoken translation.

Tap **Speak** for your language, and then speak into the microphone. The device will translate what you say. Tap  in the target language field to let the device read the translation out loud.

Then, tap **Speak** for the language of the person you are talking with and let the person reply in their language. The device will translate what they say. Tap  in the source language field to let the device read it back to you.

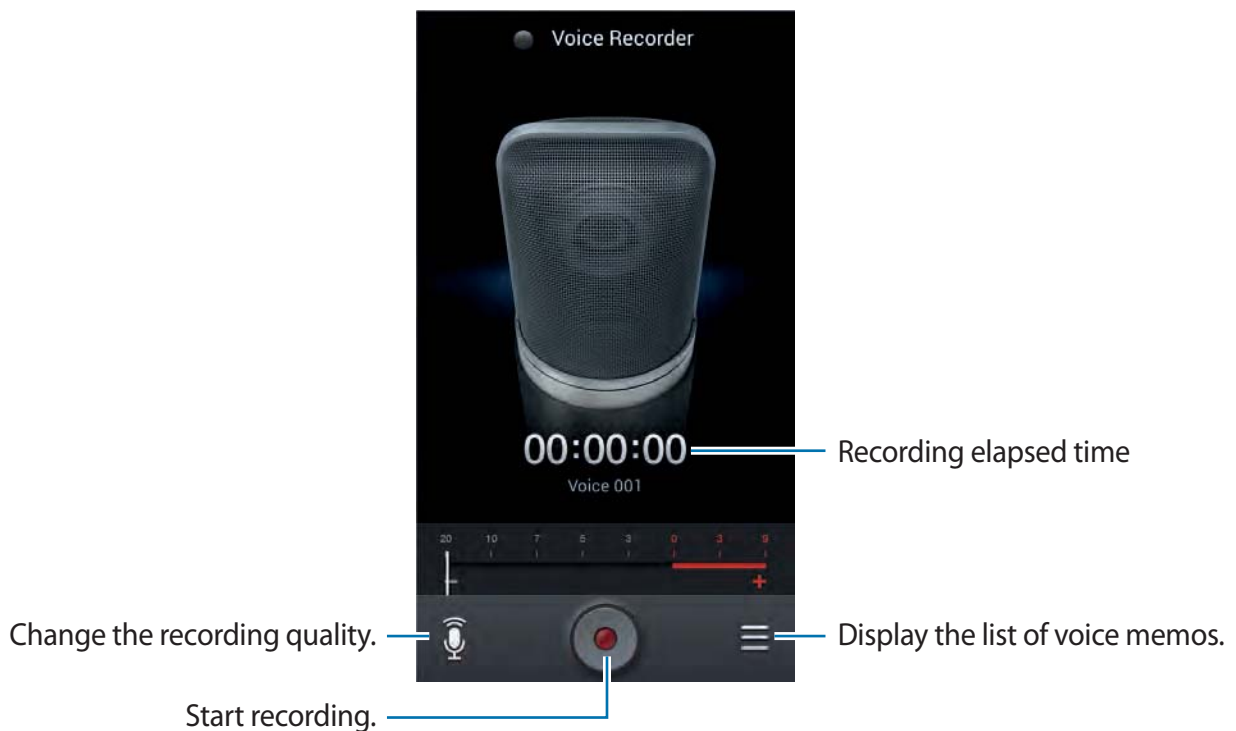
Voice Recorder

Use this application to record or play voice memos.

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








Recording voice memos

Tap  to start recording. Speak into the microphone at the top of the device. Tap  to pause recording. Tap  to finish recording.



Playing voice memos

Select a voice memo to play.

- : Trim the voice memo.
- : Adjust the playback speed.
- : Pause playback.
-  / : Skip 60 seconds backwards or forwards.
-  / : Skip to the previous or next voice memo.

To send a voice memo to others, tap  → **Share via**, and then select a sharing method.

Managing voice memos

In the list of voice memos, tap  and select one of the following:

- **Share via:** Select voice memos to send, and then select a sharing method.
- **Delete:** Select voice memos to delete.
- **Settings:** Change the voice recorder settings.
- **End:** Close the voice recorder.

Saving files with contextual tags

In the list of voice memos, tap  → **Settings** → **Contextual filename** → **On**.

S Voice

Use this application to command the device by voice to dial a number, send a message, write a memo, and more.

Tap **S Voice** on the Applications screen. Alternatively, press the Home button twice.



This application may not be available depending on the region or service provider.

Here are several examples of spoken commands:

- Open music
- Launch calculator
- Call Lulu mobile
- Dial Lulu work
- 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.

Searching the device

Tap the search field, and then enter a keyword. Alternatively, tap , and then speak a keyword.

If no results are returned from the applications, the web browser appears, displaying the search results.

Searching with images

To search with an image, tap  → **Search with camera**. Aim the rear camera at an image, and then tap .




This feature may not be available depending on the region or service provider.

Search scope

To select what applications to search, tap  → **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  → **Settings** → **Google Now**.



This feature may not be available depending on the region or service provider.

Voice Search

Use this application to search webpages by speaking.

