

SAMSUNG

SM-G360F

User Manual

Table of Contents

Read me first

Getting started

- 6 Package contents
- 7 Device layout
- 9 Using the SIM or USIM card and battery
- 14 Using a memory card
- 16 Turning the device on and off
- 16 Locking and unlocking the screen

Basics

- 17 Using the touch screen
- 20 Home screen layout
- 24 Notifications panel
- 25 Opening apps
- 26 Installing or uninstalling apps
- 28 Entering text
- 30 Screen capture
- 30 My Files
- 31 Power saving feature
- 31 Viewing help information

Network connectivity

- 32 Mobile data
- 32 Wi-Fi
- 33 Tethering and Mobile hotspot

Personalising

- 35 Managing the Home and Apps screens
- 37 Setting wallpaper and ringtones
- 38 Changing the screen lock method
- 38 Transferring data from your previous device
- 40 Setting up accounts

Phone

- 41 Making calls
- 42 Receiving calls
- 42 Options during calls

Contacts

- 44 Adding contacts
- 44 Importing and exporting contacts
- 45 Searching for contacts

Messages & email

46 Messages

47 Email

Camera

49 Basic shooting

50 Shooting modes

52 Camera settings

Gallery

54 Viewing content on the device

Useful apps and features

55 S Planner

56 Internet

57 Video

58 Clock

59 Calculator

60 Memo

60 Radio

62 Voice Recorder

63 Google apps

Connecting with other devices

65 Bluetooth

67 Wi-Fi Direct

69 NFC

71 Mobile printing

Device & data manager

72 Upgrading the device

73 Transferring files between the device and a computer

74 Backing up and restoring data

75 Performing a data reset

Settings

76 About Settings

76 CONNECTIONS

80 DEVICE

84 PERSONAL

86 SYSTEM

Troubleshooting

Read me first

Please read this manual before using the device to ensure safe and proper use.

- Descriptions are based on the device's default settings.
- Some content may differ from your device depending on the region, service provider, or device's software.
- Content (high quality content) that requires high CPU and RAM usage will affect the overall performance of the device. Apps related to the content may not work properly depending on the device's specifications and the environment that it is used in.
- Samsung is not liable for performance issues caused by apps supplied by providers other than Samsung.
- Samsung is not liable for performance issues or incompatibilities caused by edited registry settings or modified operating system software. Attempting to customise the operating system may cause the device or apps 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 depending on your data plan. For large data transfers, it is recommended to use the Wi-Fi feature.
- Default apps that come with the device are subject to updates and may no longer be supported without prior notice. If you have questions about an app provided with the device, contact a Samsung Service Centre. For user-installed apps, 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

Getting started

Package contents

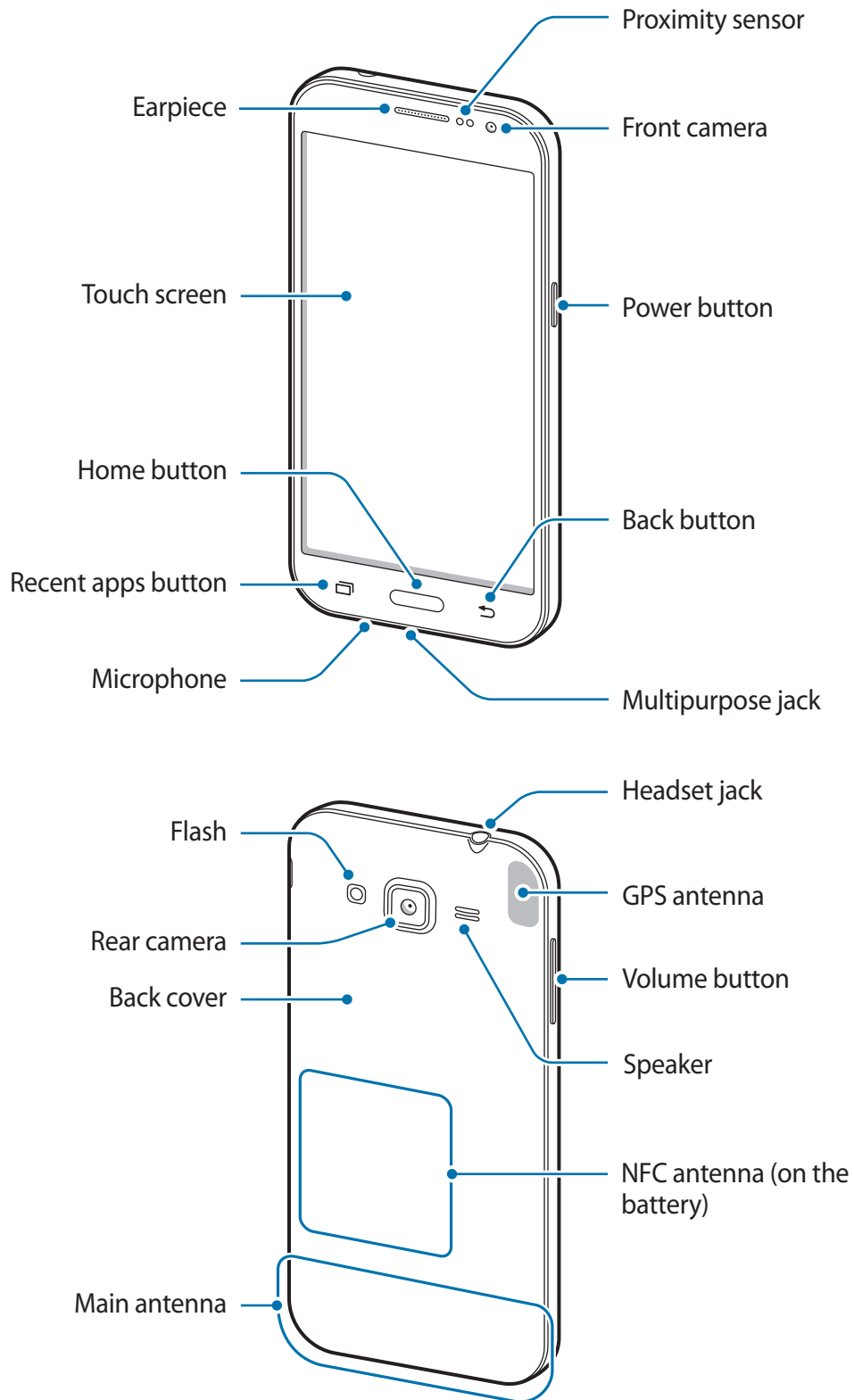
Check the product box for the following items:

- 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.
- Use only Samsung-approved accessories. Using unapproved accessories may cause the performance problems and malfunctions that are not covered by the warranty.
- Availability of all accessories is subject to change depending entirely on manufacturing companies. For more information about available accessories, refer to the Samsung website.






Device layout





- Do not cover the antenna area with your hands or other objects. This may cause connectivity problems or drain the battery.
- Using a Samsung-approved screen protector is recommended. Unapproved screen protectors may cause the sensors to malfunction.
- Do not allow water to contact the touch screen. The touch screen may malfunction in humid conditions or when exposed to water.

Buttons

Button	Function
 Power	<ul style="list-style-type: none"> • Press and hold to turn the device on or off. • Press to turn on or lock the screen.
 Recent apps	<ul style="list-style-type: none"> • Tap to open the list of recent apps. • Tap and hold to access additional options for the current screen.
 Home	<ul style="list-style-type: none"> • Press to turn on the screen while the screen is locked. • Press to return to the Home screen. • Press and hold to launch Google.
 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.

Using the SIM or USIM card and battery

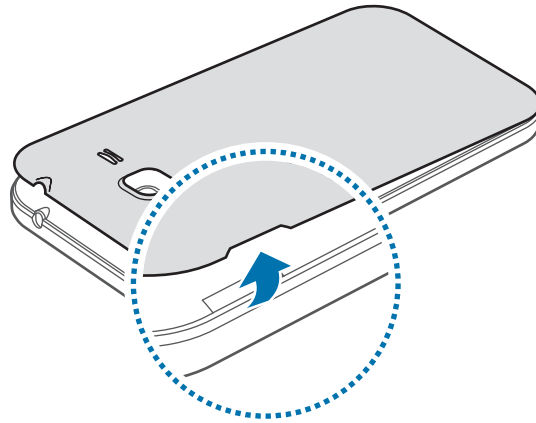
Installing the SIM or USIM card and battery

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



- Only microSIM cards work with the device.
- Some LTE services may not be available depending on the service provider. For more information about service availability, contact your service provider.

1 Remove the back cover.

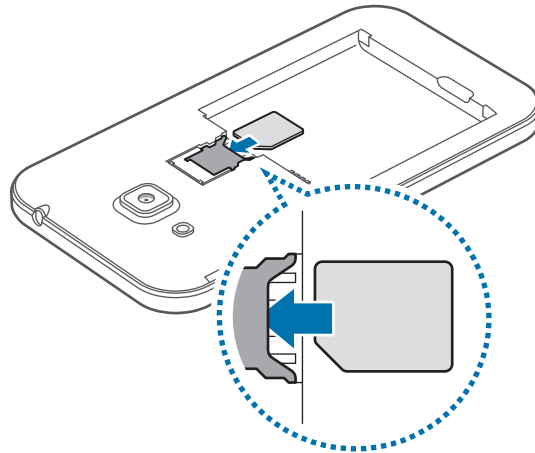


Be careful not to damage your fingernails when you remove the back cover.



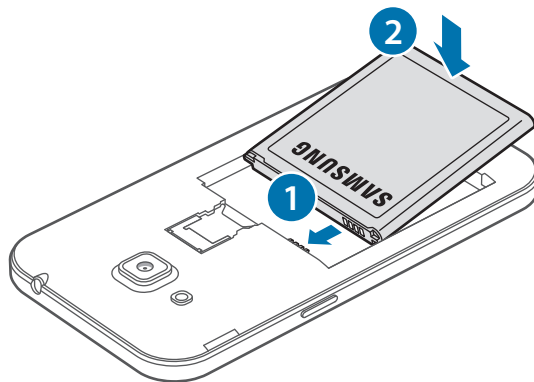
Do not bend or twist the back cover excessively. Doing so may damage the cover.