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



This application may not be available depending on the region or service provider.



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.

Viewing files


Select a folder to open it. To go back to the parent folder, tap . To return to the root directory, tap .

In a folder, tap , and then use one of the following options:

- **Select all:** Select all files to apply the same option to them at once.
- **Create folder:** Create a folder.
- **Search:** Search for files.

- **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  → **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 or service provider.

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**.

TripAdvisor

Use this application to get travel information such as destination or hotel. You can also book for a room and share your reviews with others.

Tap **TripAdvisor** on the Applications screen.

TourWrist

Use this application to experience the world in 360-degree panoramas. You can also preview virtual tours of hotels, restaurants, and other points of interest.

Tap **TourWrist** on the Applications screen.

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 or service provider.

Searching for locations



Tap , enter an address, and then tap . Select a location to view the detailed location information. To search for nearby locations, tap .

Once the location is found, tap  and use one of the following functions:

- **Clear Map:** Clear the map.
- **Make available offline:** Save the map of a specified area to view it offline.
- **Directions:** Get directions for the location.
- **Layers:** Overlay multiple layers including satellite images, traffic information, and more.
- **Settings:** Change the map settings.
- **Help:** View information about using the map.

To view current location, tap .

Getting directions for a destination

- 1 Tap .
- 2 Tap , and then select a method to enter starting and ending locations:
 - **My current location:** Use current location for starting location.
 - **Contacts:** Select from the contacts list.
 - **Point on map:** Pinpoint by tapping on the map.
 - **My Places:** Select from the list of favourite places.
- 3 Select a travel method, such as driving, public transit, or walking, and then tap **GET DIRECTIONS**.
- 4 Select one of the routes that appear, and then tap **MAP VIEW** to view details.

Local


Use this application to search for nearby restaurants, banks, bus stops, and more. Tap **Local** on the Applications screen.



This application may not be available depending on the region or service provider.

Select a place category, and then select a place from the list of search results.

- **Map:** Pinpoint the place on the map.
- **Directions:** Search for a route to the place.
- **Call:** Call the place's phone number.

To add a place category, tap  → **Add a search** on the category list, and then enter a keyword to search into the text field.

Navigation

Use this application to search for a route to a destination.

Tap **Navigation** on the Applications screen.



- Navigation maps, your current location, and other navigational data may differ from actual location information. You should always pay attention to road conditions, traffic, and any other factors that may affect your driving. Follow all safety warnings and regulations while driving.
- This application may not be available depending on the region or service provider.

Specify the destination by using one of the following methods:

- Speak the destination address.
- Enter the destination address.
- Select the destination address from the contacts list.
- Select the destination from the list of starred places.

Once a route is found, follow on-screen instructions to navigate to the destination.

Settings

About Settings

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

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 **Wi-Fi** → .

- **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.
- **Help:** Access help information for Wi-Fi.

Setting Wi-Fi sleep policy

Tap **Wi-Fi** →  → **Advanced** → **Keep Wi-Fi on during sleep**.



When the screen is turned off, the device automatically turns off Wi-Fi connections. When this happens, the device automatically accesses data networks if it is set to use them. This may incur data transfer fees. To avoid data-usage bills, set this option to **Always**.

Setting Network notification

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

Tap **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.

Tap **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.
- **Help:** Access help information for Bluetooth.

Data usage

Keep track of your data usage amount, and customise the settings for the limitation.

- **Mobile data:** Set the device to use data connections on any mobile network.
- **Set mobile data limit:** Set a limit for the mobile data usage.
- **Data usage cycle:** Enter monthly reset date to monitor your data usage.

To use more options, tap .

- **Data roaming:** Set the device to use data connections when you are roaming.
- **Restrict background data:** Set the device to disable sync in the background while using a mobile network.
- **Auto sync data:** Activate or deactivate auto-syncing of applications. You can select what information to sync for each account in **Settings** → **Accounts**.

- **Show Wi-Fi usage:** Set the device to show your data usage via Wi-Fi.
- **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.

Mobile networks

- **Mobile data:** Use to allow packet switching data networks for network services.
- **Data roaming:** Use the device to connect to another network when you are roaming or your home network is not available.
- **Access Point Names:** Set up access point names (APNs).
- **Network mode:** Select a network type.
- **Network operators:** Search for available networks and select a network for roaming.

Tethering and portable hotspot

- **Portable Wi-Fi hotspot:** Use the portable Wi-Fi hotspot to share the device's mobile network connection with computers or other devices through the Wi-Fi network.
- **USB tethering:** Use USB tethering to share the device's mobile network connection with a computer via USB. When connected to a computer, the device is used as a wireless modem for the computer.

- **Bluetooth tethering:** Use the Bluetooth tethering to share the device's mobile network connection with computers via Bluetooth.
- **Help:** Learn more about USB, Wi-Fi, and Bluetooth tethering.

VPN

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

NFC

- **NFC:** Activate the NFC feature to read or write NFC tags that contain information.
- **Android Beam:** Turn on the Android Beam feature to send data, such as webpages and contacts, to NFC-enabled devices.

Nearby devices

- **File sharing:** Activate media sharing to allow other DLNA-enabled devices to access media files on your device.
- **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.

Screen Mirroring

Activate the screen mirroring feature and share your display with others.

Kies via Wi-Fi

Connect the device to Samsung Kies via a Wi-Fi network.

My device

Lock screen

Change settings for the locked screen.

- **Screen lock:** Activate the screen lock feature. The following options may vary depending on the screen lock feature selected.
- **Multiple widgets:** Set the device to allow use of widgets on the locked screen.
- **Lock screen widgets:**
 - **Favourite apps or Camera:** Set the device to show shortcuts for each application or launch the camera application automatically when you swipe panels to the left on the locked screen.
 - **Clock or personal message:** Set the device to show a clock or personal message on the locked screen. The following options may vary, depending on your selection.

For a personal message:

- **Edit personal message:** Edit the personal message.

For a clock:

- **Dual clock:** Set the device to show the dual clock.
- **Clock size:** Change the size of the clock.
- **Show date:** Set the device to show the date with the clock.
- **Owner information:** Enter your information that is shown with the clock.
- **Shortcuts:** Set the device to show and edit application shortcuts on the locked screen.



This feature may not be available depending on the region or service provider.

- **Unlock effect:** Select an effect when you unlock the screen.
- **Help text:** Set the device to show the help text on the locked screen.
- **Wake up in lock screen:** Set the device to recognise your wake up command when the screen is locked.
- **Set wake-up command:** Set a wake up command to launch **S Voice** or perform a specified function.

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.
- **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.
 - **Professional photo:** Use this mode to make the display tone look like real colours.
 - **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 connected to a desktop dock or charging.
- **Font style:** Change the font type for display text.

- **Font size:** Change the font size.
- **Touch key light duration:** Set the duration for the touch button backlight.
- **Display battery percentage:** Set the device to display the remaining battery life.
- **Edit after screen capture:** Set the device to edit the screenshot after capturing it.
- **Auto adjust screen tone:** Set the device to save power by adjusting the brightness of the display.
- **High touch sensitivity:** Set the device to increase the sensitivity so you can use the touch screen with gloves on.



Depending on the type of material you wear while touching the device, some commands may not be recognised.

Sound

Change settings for various sounds on the device.

- **Volume:** Adjust the volume level for call ringtones, music and videos, system sounds, and notifications.
- **Ringtones:** Select a ringtone to alert you to incoming calls.
- **Vibrations:** Add or select a vibration pattern.
- **Default notification sound:** Select a ringtone for events, such as incoming messages and missed calls.
- **Vibrate when ringing:** Set the device to vibrate and play a ringtone for incoming calls.
- **Dialling keypad tone:** Set the device to sound when tapping the buttons on the keypad.
- **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.
- **Adapt Sound:** Personalise the sound for the ear you use most during calls or while listening to music.

Home screen mode

Select a Home screen mode (standard or easy).

Call

Customise the settings for calling features.

- **Call rejection:** Reject calls from specified phone numbers automatically. Add phone numbers to the reject list.
- **Set up call reject messages:** Add or edit the message sent when you reject a call.
- **Answering/ending calls:**
 - **The home key answers calls:** Set the device to answer an incoming call when pressing the Home button.
 - **The power key ends calls:** Set the device to end a call when pressing the Power button.
- **Turn off screen during calls:** Set the device to turn on the proximity sensor during a call.
- **Call alerts:**
 - **Answer vibration:** Set the device to vibrate when the other party answers a call.
 - **Call-end vibration:** Set the device to vibrate when the other party ends a call.
 - **Call connect tone:** Activate or deactivate the call connection tone.
 - **Minute minder:** Activate or deactivate the minute minder tone.
 - **Call end tone:** Activate or deactivate the call disconnection tone.
 - **Alerts during calls:** Set the device to alert you to events during a call.
- **Call accessories:**
 - **Automatic answering:** Set the device to answer automatically after a specified period (available only when a headset is connected).
 - **Automatic answering timer:** Select the length of time that the device waits before answering calls.
 - **Outgoing call conditions:** Set the device to allow outgoing calls with a Bluetooth headset, even when your device is locked.
 - **Outgoing call type:** Select the type of outgoing calls to make you use a Bluetooth headset.