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

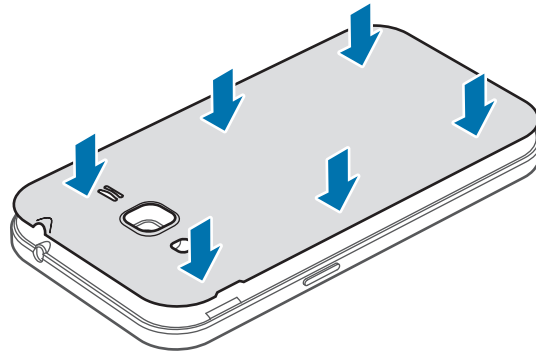


- Do not insert a memory card into the SIM card slot. If a memory card happens to be lodged in the SIM card slot, take the device to a Samsung Service Centre to remove the memory card.
- Use caution not to lose or let others use the SIM or USIM card. Samsung is not responsible for any damages or inconveniences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

3 Insert the battery with the battery's gold-coloured contacts properly aligned with the device's contacts.



4 Replace the back cover.

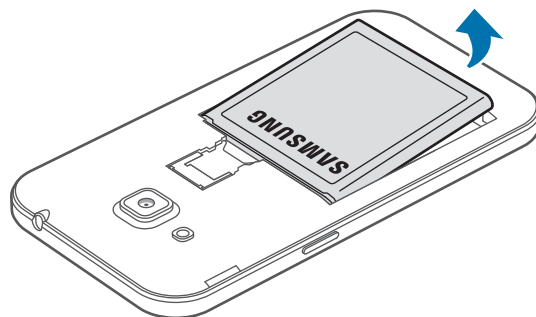


- Ensure that the back cover is closed tightly.
- Use only Samsung-approved back covers and accessories with the device.

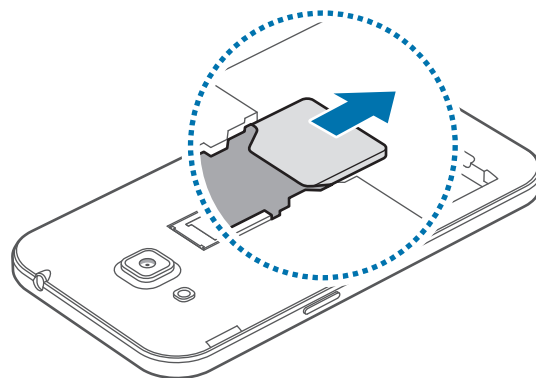
Removing the SIM or USIM card and battery

1 Remove the back cover.

2 Pull out the battery.



3 Press the SIM or USIM card with your finger, 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 battery by connecting them via the USB cable.

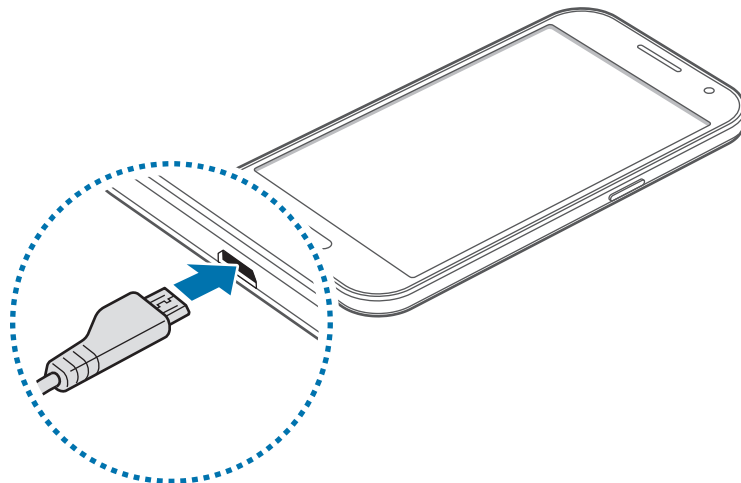


Use only Samsung-approved chargers, batteries, and cables. Unapproved chargers or cables can cause the battery to explode or damage the device.



- When the battery power is low, the battery icon appears empty.
- If the battery is completely discharged, the device cannot be turned on immediately when the charger is connected. Allow a depleted battery to charge for a few minutes before turning on the device.
- If you use multiple apps at once, network apps, or apps that need a connection to another device, the battery will drain quickly. To avoid disconnecting from the network or losing power during a data transfer, always use these apps after fully charging the battery.

Plug the small end of the charger into the multipurpose jack of the device, and plug the large end of the charger into an electric socket.



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 charger should remain close to the electric socket and easily accessible while charging.

Reducing the battery consumption

Your device provides options that help you save the 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 apps using the task manager.
- Deactivate the Bluetooth feature.
- Deactivate the Wi-Fi feature.
- Deactivate auto-syncing of apps.
- Decrease the backlight time.
- Decrease the screen brightness.

Using a memory card

Installing a memory card

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

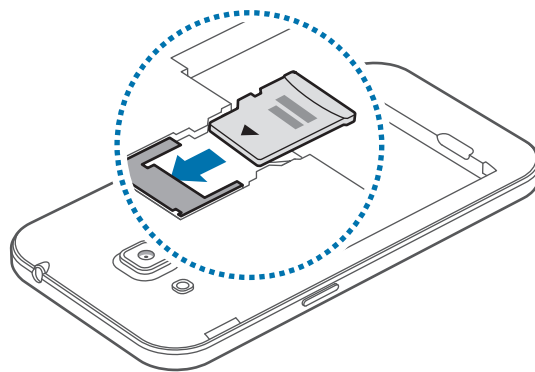


- Some memory cards may not be fully compatible with the device. Using an incompatible card may damage the device or the memory card, or corrupt the data stored in it.
- Use caution to insert the memory card right-side up.




- The device supports the FAT and the exFAT file systems for memory cards. When inserting a card formatted in a different file system, the device asks to reformat the memory card.
- Frequent writing and erasing of data shortens the lifespan of memory cards.
- When inserting a memory card into the device, the memory card's file directory appears in the **My Files** → **SD card** folder.

- 1 Remove the back cover and battery.
- 2 Insert a memory card with the gold-coloured contacts facing downwards.




- 3 Replace the battery and back cover.

Removing the memory card

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


- 1 Remove the back cover and battery.
- 2 Pull out the memory card.
- 3 Replace the battery and back cover.

 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 can damage 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  → **Settings** → **Storage** → **Format SD card** → **Format SD card** → **Erase everything**.

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

Turning the device on and off

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

When you turn on your device for the first time or after performing a data reset, follow the on-screen instructions to set up your device.

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

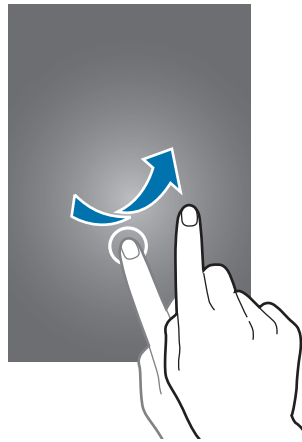


Follow all posted warnings and directions from authorised personnel in areas where the use of wireless devices is restricted, such as aeroplanes and hospitals.

Locking and unlocking the screen

Pressing the Power button turns off the screen and locks it. Also, the screen turns off and automatically locks if the device is not used for a specified period.

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



You can change the unlock code to unlock the screen. Refer to [Changing the screen lock method](#) for more information.

Basics

Using the touch screen



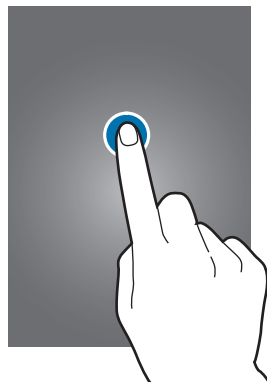
- Do not allow the touch screen to come into contact with other electrical devices. Electrostatic discharges can cause the touch screen to malfunction.
- To avoid damaging the touch screen, do not tap it with anything sharp or apply excessive pressure to it with your fingertips.



- The device may not recognise touch inputs close to the edges of the screen, which are outside of the touch input area.
- Leaving the touch screen idle for extended periods may result in afterimages (screen burn-in) or ghosting. Turn off the touch screen when you do not use the device.
- It is recommended to use fingers when you use the touch screen.

Tapping

To open an app, to select a menu item, to press an on-screen button, or to enter a character using the keyboard on the screen, tap it with a finger.



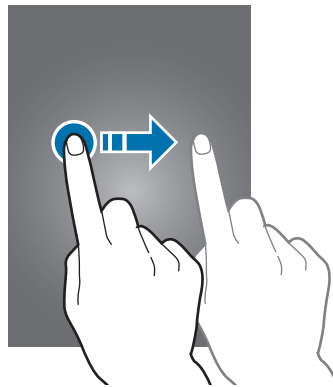
Tapping and holding

Tap and hold an item or the screen for more than 2 seconds to access available options.



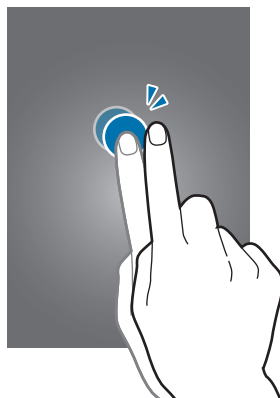
Dragging

To move an item, tap and hold it and drag it to the target position.



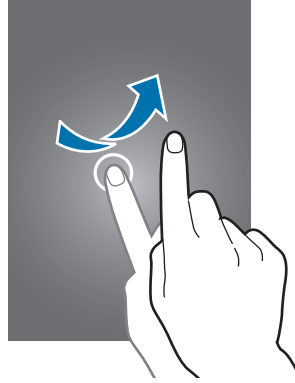
Double-tapping

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



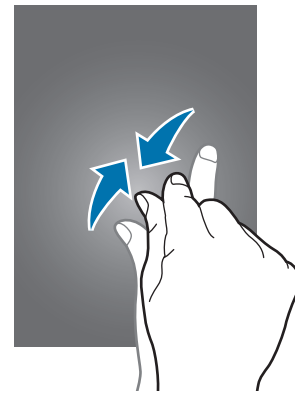
Flicking

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



Spreading and pinching

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



Home screen layout

Home screen

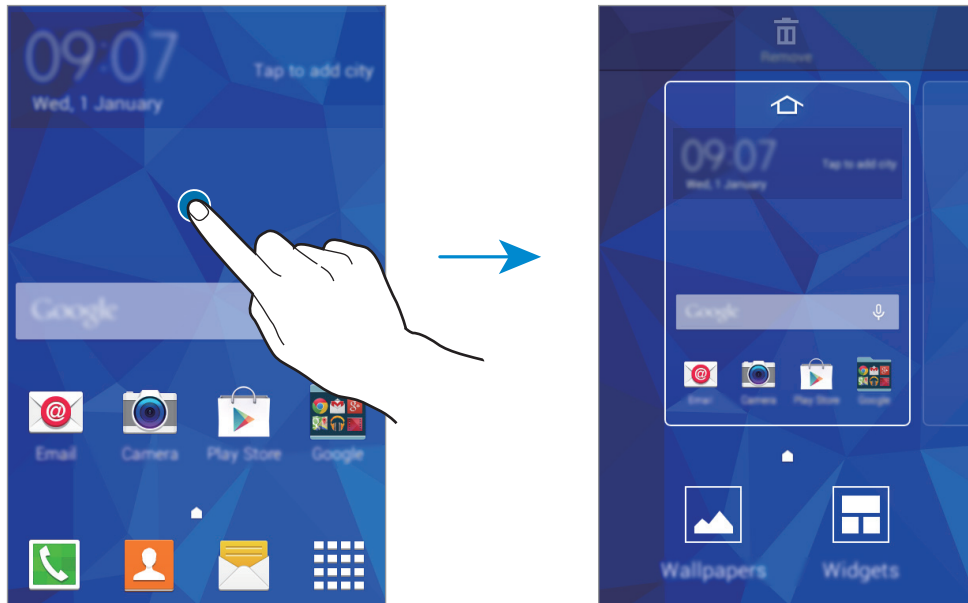
The Home screen is the starting point for accessing all of the device's features. It displays widgets, shortcuts to apps, and more. Widgets are small apps that launch specific app functions to provide information and convenient access on your Home screen.