- **Additional settings:**
 - **Caller ID:** Display your caller ID to other parties for outgoing calls.
 - **Call forwarding:** Divert incoming calls to another number.
 - **Auto area code:** Set the device to insert a prefix (area or country code) automatically before a phone number.
 - **Call barring:** Block incoming or outgoing calls.
 - **Call waiting:** Allow incoming call alerts when a call is in progress.
 - **Auto redial:** Activate auto redial for calls that were not connected or that were cut off.
 - **Fixed Dialling Numbers:** Activate or deactivate FDN mode to restrict calls to numbers in the FDN list. Enter the PIN2 supplied with your SIM or USIM card.
- **Ringtones and keypad tones:**
 - **Ringtones:** Select a ringtone to alert you to incoming calls.
 - **Vibrations:** Add or select a vibration pattern.
 - **Vibrate when ringing:** Set the device to vibrate and play a ringtone for incoming calls.
 - **Keypad tones:** Set the device to sound when tapping the buttons on the keypad.
- **Personalise call sound:** Select a type of call sound to use with a headset.
- **Increase volume in pocket:** Set the device to raise the ringtone volume when the device is in an enclosed, such as a bag or pocket.
- **Video call image:** Select an image to be shown to the other party.
- **Use call fail options:** Choose to try a voice call when a video call fails to connect.
- **Voicemail service:** Select or set your voicemail service provider.
- **Voicemail settings:** Enter the number to access the voicemail service. Obtain this number from the service provider.
- **Sound:** Select a ringtone to alert you to new voicemails.
- **Vibrate:** Set the device to vibrate when voicemails are received.
- **Accounts:** Set the device to accept IP calls and set up your accounts for IP call services.
- **Use Internet calling:** Set whether to use IP call services for all calls or only for IP calls.

Blocking mode

Select which notifications will be blocked or set to allow notifications for calls from specified contacts in blocking mode.

Power saving mode

Activate power-saving mode and change the settings for power-saving mode.

- **CPU power saving:** Set the device to limit some system resource usage.
- **Screen power saving:** Set the device to decrease the brightness of the display.
- **Learn about Power saving mode:** Discover how to reduce battery consumption.

Accessory


Change the accessory settings.

- **Automatic unlock:** Set the device to unlock automatically when the cover is flipped open.
- **Audio output:** Select a sound output format to use when connecting your device to 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.
- **Answering/ending calls:**
 - **The home key answers calls:** Set the device to answer an incoming call when pressing the Home button.
 - **Answer calls by tapping:** Set the device to answer an incoming call when tapping the call accept button twice.
 - **The power key ends calls:** Set the device to end a call when pressing the Power button.

- **Show shortcut:** Add a shortcut to **Accessibility** on the quick menu that appears when you press and hold the Power button.
- **Manage accessibility:** Export or import the accessibility settings to share them with other devices.
- **TalkBack:** Activate Talkback, which provides voice feedback.
- **Font size:** Change the font size.
- **Magnification gestures:** Set the device to zoom in and out with finger gestures.
- **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.
- **Enhance web accessibility:** Set applications to install web scripts to make their web content more accessible.
- **Sound balance:** Adjust the sound balance when using a dual headset.
- **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.
- **Interaction control:** Set an area of the screen to be excluded from touch inputs.

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.

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.
- **Download offline speech recognition:** Download and install language data for offline voice input.

Samsung keyboard

To change the Samsung keyboard settings, tap .



The available options may vary depending on the region or service provider.

- **Portrait keyboard types:** Change the keyboard layout.
- **Input languages:** Select languages for text input.
- **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.
- **Continuous input:** Set the device to enter text by sweeping on the keyboard.
- **Keyboard swipe:** Enable or disable the keyboard sweeping feature for the text input mode. Switch between input modes by scrolling left or right on the keyboard.



This feature may not be available depending on the region or service provider.

- **Handwriting:** Customise settings for handwriting mode, such as recognition time, pen thickness, or pen colour.
- **Advanced:**
 - **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.
 - **Character preview:** Set the device to display a large image of each character tapped.
 - **Key-tap sound:** Set the device to sound when a key is touched.
- **Help:** Access help information for using the Samsung keyboard.
- **Reset settings:** Reset Samsung keyboard settings.

Voice recogniser

Select a voice recognition engine.

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 pressing the Home button 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.
- **Auto-start speaker:** Set the device to automatically turn on the speakerphone when making a call with **S Voice**.
- **Show body of message:** Set the device to display the text of a new message received while in driving mode.

- **Wake up command:** Set the device to start voice recognition by saying a wake up command while using **S Voice**.
- **Wake up in lock screen:** Set the device to recognise your wake up command when the screen is locked.
- **Set wake-up command:** Set a wake up command to launch **S Voice** or perform a specified function.
- **Check missed events:** Set the device to check missed calls, messages, or 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.
- **Download 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.

Motions and gestures

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

- **Motion:**
 - **Direct call:** Set the device to make a voice call by picking up and holding the device near your ear while viewing call, message, or contact details.
 - **Smart alert:** Set the device to alert you if you have missed calls or new messages when you pick up the device.
 - **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.
 - **Move an 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.
 - **Browse an image:** Set the device to scroll through an image by moving the device in any direction when the image is zoomed in.
 - **Mute/Pause:** Set the device to mute incoming calls, alarms, and music by placing the device face down.
- **Gyroscope calibration:** Calibrate the gyroscope so your device can correctly recognise rotation.
 -  Place the device on a stable surface during calibration. The calibration process may fail if the device vibrates or moves.
 - Calibrate the gyroscope when you experience drifting or unintended movements when using tilting or panning motions or motion-enabled games.

Smart screen

- **Smart stay:** Set the device to prevent the display backlight from turning off while you are looking at the display.
- **Smart rotation:** Set the interface not to rotate according to the orientation of your face.

Voice control

Change settings to control options by voice commands.