To view other panels, scroll left or right, or tap one of the screen indicators at the bottom of the screen. To customise the Home screen, refer to [Managing the Home screen](#).




Home screen options

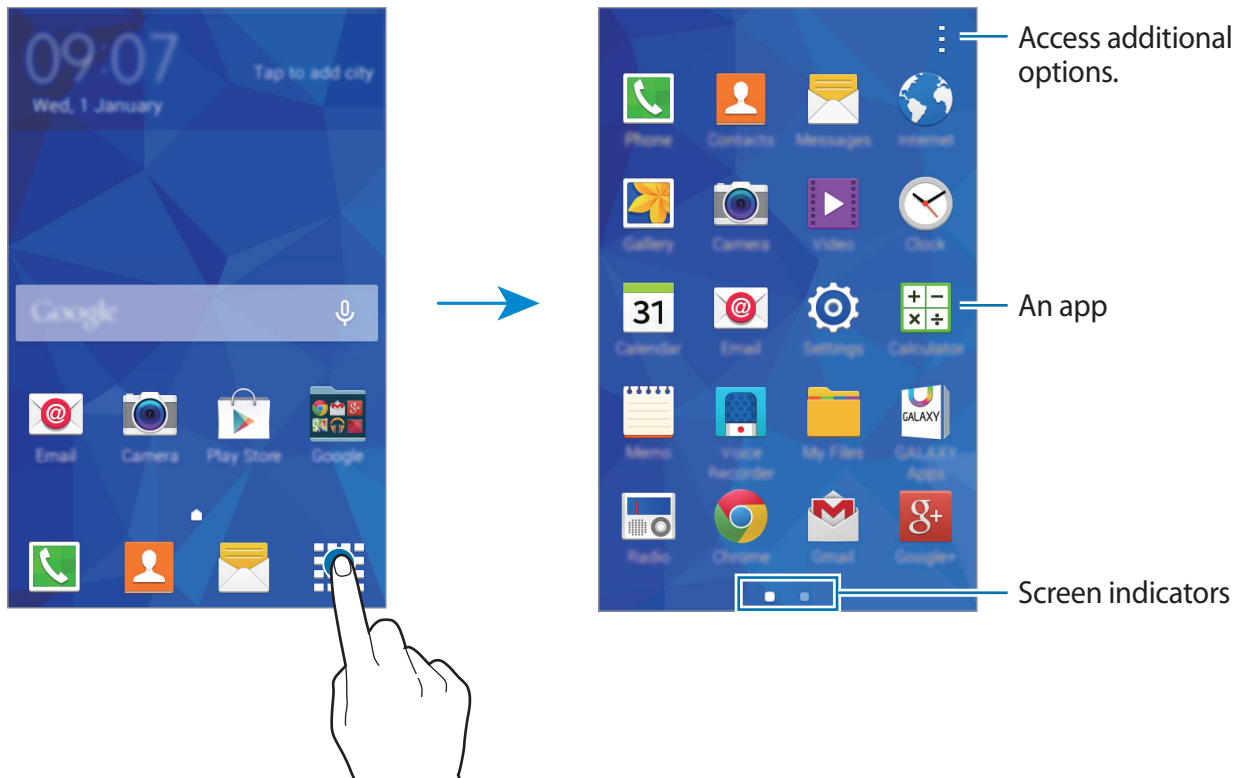
On the Home screen, tap and hold an empty area, or pinch your fingers together to access the available options.



Apps screen

The Apps screen displays icons for all apps, including newly installed apps.

On the Home screen, tap  to open the Apps screen. To view other panels, scroll left or right, or select a screen indicator at the bottom of the screen. To customise the Apps screen, refer to [Managing the Apps screen](#).



Indicator icons

Indicator icons appear on the status bar at the top of the screen. The icons listed in the table below are most common.



The status bar may not appear at the top of the screen in some apps. To display the status bar, drag down from the top of the screen.

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
	LTE network connected
	Wi-Fi connected
	Bluetooth feature activated
	GPS activated
	Call in progress
	Missed call
	Connected to computer
	No SIM or USIM card
	New text or multimedia message
	Alarm activated
	Mute mode activated
	Vibration mode activated
	Flight mode activated
	Error occurred or caution required
	Battery power level

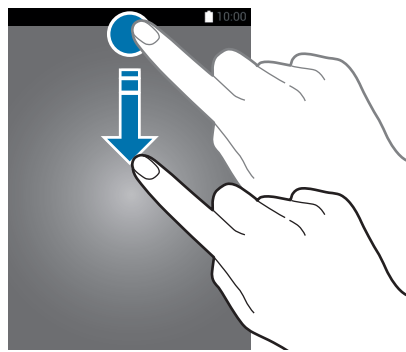
Notifications panel

Using the notifications panel

When you receive new notifications, such as messages or missed calls, indicator icons appear on the status bar. To see more information about the icons, open the notifications panel and view the details.

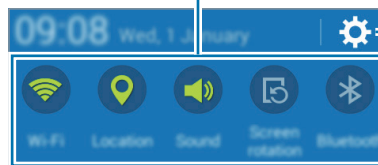
To open the notifications panel, drag the status bar downwards.

To close the notifications panel, drag the bar from the bottom of the screen upwards.



You can use the following functions on the notifications panel.

Activate or deactivate options.
Tap and hold a button to view more detailed settings.

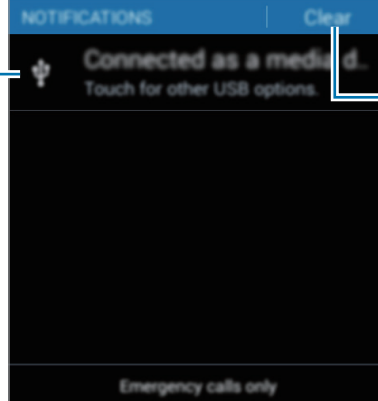


Launch **Settings**.

Adjust the brightness.



Tap a notification and perform various actions.



Clear all notifications.

Using the quick setting buttons

You can activate or deactivate some features on the notifications panel. Tap the following options to activate or deactivate them. You can view more detailed settings if you tap and hold a button.

- **Wi-Fi:** Refer to [Wi-Fi](#) for more information.
- **Location:** Refer to [Location](#) for more information.
- **Sound / Vibrate / Mute:** Select a sound mode.
- **Screen rotation:** Allow or prevent the interface from rotating when you rotate the device.



Some apps do not allow screen rotation.

- **Bluetooth:** Refer to [Bluetooth](#) for more information.
- **Mobile data:** Refer to [Data usage](#) or [Mobile networks](#) for more information.
- **U. power saving:** Refer to [Ultra power saving mode](#) for more information.
- **Mobile hotspot:** Refer to [Tethering and Mobile hotspot](#) for more information.
- **NFC:** Refer to [NFC](#) for more information.
- **Sync:** Activate or deactivate auto-syncing of apps, such as calendar or email.
- **Flight mode:** Refer to [Flight mode](#) for more information.

Opening apps

On the Home screen or the Apps screen, select an app icon to open it.

To open the list of recently-used apps, tap  and select an app icon to open.

Closing an app

Tap  and drag an app icon to the left or right to close it. To close all running apps, tap .

Installing or uninstalling apps

Samsung GALAXY Apps

Use this app to purchase and download apps.

Tap **GALAXY Apps** on the Apps screen.




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

Installing apps

Browse apps by category or tap  to search for a keyword.

Select an app to view information about it. To download free apps, tap **Free**. To purchase and download apps where charges apply, tap the button that shows the app's price.



To change the auto update settings, tap  → **Settings** → **Auto update apps**, and then select an option.

Play Store

Use this app to purchase and download apps.


Tap **Play Store** on the Apps screen.

Installing apps

Browse apps by category or tap  to search for a keyword.


Select an app to view information about it. To download free apps, tap **INSTALL**. To purchase and download apps where charges apply, tap the price and follow the on-screen instructions.



To change the auto update settings, tap  → **SETTINGS** → **Auto-update apps**, and then select an option.

Managing apps

Uninstalling or disabling apps

To disable default apps, open the Apps screen and tap **⋮** → **Uninstall/disable apps**.  appears on the apps that you can disable. Select an app and tap **OK**.

To uninstall downloaded apps, open the Apps screen and tap **⋮** → **Downloaded apps** → **⋮** → **Uninstall**. Alternatively, on the Apps screen, tap **Settings** → **Application manager**, select an app, and then tap **Uninstall**.

Enabling apps

On the Apps screen, tap **⋮** → **Show disabled apps**, select apps, and then tap **Done**. Alternatively, on the Apps screen, tap **Settings** → **Application manager**, scroll to **DISABLED**, select an app, and then tap **Enable**.



- Hiding apps: Hide apps in the Apps screen only. You can continue to use hidden apps.
- Disabling apps: Disable selected default apps that cannot be uninstalled from the device. You cannot use disabled apps.
- Uninstalling apps: Uninstall downloaded apps.

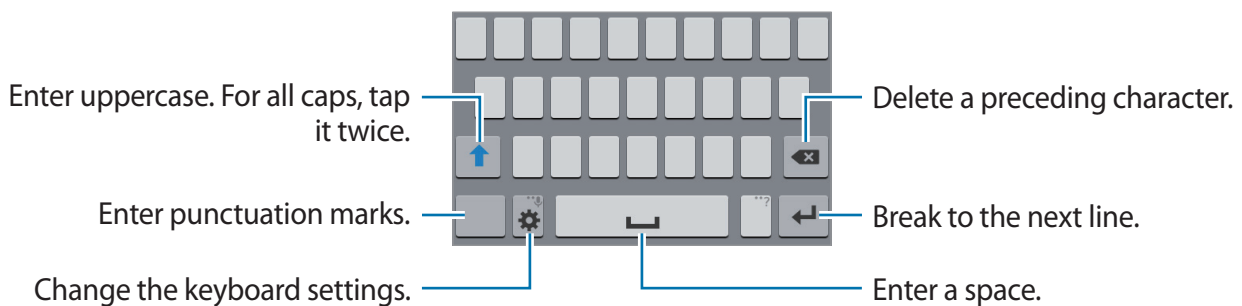
Entering text

Keyboard layout


A keyboard appears automatically when you enter text to send messages, create memos, and more.



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 input language

Tap  → **Select input languages**, and then select the languages to use. If you select two or more languages, you can switch between the input languages by sliding the space key left or right.



Changing the keyboard layout

Tap , select a language under **INPUT LANGUAGES**, and then select a keyboard layout to use.

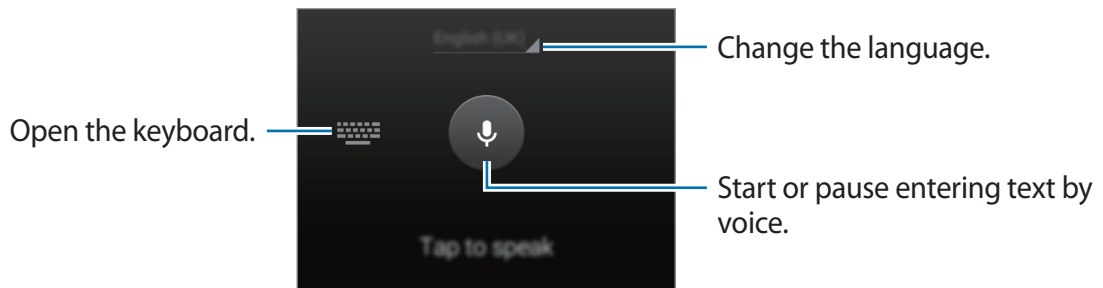




On **3x4 keyboard**, a key has three or four characters. To enter a character, tap the corresponding key repeatedly until the desired character appears.

Using additional keyboard functions




Tap and hold  to use various functions. Other icons may appear instead of  depending on the last function that was used.

-  : Enter text by voice.



-  : Change the keyboard settings.
-  : Enter emoticons.

Copying and pasting

- 1 Tap and hold over text.
- 2 Drag  or  to select the desired text, or tap **Select all** to select all text.
- 3 Tap **Copy** or **Cut**. The selected text is copied to the clipboard.
- 4 Place the cursor where the text is to be inserted and tap  → **Paste**.

Screen capture

Capture a screenshot while using the device.

Press and hold the Home button and the Power button simultaneously. The image is saved in the **Gallery** → ☰ → **Album** → **Screenshots** folder. After capturing a screenshot, you can edit the image and share it with others.

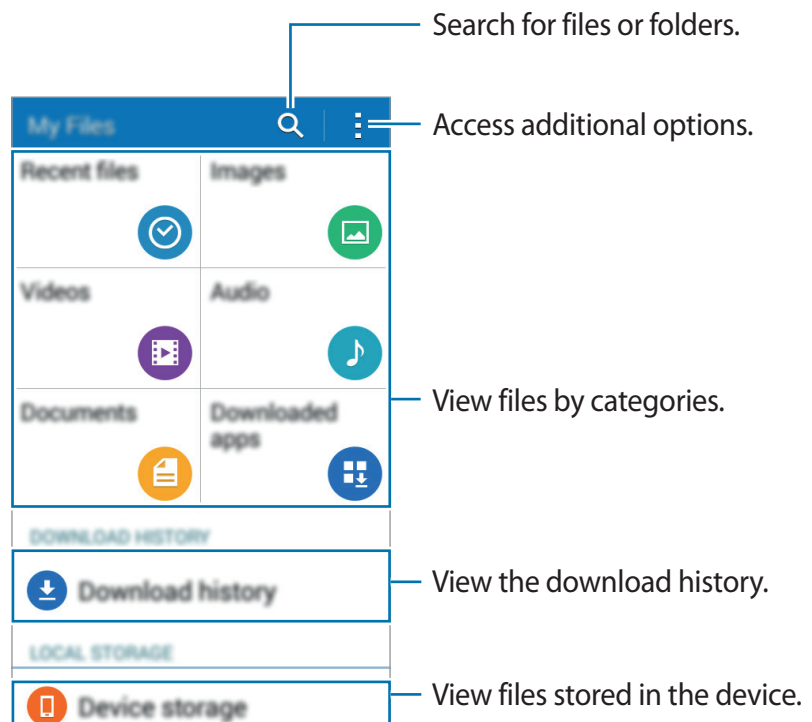


It is not possible to capture a screenshot while using some apps.

My Files

Use this app to access various files stored in the device or in other locations.

Tap **My Files** on the Apps screen.



Power saving feature



Ultra power saving mode


Use this mode to extend the device's battery power. In ultra power saving mode, the device performs the following:

- Restricts the available apps to essential and selected apps only.
- Deactivates the mobile data connection when the screen turns off.
- Deactivates the Wi-Fi and Bluetooth features.

On the Apps screen, tap **Settings** → **Ultra power saving mode**, and tap the **Ultra power saving mode** switch to activate it. Alternatively, open the notifications panel and tap **U. power saving** to activate it.

To add an app to the Home screen, tap  and select an app.

To remove an app from the Home screen, tap  → **Remove**, select an app with , and then tap **OK**.

To change the settings for ultra power saving mode, such as network connectivity or sound, tap  → **Settings**.

To deactivate ultra power saving mode, tap  → **Disable ultra power saving mode**.



The estimated maximum standby time shows the time remaining before the battery power runs out if the device is not used. Standby time may vary depending on your device settings and operating conditions.

Viewing help information

To view help information for an app while you are using the app, tap  → **Help**.



Some apps may not include help information.

Network connectivity

Mobile data

Connect the device to a mobile network to use the Internet or share media files with other devices. Refer to [Data usage](#) for additional options.

On the Apps screen, tap **Settings** → **Data usage**, and then tick **Mobile data**. Alternatively, open the notifications panel and tap **Mobile data** to activate it.

Wi-Fi

Connect the device to a Wi-Fi network to use the Internet or share media files with other devices. Refer to [Wi-Fi](#) for additional options.



Turn off Wi-Fi to save the battery when not in use.

- 1 On the Apps screen, tap **Settings** → **Wi-Fi**, and then tap the **Wi-Fi** switch to activate it.
- 2 Select a network from the Wi-Fi networks list. Networks that require a password appear with a lock icon.
- 3 Tap **Connect**.



Once the device connects to a Wi-Fi network, the device will reconnect to that network each time it is available without requiring a password. To prevent the device connecting to the network automatically, select it from the list of networks and tap **Forget**.

Tethering and Mobile hotspot

About tethering and mobile hotspots



Use this feature to share the device's mobile data connection with computers and other devices if an Internet connection is unavailable. Connections can be made via Wi-Fi, USB, or Bluetooth.



You may incur additional charges when using this feature.

Using the mobile hotspot

Use your device as a mobile hotspot to share your device's mobile data connection with other devices.

- 1 On the Apps screen, tap **Settings** → **Tethering and Mobile hotspot** → **Mobile hotspot**.
- 2 Tap the **Mobile hotspot** switch to activate it.
 -  appears on the status bar. Other devices can find your device in the Wi-Fi networks list.
 - To set a password for the mobile hotspot, tap  → **Configure hotspot** and select the level of security. Then, enter a password and tap **Save**.
- 3 On the other device's screen, search for and select your device from the Wi-Fi networks list.
- 4 On the connected device, use the device's mobile data connection to access the Internet.

Using USB tethering

Share the device's mobile data connection with other devices via a USB cable.

- 1 On the Apps screen, tap **Settings** → **Tethering and Mobile hotspot**.
- 2 Connect your device to the computer via the USB cable.
- 3 Tick **USB tethering**.
ψ appears on the status bar when the two devices are connected.
- 4 On the computer, use your device's mobile data connection.

Using Bluetooth tethering

Share the device's mobile data connection with other devices via Bluetooth. Ensure that the computer that you connect to supports the Bluetooth feature.

- 1 Pair your device with the other device via Bluetooth. Refer to [Pairing with other Bluetooth devices](#) for more information.
- 2 On the Apps screen of your device, tap **Settings** → **Tethering and Mobile hotspot**.
- 3 Tick **Bluetooth tethering**.
- 4 On the connected device, open the Bluetooth settings screen, tap ⚙️ → **Internet access**.
⌘ appears on the status bar when the two devices are connected.
- 5 On the connected device, use the device's mobile data connection to access the Internet.



The connection methods may vary depending on the connected devices.

Personalising

Managing the Home and Apps screens

Managing the Home screen

Adding items

Tap and hold an app from the Apps screen, and then drag it to the Home screen.

To add widgets, open the Home screen, tap and hold an empty area, tap **Widgets**, tap and hold a widget, and then drag it to the Home screen.

Moving and removing an item

Tap and hold an item on the Home screen, and then drag it to a new location.

To move the item to another panel, drag it to the side of the screen.

You can also move frequently-used apps to the shortcuts area at the bottom of the Home screen.

To remove an item, tap and hold the item. Then, drag it to **Remove** that appears at the top of the screen.

Creating a folder

- 1 On the Home screen, tap and hold an app, and then drag it to **Create folder** that appears at the top of the screen.
- 2 Enter a folder name.
- 3 Tap **+**, select the apps to move to the folder, and then tap **Done**.

Managing panels

On the Home screen, tap and hold an empty area to add, move, or remove a panel.

To add a panel, scroll left to the last panel, and then tap .

To move a panel, tap and hold a panel preview, and then drag it to a new location.

To remove a panel, tap and hold a panel preview, and then drag it to **Remove** at the top of the screen.