Accounts

Add account

Add email or SNS accounts.

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

Customise settings for location services, security, and other options.

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 and to determine the location of your lost or stolen device via Wi-Fi or mobile 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 and the SIM or USIM card.

- **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:**
 - **Encrypt:** Set the device to encrypt files when you save them to a memory card.
 - **Full encryption:** Set the device to encrypt all files on a memory card.
 - **Exclude multimedia files:** Set the device to encrypt all files on a memory card, except for media files.



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.

- **Remote controls:** Set the device to allow control of your lost or stolen device remotely via the Internet. To use this feature, you must sign in to your Samsung account.
 - **Account registration:** Add or view your Samsung account.
 - **Use wireless networks:** Set the device to allow location data collection and to determine the location of your lost or stolen device via Wi-Fi or mobile network.
- **SIM Change Alert:** Activate or deactivate the Find my mobile feature which helps locate the device when lost or stolen.
- **Find my mobile web page:** Access the SamsungDive website (www.samsungdive.com). You can track and control your lost or stolen device on the SamsungDive website.
- **Set up SIM card lock:**
 - **Lock SIM card:** Activate or deactivate the PIN lock feature to require the PIN before using the device.
 - **Change SIM PIN:** Change the PIN used to access SIM or USIM data.
- **Make passwords visible:** By default, the device hides passwords for security. 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.
- **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.

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.



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.

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.

- **Automatic date and time:** Automatically update the time and date when moving across time zones.
- **Set date:** Set the current date manually.
- **Set time:** Set the current time manually.
- **Automatic time zone:** Set the device to receive time zone information from the network when you move across time zones.
- **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.

Developer options

Change the settings for application development.

- **Make bug report:** Collect information on the device and send it via email.
- **Desktop backup password:** Set a password to secure your backup data.
- **Stay awake:** Set the screen to remain on while you are charging the battery.
- **Protect SD card:** Set the device to request a confirmation when reading data from a memory card.
- **USB debugging:** Activate USB debugging mode to connect your device to a computer with a USB cable.
- **Include bug reports in power menu:** Set the device to display the bug reporting option on the device's power menu.
- **Allow mock locations:** Allow mock locations and service information to be sent to a Location Manager service for testing.
- **Select debug app:** Select applications to debug and prevent errors when you pause debugging.
- **Wait for debugger:** Set the device to prevent the selected application from loading until the debugger is ready.
- **Verify apps via USB:** Set the device to check the application for harmful behaviour before installing it.
- **Show touches:** Set the device to show the pointer when you touch the screen.
- **Show pointer location:** Set the device to show the coordinates and traces of the pointer when you touch the screen.
- **Show layout boundaries:** Set the device to show boundaries.
- **Show GPU view updates:** Set the device to flash areas of the screen when they are updated with the GPU.
- **Show hardware layers updates:** Set the device to flash areas of the screen when hardware layers updates.
- **Show GPU overdraw:** Set the device to paint areas of the screen in different colours to indicate where overdraw occurs.

- **Show screen updates:** Set the device to flash areas of the screen when they are updated.
- **Window animation scale:** Select a speed for opening and closing pop-up windows.
- **Transition animation scale:** Select a speed for switching between screens.
- **Animator duration scale:** Select how long pop-up windows will be shown.
- **Disable hardware overlays:** Set the device to hide hardware overlays.
- **Force GPU rendering:** Set the device to use 2D hardware acceleration to improve graphic performance.
- **Enable 4x MSAA:** Set the device to enable 4x multisample anti-aliasing (MSAA) in OpenGL applications to improve image quality.
- **Simulate secondary displays:** Set the device to show one or more overlay windows.
- **Strict mode:** Set the device to flash the screen when applications perform long operations.
- **Show CPU usage:** Set the device to list all active processes.
- **Profile GPU rendering:** Set the device to check the time of GPU rendering time.
- **Enable OpenGL traces:** Set the device to capture traces of OpenGL application activity.
- **Enable traces:** Set the device to capture traces of application and system performance.
- **Do not keep activities:** Set the device to end a running application when you launch a new application.
- **Limit background processes:** Set the device to limit the number of processes that can run in the background.
- **Show all ANRs:** Set the device to alert you to unresponsive applications that are running in the background.

About device

Access device information and update device software.

Troubleshooting



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 **Red-eye** or **Red-eye fix**.



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 capturing photos in a dusty place.
- Adjust the ISO sensitivity. (p. 96)



Photos are blurred

Blurring can occur if you capture 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.



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.
- Adjust the ISO sensitivity. (p. 96)
- 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**.
- Adjust the exposure.
- Set the metering option to **Spot** if a subject is in the centre of the frame.

When you cannot turn on the device

- Ensure that the battery is inserted. (p. 11)
- Charge the battery.