To set a panel as the main Home screen, tap .

Managing the Apps screen

Changing the sorting method

On the Apps screen, tap  → **View as** and select a sorting method.


Hiding apps

Hide apps that you do not want to see on the Apps screen.

On the Apps screen, tap  → **Hide apps**, select apps, and then tap **Done**.

To display hidden apps, tap  → **Show hidden apps**, select apps, and then tap **Done**.

Moving items

On the Apps screen, tap  → **Edit**. Tap and hold an item and drag it to a new location.

To move the item to another panel, drag it to the side of the screen.

To move an item to a new panel, drag it to **Create page** that appears at the top of the screen.



You can move folders only in the folder panel.

Setting wallpaper and ringtones

Setting wallpaper

Set an image or photo stored in the device as wallpaper for the Home screen or the locked screen.

- 1 On the Home screen, tap and hold an empty area, and then tap **Wallpapers**. Alternatively, on the Apps screen, tap **Settings** → **Display** → **Wallpaper**.
- 2 Select a screen to change or apply wallpaper to.
- 3 Select an option and an image.
- 4 Tap **Set as wallpaper** or **Done**.

Changing ringtones

Change ringtones for incoming calls and notifications.

On the Apps screen, tap **Settings** → **Sound**.

To set a ringtone for incoming calls, tap **Ringtones**, select a ringtone, and then tap **Done**. To use a song stored in the device or in your account as a ringtone, tap **Add**.

To set a ringtone for notifications, tap **Notifications**, select a ringtone, and then tap **Done**.

Changing the screen lock method

You can change the way that you lock the screen to prevent others from accessing your personal information.

On the Apps screen, tap **Settings** → **Lock screen** → **Screen lock**, and then select a screen lock method. The device requires an unlock code whenever unlocking it.



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

Pattern

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

PIN

A PIN consists of numbers only. Enter at least four numbers, and then enter the password again to verify it.

Password

A password consists of characters and numbers. Enter at least four characters including numbers and symbols, and then enter the password again to verify it.

Transferring data from your previous device

Using backup accounts

You can transfer backup data from your previous device to your new device using your Google account. Refer to [Backing up and restoring data](#) for more information.

Using Samsung Smart Switch

You can transfer data of the previous device to a new device via Smart Switch. Visit www.samsung.com/smartswitch for more information.



Samsung Smart Switch is not supported on some devices or computers.

Using Smart Switch Mobile

Use this app to transfer data from your previous iPhone or Android device to your new device. You can download the app from **GALAXY Apps** or **Play Store**.

- 1 On your device, tap **Smart Switch Mobile**.
- 2 On your device, select an option depending on the previous device type and follow the on-screen instructions.

If the previous device is an Android device, ensure that the Smart Switch Mobile app is installed on the device. Refer to the help for more information.

Using Smart Switch with computers

Use this feature to import a backup of your data (from selected manufacturer's mobile devices) from a computer to your device. You can download the app from www.samsung.com/smartswitch.

- 1 Back up data from a previous device to the computer. For more information, contact the device's manufacturer.
- 2 On the computer, launch Smart Switch.
- 3 Connect your current device to the computer using the USB cable.
- 4 On the computer, click the manufacturer of the previous device and follow the on-screen instructions to transfer data to your device.

Using Samsung Kies

Import a backup of your data from your computer via Samsung Kies to restore data on your device. You can also back up data to the computer via Samsung Kies. Refer to [Connecting with Samsung Kies](#) for more information.

Setting up accounts

Adding accounts

Some apps used on your device require a registered account. Create accounts to have the best experience with your device.

On the Apps screen, tap **Settings** → **Add account** and select an account service. Then, follow the on-screen instructions to complete the account setup.

To sync content with your accounts, select an account and tick items to sync.



Removing accounts

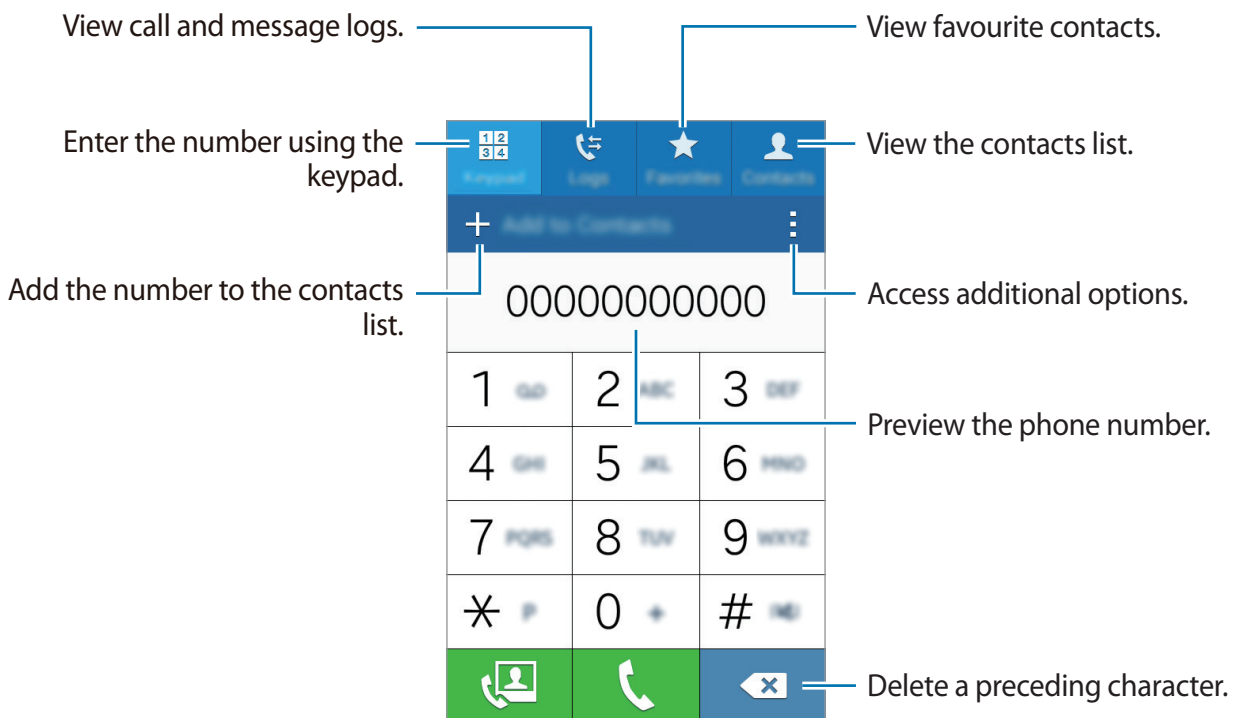
On the Apps screen, tap **Settings**, select an account name under **PERSONAL**, select the account to remove, and then tap **:** → **Remove account**.

Phone

Making calls

Tap **Phone** on the Apps screen.

Tap **Keypad**, enter a phone number, and then tap  to make a voice call, or tap  to make a video call. You can also make calls to phone numbers listed in **Logs**, **Favourites**, and **Contacts**.




Making calls from call logs or contacts list

Tap **Logs** or **Contacts**, and then drag a contact or a phone number to the right to make a call.

Making an international call

Tap **Keypad**.

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

To block outgoing international calls, tap **:** → **Settings** → **Call** → **Additional settings** → **Call barring**. Then, select a call type and tick **International calls**.

Receiving calls



Answering a call

When a call comes in, drag  outside the large circle.


Rejecting a call

When a call comes in, drag  outside the large circle.

To send a message when rejecting an incoming call, drag the reject message bar upwards.


To create various rejection messages, open the Apps screen and tap **Phone** →  → **Settings** → **Call** → **Set up call reject messages** → .

Missed calls

If a call is missed,  appears on the status bar. Open the notifications panel to view the list of missed calls. Alternatively, on the Apps screen, tap **Phone** → **Logs** to view missed calls.


Options during calls

During a voice call

During a voice call, the device automatically locks the screen to prevent unwanted touch inputs. To unlock the screen, double-tap .










The following actions are available:

- **Add call:** Dial a second call.
- **Keypad:** Open the keypad.
- **End call:** End the current call.
- **Speaker:** Activate or deactivate the speakerphone. When using the speakerphone, speak into the microphone at the top of the device and keep the device away from your ears.
- **Mute:** Turn off the microphone so that the other party cannot hear you.
- **Bluetooth:** Switch to a Bluetooth headset if it is connected to the device.

Tap  to view more options.

During a video call

The following actions are available:

-  → **Hide me:** Hide your image from the other party.
-  → **Outgoing image:** Select an image to show it to the other party.
-  → **Capture image:** Capture the other party's image.
-  → **Record video:** Record a video of the other party's images.
-  → **Memo:** Create a memo.
-  → **Messages:** Send a message.
-  → **Keypad:** Open the keypad.
-  → **Speaker off / Speaker on:** Activate or deactivate the speakerphone. When using the speakerphone, speak into the microphone at the top of the device and keep the device away from your ears.
-  → **Switch to headset / Switch to phone:** Switch sound output to a connected Bluetooth headset or back to the device's speaker.

Tap the screen to use the following options:

- **Switch:** Switch between the front and rear cameras.
- **Mute:** Turn off the microphone so that the other party cannot hear you.
- **End call:** End the current call.


Contacts

Adding contacts

Moving contacts from other devices

You can move contacts from other devices to your device. Refer to [Transferring data from your previous device](#) for more information.

Creating contacts manually

- 1 On the Apps screen, tap **Contacts**.
- 2 Tap **+** and enter contact information.
 - : Add an image.
 - **+** / **-**: Add or delete a contact field.
- 3 Tap **Save**.

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

Importing and exporting contacts

Import contacts from storage services to your device or export contacts from the device to storage services.

On the Apps screen, tap **Contacts**.

Tap **⋮** → **Settings** → **Contacts** → **Import/export**, and then select an import or export option.

Searching for contacts

On the Apps screen, tap **Contacts**.

Use one of the following search methods:

- Scroll up or down the contacts list.
- 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.

Adding shortcuts for contacts to the Home screen

Add shortcuts to contacts that you frequently communicate with on the Home screen.

- 1 On the Apps screen, tap **Contacts**.
- 2 Select a contact.
- 3 Tap **⋮** → **Add shortcut to home screen**.