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. 11)

When the flash is not functional

- The flash option may be set to **Off**. (p. 100)
- 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. 97)

When the photo is too bright

- Turn the flash off. (p. 100)
- Adjust the ISO sensitivity. (p. 96)
- Adjust the exposure value. (p. 95)

When the photo is too dark

- Turn the flash on. (p. 100)
- Adjust the ISO sensitivity. (p. 96)
- Adjust the exposure value. (p. 95)

When you turn on your device or while you are using the device, it prompts you to enter one of the following codes:

- Password: When the device lock feature is enabled, you must enter the password you set for the device.
- PIN: When using the device for the first time or when the PIN requirement is enabled, you must enter the PIN supplied with the SIM or USIM card. You can disable this feature by using the Lock SIM card menu.
- PUK: Your SIM or USIM card is blocked, usually as a result of entering your PIN incorrectly several times. You must enter the PUK supplied by your service provider.
- PIN2: When you access a menu requiring the PIN2, you must enter the PIN2 supplied with the SIM or USIM card. For details, contact your service provider.

Your device displays network or service error messages

- When you are in areas with weak signals or poor reception, you may lose reception. Move to another area and try again.
- You cannot access some options without a subscription. Contact your service provider for more details.

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.

The touch screen responds slowly or improperly

If your device has a touch screen and the touch screen is not responding properly, try the following:

- Remove any protective covers from the touch screen. Protective covers may prevent the device from recognising your inputs and are not recommended for touch screen devices.
- Ensure that your hands are clean and dry when tapping the touch screen.
- 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, take it to your local Samsung Service Centre.

Your device freezes or has fatal errors

If your device freezes or hangs, you may need to close programs or reset the device to regain functionality. If your device is frozen and unresponsive, press and hold the Power button for more than 7 seconds. The device reboots automatically.

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**.

Calls are being dropped

When you are in areas with weak signals or poor reception, you may lose your connection to the network. Move to another area and try again.

Outgoing calls are not connected

- Ensure that you have pressed the Dial key.
- Ensure that you have accessed the right cellular network.
- Ensure that you have not set call barring for the phone number you are dialling.

Incoming calls are not connected

- Ensure that your device is turned on.
- Ensure that you have accessed the right cellular network.
- Ensure that you have not set call barring for the incoming phone number.

Others cannot hear you speaking on a call

- Ensure that you are not covering the built-in microphone.
- Ensure that the microphone is close to your mouth.
- If using a headset, ensure that it is properly connected.

Audio quality is poor

- Ensure that you are not blocking the device's internal antenna.
- When you are in areas with weak signals or poor reception, you may lose reception. Move to another area and try again.

When dialling from contacts, the call is not connected

- Ensure that the correct number is stored in the contact list.
- Re-enter and save the number, if necessary.
- Ensure that you have not set call barring for the contact's phone number.

The device beeps and the battery icon is empty

Your battery is low. Recharge or replace the battery to continue using the device.

The battery does not charge properly or the device turns off

- The battery terminals may be dirty. Wipe both gold-coloured contacts with a clean, soft cloth and try charging the battery again.
- If the battery no longer charges completely, dispose of the old battery properly and replace it with a new battery (refer to your local ordinances for proper disposal instructions).

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 Samsung 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.

Error messages appear when opening music files

Some music files may not play on your Samsung device for a variety of reasons. If you receive error messages when opening music 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.

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, if necessary.
- 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

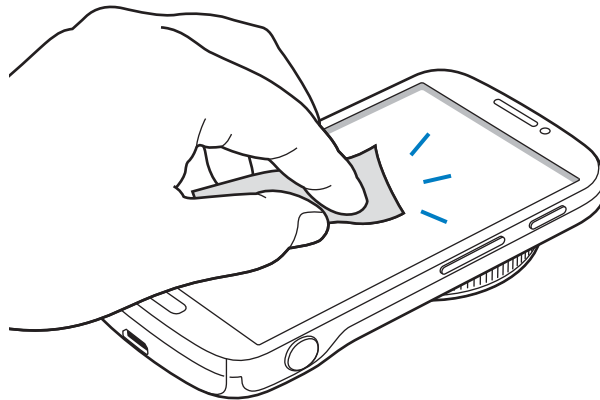
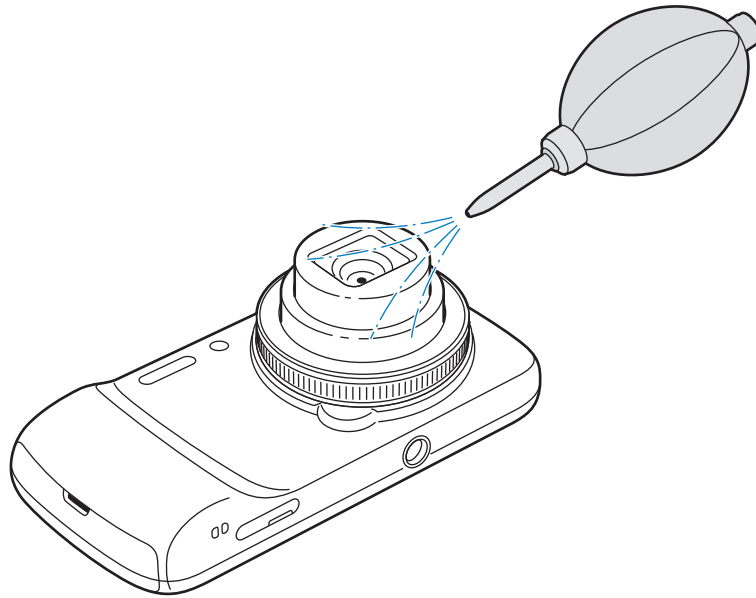
- Ensure that the USB cable you are using is compatible with your device.
- Ensure that you have the proper drivers installed and updated on your computer.
- If you are a Windows XP user, ensure that you have Windows XP Service Pack 3 or higher installed on your computer.
- Ensure that you have Samsung Kies 2.0 or Windows Media Player 10 or higher installed on your computer.