Messages & email


Messages

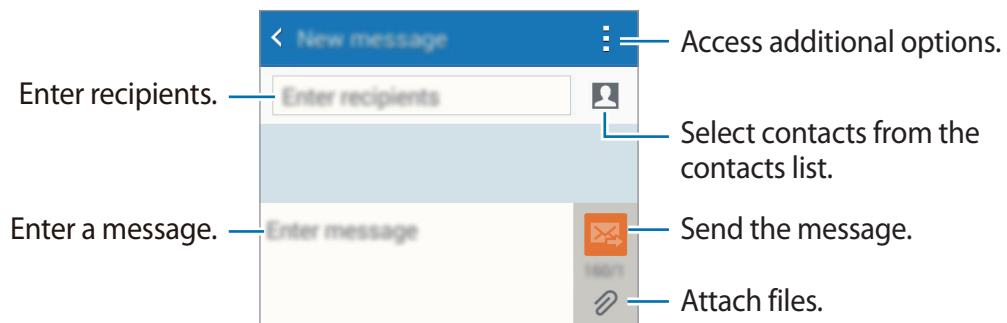
Sending messages

Send text messages (SMS) or multimedia messages (MMS).



You may incur additional charges for sending or receiving messages when you are roaming.

- 1 Tap **Messages** on the Apps screen.
- 2 Tap .
- 3 Add recipients and enter a message.



- 4 Tap  to send the message.

Viewing incoming messages

Incoming messages are grouped into message threads by contact. Select a contact to view the person's messages.



You may incur additional charges for sending or receiving messages when you are roaming.

While viewing a message, tap  to view more options.

Email

Setting up email accounts

Tap **Email** on the Apps screen.

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 or tap **Manual setup** for a company email account. After that, follow the on-screen instructions to complete the setup.

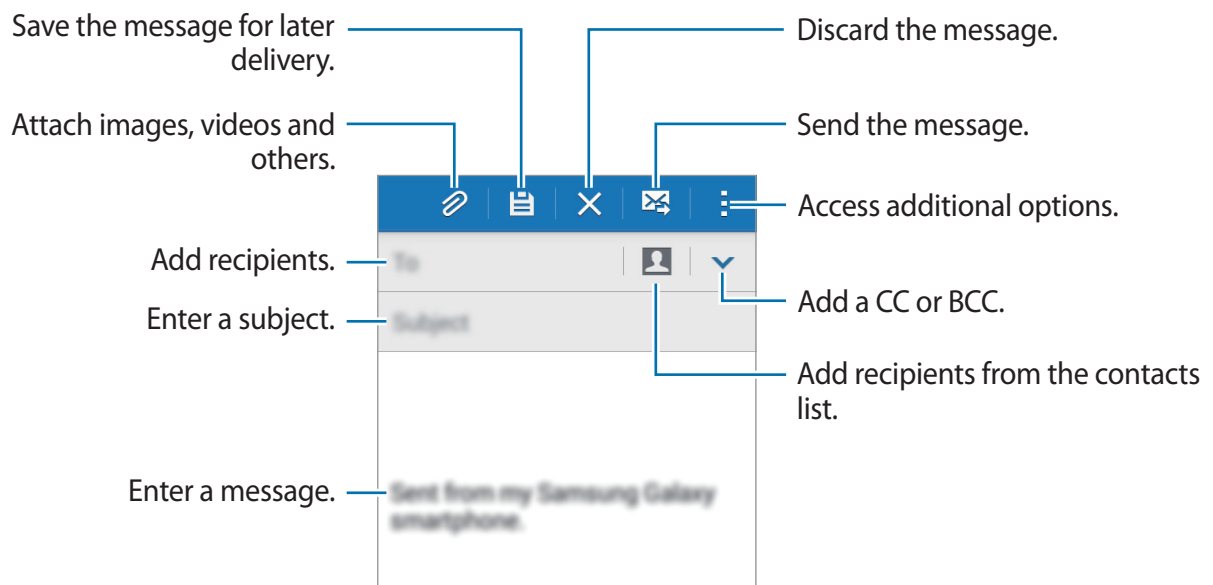
To set up another email account, tap **☰** → **Manage accounts** → **+**.

If you have more than one email accounts, you can set one as the default account. Tap **☰** → **Manage accounts**, select an account, and then tick **Default account**.

Sending emails

Tap **Email** on the Apps screen.

Tap **✍** at the bottom of the screen to compose a message.

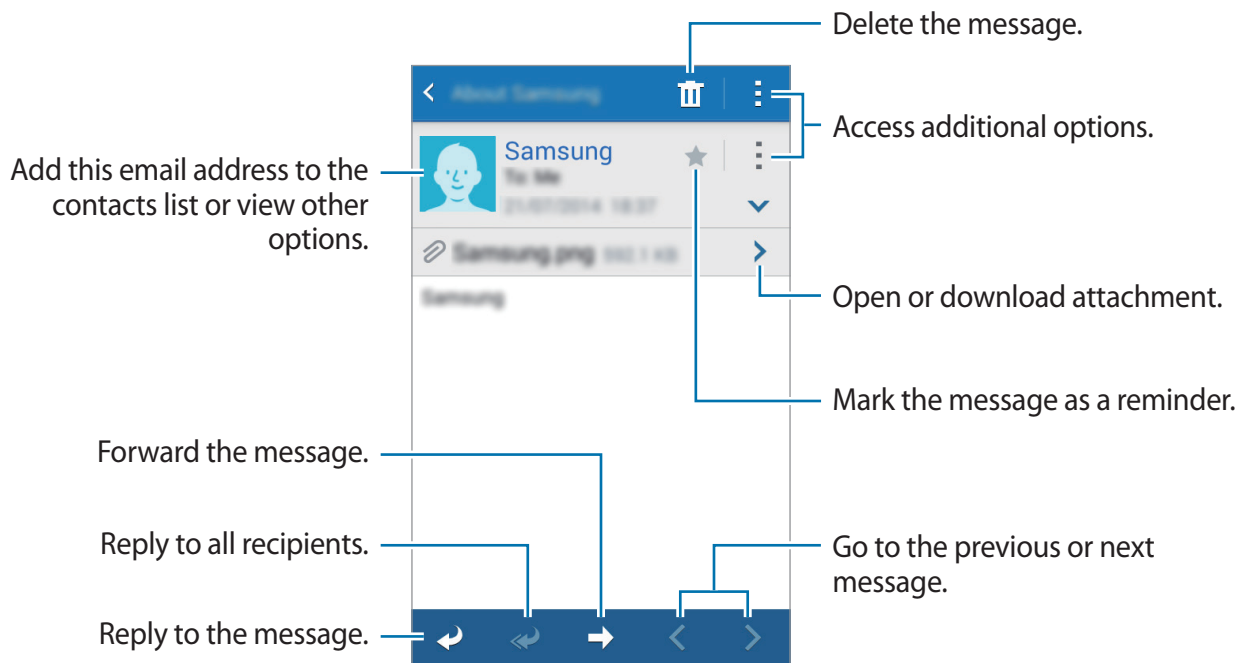


Reading emails

Tap **Email** on the Apps screen.

Tap ☰, select an email account to use, and new messages are retrieved. To manually retrieve new messages, tap ↻.




Tap a message to read.

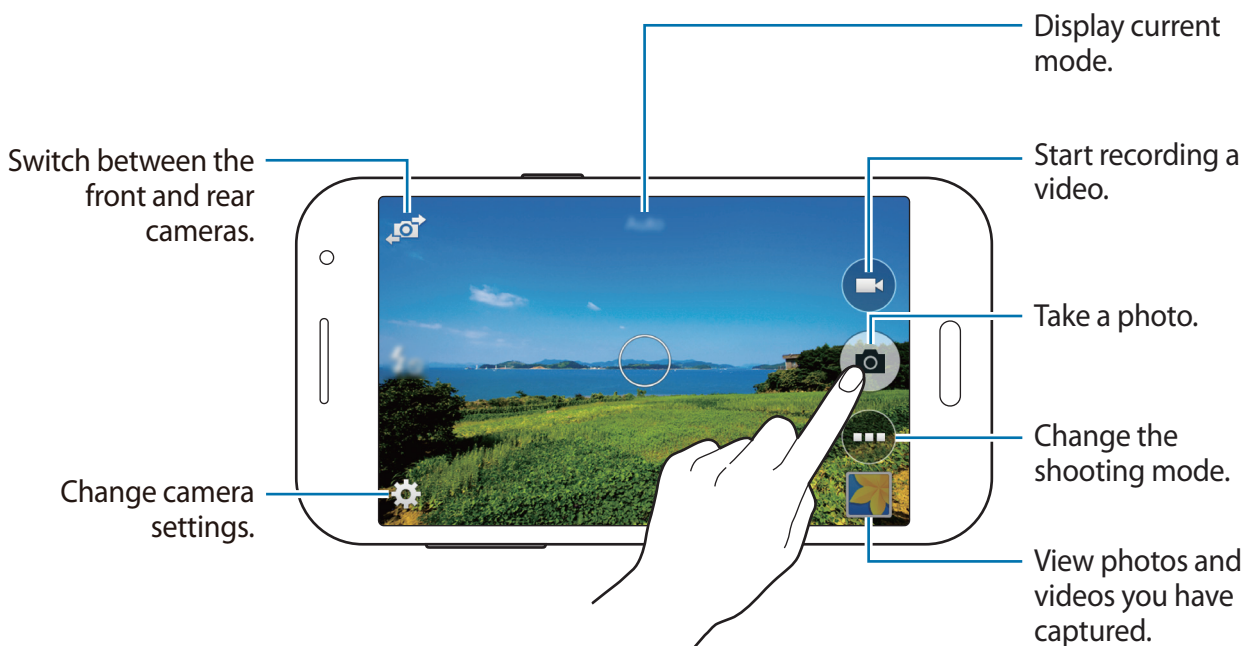


Camera

Basic shooting

Taking photos or recording videos



- 1 Tap **Camera** on the Apps screen.
- 2 Tap the image on the preview screen where the camera should focus.
- 3 Tap  to take a photo or tap  to record a video.
 - Spread two fingers apart on the screen to zoom in, and pinch to zoom out.
 - To capture an image from the video while recording, tap .



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

Launching Camera on the locked screen

To quickly take photos of special moments, launch **Camera** on the locked screen.

On the locked screen, drag  outside the large circle. If  is not shown, open the Apps screen, tap **Settings** → **Lock screen**, and then tick **Camera shortcut**.



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

Camera etiquette

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

Shooting modes

Auto

Use this mode to allow the camera to evaluate the surroundings and determine the ideal mode for the photo.


On the Apps screen, tap **Camera** →  → **Auto**.

Beauty face

Use this mode to take a photo with lightened faces for gentler images.

On the Apps screen, tap **Camera** →  → **Beauty face**.

Panorama

Use this mode to take a photo composed of many photos strung together. The device identifies the photo with  in **Gallery**.


On the Apps screen, tap **Camera** →  → **Panorama**.



To get the best shot, follow these tips:

- Move the camera slowly in one direction.
- Keep the image within the frame on the camera's viewfinder.
- Avoid taking photos of indistinct backgrounds, such as an empty sky or a plain wall.

Best photo

Use this mode to take a series of photos and save the best one. To view other photos in the series, scroll left or right. The device recommends the best photo and identifies it with .

On the Apps screen, tap **Camera** →  → **Best photo**.

Continuous shot

Use this mode to take a series of photos of moving subjects.

On the Apps screen, tap **Camera** →  → **Continuous shot**.


While holding the device steadily, press and hold the Shutter button to take several photos continuously.

Sports

Use this mode to take a photo of fast-moving subjects.

On the Apps screen, tap **Camera** →  → **Sports**.

Camera settings

On the Apps screen, tap **Camera** → . Not all of the following options are available in both still camera and video camera modes.

- **Picture size:** Select a resolution. Use higher resolution for higher quality. But it takes up more memory.
- **ISO:** Select an ISO value. This controls camera light sensitivity. It is measured in film-camera equivalents. Low values are for stationary or brightly-lit objects. Higher values are for fast-moving or poorly-lit objects.
- **Metering modes:** Select a metering method. This determines how light values are calculated. **Centre-weighted** measures background light in the centre of the scene. **Spot** measures the light value at a specific location. **Matrix** averages the entire scene.
- **Tap to take pics:** Tap the image on the preview screen to take photos.
- **Video size:** Select a resolution. Use higher resolution for higher quality. But it takes up more memory.
- **Recording mode:** Change the recording mode.
- **Effects:** Select a filter effect to use when taking photos or recording videos.
- **Flash:** Activate or deactivate the flash.
- **Timer:** Use this for delayed-time shots.
- **Location tags:** Set the device to attach the location tag to the photo.



- 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.
- When you share a photo with the location tag attached, the location information may be exposed to others.

- **Save as flipped:** Invert the image to create a mirror-image of the original scene. This feature is available only when using the front camera.
- **Storage location:** Select the memory location for storage.
- **White balance:** Select an appropriate white balance, so images have a true-to-life colour range. The settings are designed for specific lighting situations. These settings are similar to the heat range for white-balance exposure in professional cameras.
- **Exposure value:** Change the exposure value. This determines how much light the camera's sensor receives. For low-light situations, use a higher exposure.
- **Grid lines:** Display viewfinder guides to help composition when selecting subjects.
- **The volume key:** Set the device to use the Volume button to control the shutter or zoom function.
- **Reset settings:** Reset the camera settings.



The available options vary depending on the mode used.

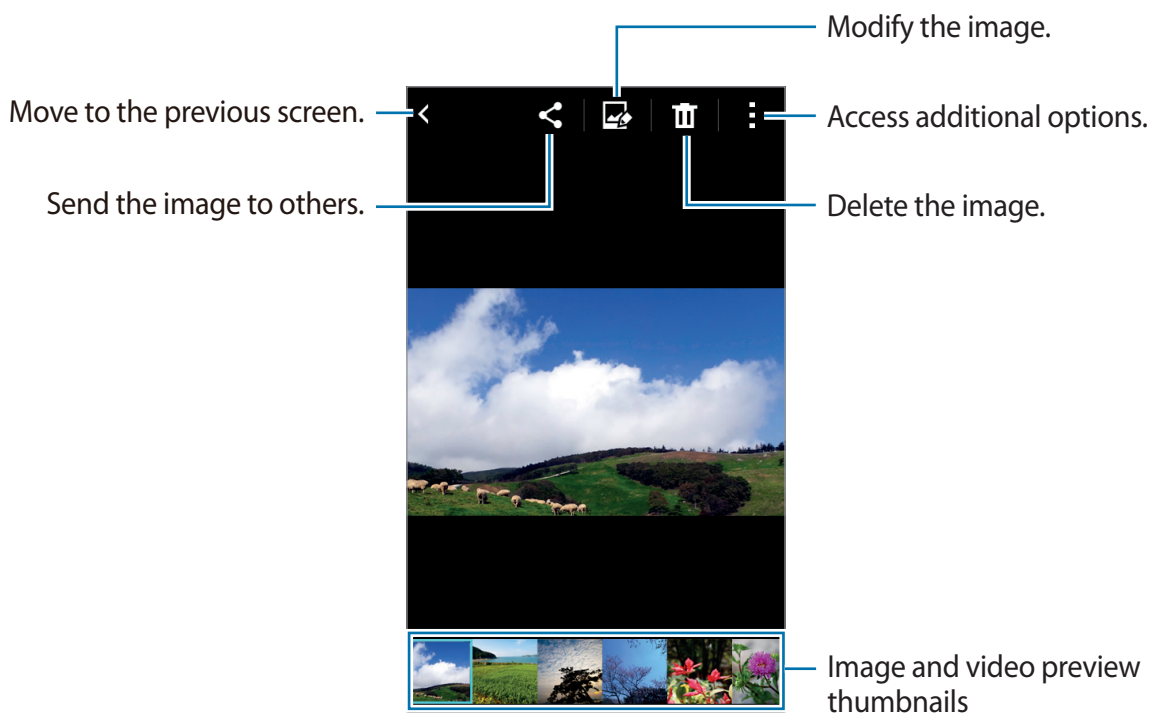
Gallery

Viewing content on the device

On the Apps screen, tap **Gallery** and select an image or a video.

Video files show the ▶ icon on the preview thumbnail.

To hide or show the menu bar and the preview thumbnails, tap the screen.

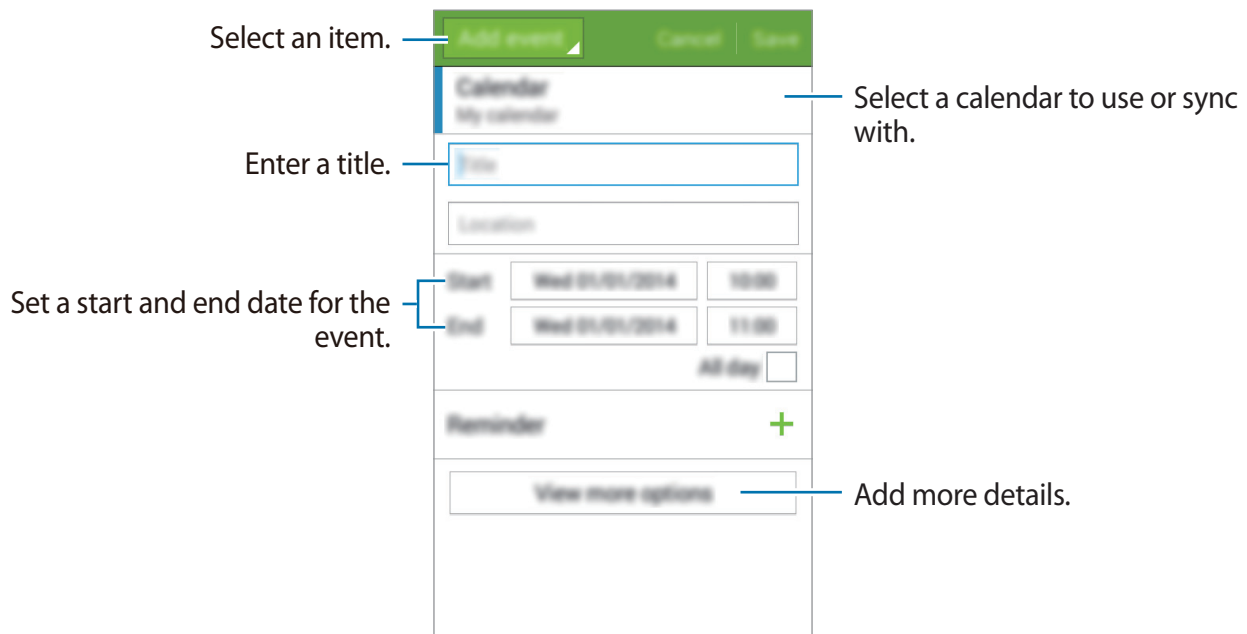


Useful apps and features

S Planner

Creating events or tasks

- 1 Tap **S Planner** on the Apps screen.
- 2 Tap **+**. Alternatively, select a date with no events or tasks in it and tap the date again. If the date already has saved events or tasks in it, tap the date and tap **+**.
- 3 Select either event or task and enter details.
 - **Add event:** Set a start and end date for an event. You can set an optional repeat setting.
 - **Add task:** Add a task to do on a specific date. You can set an optional priority setting.



- 4 Tap **Save** to save the event or task.

Syncing events and tasks with your accounts

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

To sync events and tasks with your accounts, tap **☰** → **Sync**.

To add accounts to sync with, tap **☰** → **Calendars** → **Add account**. Then, select an account to sync with and sign in. When an account is added, a green circle is displayed next to the account name.

To change an account's syncing option, open the Apps screen, tap **Settings**, and then select an account service under **PERSONAL**.