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.

Cleaning the device

Use a 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, service provider, or software version, and is subject to change without prior notice.



Safety information

This safety information contains content for mobile devices. Some content may be not applicable to your device. To prevent injury to yourself and others or damage to your device, read the safety information about your device before using the device.



Warning

Failure to comply with safety warnings and regulations can cause serious injury or death

Do not use damaged power cords or plugs, or loose electrical sockets

Unsecured connections can cause electric shock or fire.

Do not touch the power cord with wet hands or disconnect the charger by pulling the cord

Doing so may result in electrocution.

Do not bend or damage the power cord

Doing so may cause electric shock or fire.

Do not use your device while it is charging or touch your device with wet hands

Doing so may cause electric shock.

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 use your device outdoor during a thunderstorm

Doing so may result in electric shock or device malfunction.

Use manufacturer-approved batteries, chargers, accessories, and supplies

- 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.

Do not drop or cause an impact to the charger or the device**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

- Avoid exposing your device and battery to very cold or very hot temperatures.
- Extreme temperatures can damage the device and reduce the charging capacity and life of your device and battery.
- Prevent the battery from coming into 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.
- Never use a damaged charger or battery.

Do not store your device near or in heaters, microwaves, hot cooking equipment, or high pressure containers

- The battery may leak.
- Your device may overheat and cause a fire.

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.

Do not bite or suck the device or the battery

- 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 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.

**Caution****Failure to comply with safety cautions and regulations can cause injury or property damage****Do not use your device near other electronic devices**

- Most electronic devices use radio frequency signals. Your device may interfere with other electronic devices.
- Using an LTE data connection may cause interference with other devices, such as audio equipment and telephones.

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.
- Electronic devices in your car may malfunction, due to radio interference from your device. Contact the manufacturer for more information.

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 mobile device usage while operating a vehicle

While driving, safely operating the vehicle is your first responsibility. Never use your mobile device while driving, if it is prohibited by law. For your safety and the safety of others, use your common sense and remember the following tips:

- Get to know your device and its convenience features, such as speed dial and redial. These features help you reduce the time needed to place or receive calls on your mobile device.
- Position your device within easy reach. Make sure you can access your wireless device without taking your eyes off the road. If you receive an incoming call at an inconvenient time, let your voicemail answer it for you.
- Suspend calls in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice, and heavy traffic can be hazardous.
- Do not take notes or look up phone numbers. Jotting down a "to do" list or flipping through your address book takes attention away from your primary responsibility of driving safely.
- Dial sensibly and assess the traffic. Place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary.
- Do not engage in stressful or emotional conversations that may be distracting. Make the person you are talking to aware that you are driving and suspend conversations that could potentially divert your attention from the road.

Care and use your mobile device properly

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 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).
- Store the battery at temperatures from 0 °C to 45 °C.

Do not store your device with metal objects, such as coins, keys, and necklaces

- Your device may be scratched or may malfunction.
- If the battery terminals come into contact with metal objects, this may cause a fire.

Do not store your device 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 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 back cover removed

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

If your device has a camera flash or light, do not use it close to the eyes of people or pets

Using a flash close to the eyes may cause temporary loss of vision or damage to the eyes.

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 hear your conversation or 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.

Do not paint or put stickers on your device

- Paint and stickers can clog moving parts and prevent proper operation.
- If you are allergic to paint or metal parts of the device, you may experience itching, eczema, or swelling of the skin. When this happens, stop using the device and consult your physician.

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.

Install mobile devices and equipment with caution

- Ensure that any mobile 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.

Do not drop your device or cause impacts to your device

- Your device may be damaged or may malfunction.
- If bent or deformed, your device may be damaged or parts may malfunction.

Ensure maximum battery and charger life

- Avoid charging your device for more than a week, as overcharging may shorten battery life.
- Over time, unused device will discharge and must be recharged before use.
- Disconnect the charger from power sources when not in use.
- Use the battery only for their intended purposes.
- Leaving batteries unused over time may reduce their lifespan and performance. It may also cause the batteries to malfunction or explode, or cause a fire.
- 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.

When using the device, mind the following

- Hold the device upright, as you would with a traditional phone.
- Speak directly into the microphone.
- Do not cover the antenna area with your hands or other objects. This may cause connectivity problems or drain the battery.

Do not disassemble, modify, or repair your device

- Any changes or modifications to your device can void your manufacturer's warranty. If your device needs servicing, take your device to a Samsung Service Centre.
- Do not disassemble or puncture the battery, as this can cause explosion or fire.

- Turn off the device before removing the battery. If you remove the battery with the device turned on, it may cause the device to malfunction.

When cleaning your device, mind the following

- 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.

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

Your device may malfunction.

Avoid disturbing others when using the device in public

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.

Handle SIM cards, memory cards, or cables with care

- When inserting a card or connecting a cable to your device, make sure that the card is inserted or the cable is connected to the proper side.
- 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.
- Protect cards from strong shocks, static electricity, and electrical noise from other devices.
- Do not touch gold-coloured contacts or terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.
- Inserting a card or connecting a cable by force or improperly may result in damage to the multipurpose jack or other parts of the device.

Ensure access to emergency services

Emergency calls from your device may not be possible in some areas or circumstances. Before travelling in remote or undeveloped areas, plan an alternative method of contacting emergency services personnel.

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.

Do not distribute copyright-protected material

Do not distribute copyright-protected material without the permission of the content owners. Doing this may violate copyright laws. The manufacturer is not liable for any legal issues caused by the user's illegal use of copyrighted material.

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.

Specific Absorption Rate (SAR) certification information

THIS DEVICE MEETS INTERNATIONAL GUIDELINES FOR EXPOSURE TO RADIO WAVES

Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) recommended by international guidelines. The guidelines were developed by an independent scientific organisation (ICNIRP) and include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The radio wave exposure guidelines use a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit for mobile devices is 2.0 W/kg. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands.

During use, the actual SAR values for this device are usually well below the values stated above. This is because, for purposes of system efficiency and to minimise interference on the network, the operating power of your mobile device is automatically decreased when full power is not needed for the call. The lower the power output of the device, the lower its SAR value.

A body-worn SAR test has been performed on this device at a separation distance of 1.0 cm. To meet RF exposure guidelines during body-worn operation, the device must be positioned at least 1.0 cm away from the body.


Organisations such as the World Health Organisation and the US Food and Drug Administration have suggested that if people are concerned and want to reduce their exposure, they could use a hands-free accessory to keep the wireless device away from the head and body during use, or reduce the amount of time spent using the device. For more information, visit www.samsung.com/sar and search for your device with the model number.

Correct disposal of this product



(Waste Electrical & Electronic Equipment)

(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature  indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

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

This EEE is compliant with RoHS.

Correct disposal of batteries in this product



(Applicable in countries with separate collection systems)

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

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

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You may not use any content or services in a manner that has not been authorised by the content owner or service provider.

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FCC Notice and Cautions

FCC Notice



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

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

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated.

Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this standard, contact the National Fire Protection Association, One Battery March Park, Quincy, MA 02269, Attn: Publication Sales Division.

Cautions

Changes or modifications made in the radio phone, not expressly approved by Samsung, will void the user's authority to operate the equipment.

The use of any unauthorized accessories may be dangerous and void the phone warranty if said accessories cause damage or a defect to the phone.

Although your phone is quite sturdy, it is a complex piece of equipment and can be broken. Avoid dropping, hitting, bending or sitting on it.

Other Important Safety Information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.

- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.
- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.
- Switch your phone off before boarding an aircraft. The use of wireless phone in aircraft is illegal and may be dangerous to the aircraft's operation.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Product Performance

Getting the Most Out of Your Signal Reception

The quality of each call you make or receive depends on the signal strength in your area. Your phone informs you of the current signal strength by displaying a number of bars next to the signal strength icon. The more bars displayed, the stronger the signal.

If you're inside a building, being near a window may give you better reception.

Understanding the Power Save Feature

If your phone is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your phone is active, it periodically rechecks service availability or you can check it yourself by pressing any key.

Anytime the Power Save feature is activated, a message displays on the screen. When a signal is found, your phone returns to standby mode.

Maintaining Your Phone's Peak Performance

For the best care of your phone, only authorized personnel should service your phone and accessories. Faulty service may void the warranty.

There are several simple guidelines to operating your phone properly and maintaining safe, satisfactory service.

- **Place the mobile phone's acoustic output next to your ear for proper orientation.**
- **Do not tamper or alter the phone's antenna.**
- Don't use the phone if the antenna is damaged.
- Speak directly into the phone's receiver.
- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery. If it is inoperable, call Customer Care for service.

Availability of Various Features/Ring Tones

Many services and features are network dependent and may require additional subscription and/or usage charges. Not all features are available for purchase or use in all areas. Downloadable Ring Tones may be available at an additional cost. Other conditions and restrictions may apply. See your service provider for additional information.

This device is capable of operating in 802.11a/n mode. For 802.11a/n devices operating in the frequency range of 5.15 - 5.25 GHz, they are restricted for indoor operations to reduce any potential harmful interference for Mobile Satellite Services (MSS) in the US. WIFI Access Points that are capable of allowing your device to operate in 802.11a/n mode (5.15 - 5.25 GHz band) are optimized for indoor use only. If your WIFI network is capable of operating in this mode, please restrict your WIFI use indoors to not violate federal regulations to protect Mobile Satellite Services.