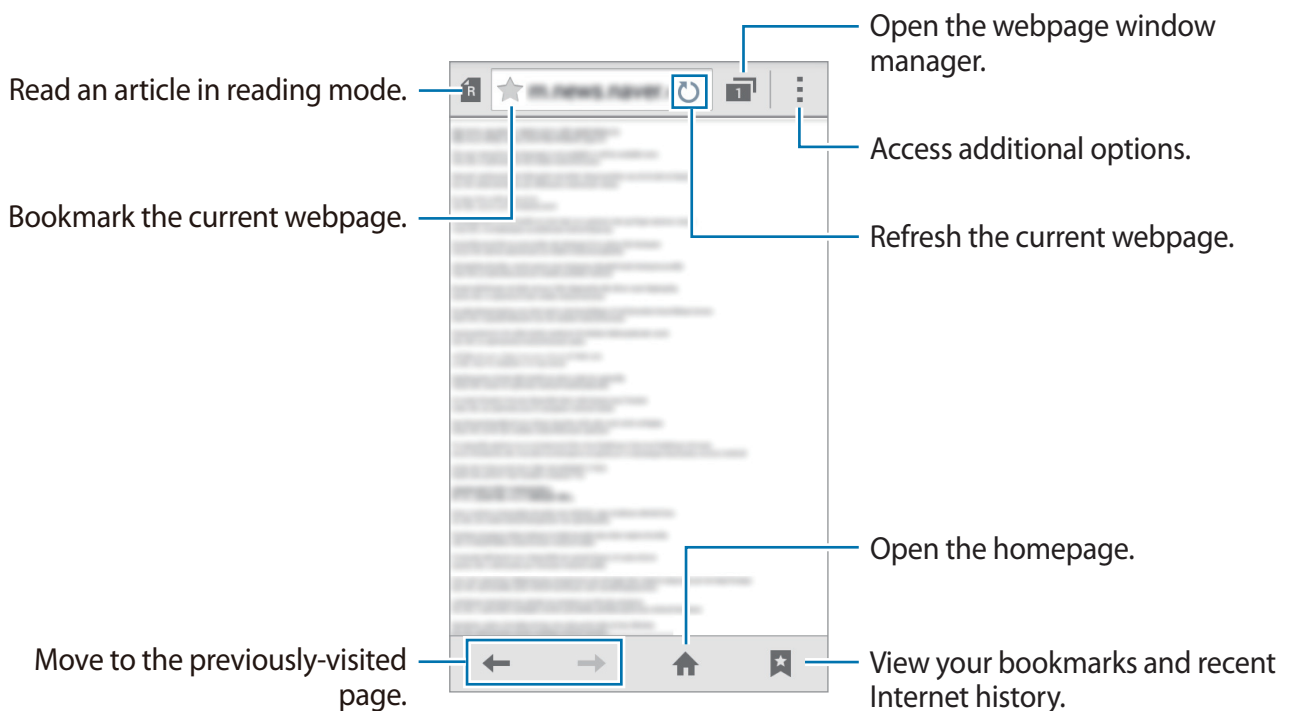
Internet

1 Tap **Internet** on the Apps screen.

2 Tap the address field. To change the search engine, tap the search engine icon next to the web address field.

3 Enter the web address or a keyword, and then tap **Go**. To search the web by voice, tap **🎤**.

To view the toolbars, drag your finger downwards slightly on the screen.

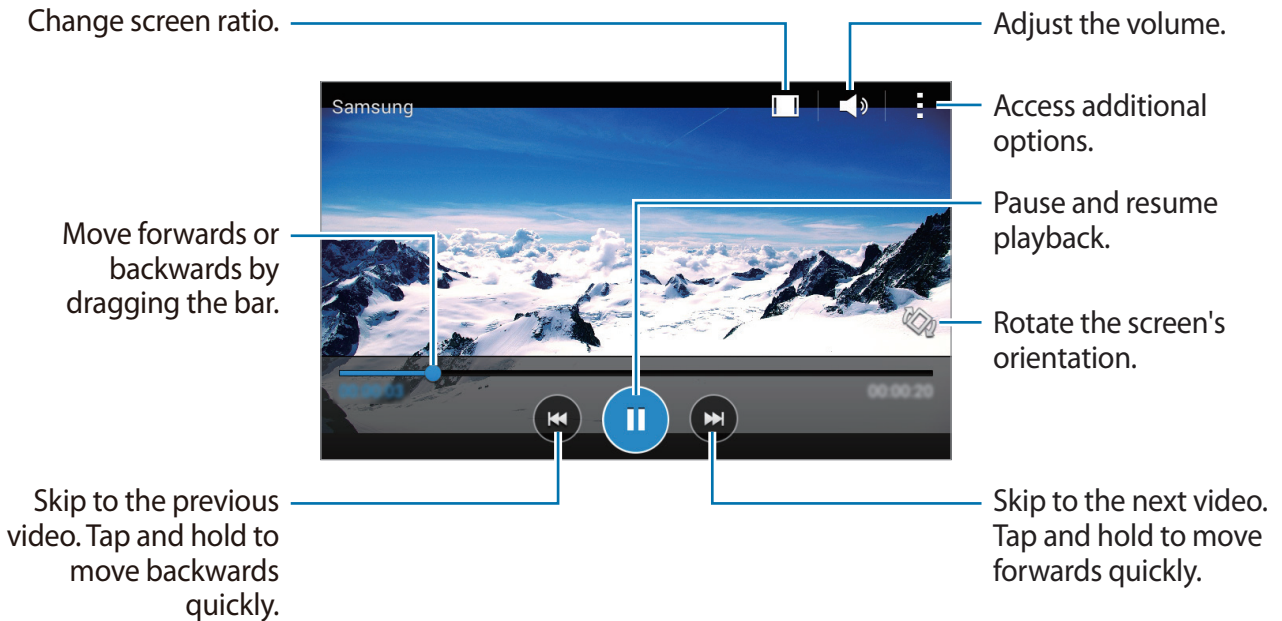


Video

Playing videos

Tap **Video** on the Apps screen.

Select a video to play.




Clock

Alarm



On the Apps screen, tap **Clock** → **Alarm**.

Setting alarms

Tap **+** in the alarms list, set an alarm time, select the days on which the alarm will repeat, set other various alarm options, and then tap **Save**. To activate or deactivate alarms, tap  next to the alarm in the alarms list.

- **Snooze:** Set an interval and the number of times for the alarm to repeat after the preset time.
- **Smart alarm:** Set a time and tone for the smart alarm. A smart alarm starts at a low volume a few minutes before a preset alarm is scheduled to sound. The volume of the smart alarm increases gradually until you turn it off or the preset alarm sounds.

Stopping alarms

Drag  outside the large circle to stop an alarm. If you have previously enabled the snooze option, drag  outside the large circle to repeat the alarm after a specified length of time.

Deleting alarms

Tap  → **Select**, select alarms, and then tap .

World clock

On the Apps screen, tap **Clock** → **World clock**.

Creating clocks

Tap **+** and enter a city name or select a city from the cities list.

Deleting clocks

Tap  → **Select**, select clocks, and then tap .

Stopwatch

On the Apps screen, tap **Clock** → **Stopwatch**.

Tap **Start** to time an event. Tap **Lap** to record lap times.

Tap **Stop** to stop timing. To clear lap times, tap **Reset**.

Timer

On the Apps screen, tap **Clock** → **Timer**.


Set the duration, and then tap **Start**.

Drag  outside the large circle when the timer goes off.

Calculator

Use this app for simple or complex calculations.

Tap **Calculator** on the Apps screen.

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




Memo

Use this app to create memos and organise them by category.

Tap **Memo** on the Apps screen.

Composing memos

Tap **+** on the memos list and enter a memo. While composing a memo, use the following options:

-  : Create or set a category.
-  : Insert images.
-  : Make a voice recording to insert.

To save the memo, tap **Save**.

To edit a memo, tap a memo, and then tap the content of the memo.

Searching for memos

Tap **Q** on the memos list and enter a keyword to search for memos that include the keyword.

Radio

Listening to the FM radio

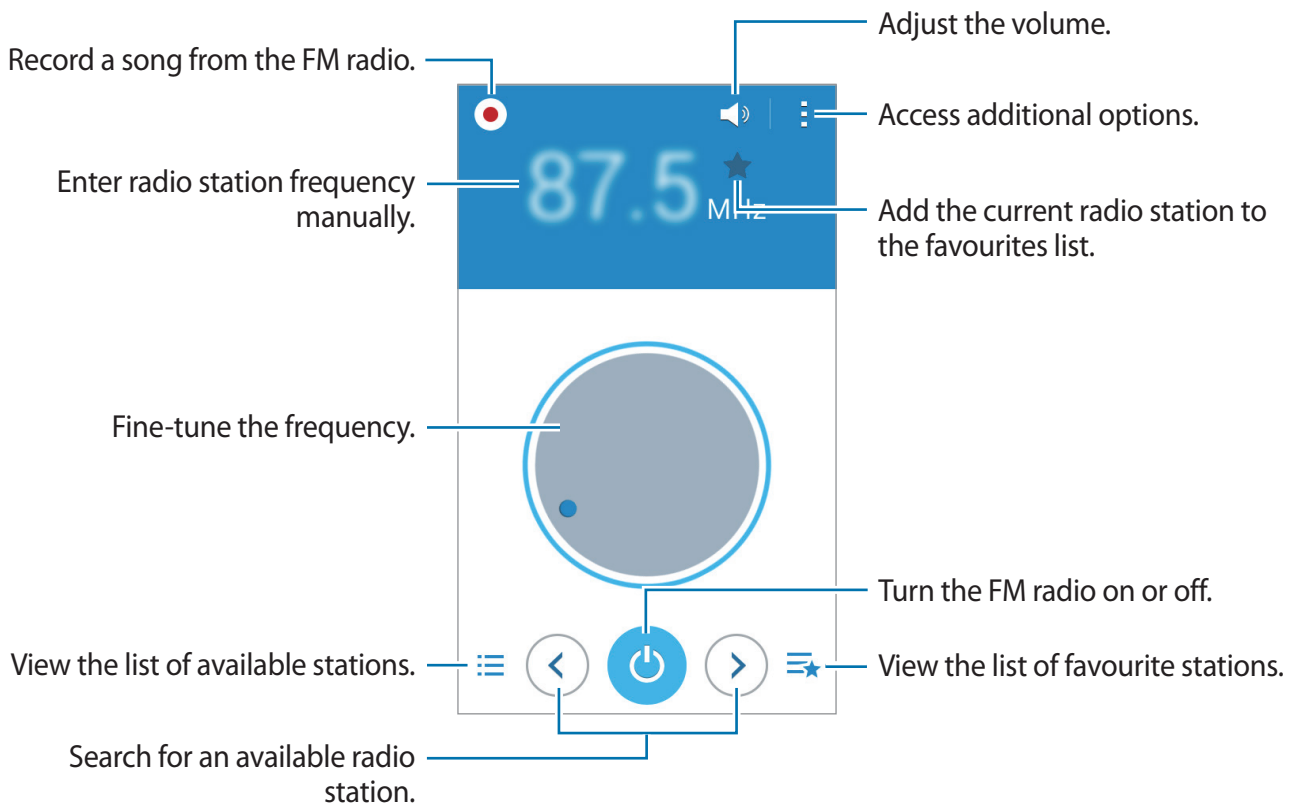
Tap **Radio** on the Apps screen.

Before you use this app, you must connect a headset, which serves as the radio antenna.



The FM radio scans and saves available stations automatically when running for the first time.


Tap  to turn on the FM radio. Select the radio station you want from the stations list and tap  to return to the FM radio screen.



Scanning radio stations

Tap **Radio** on the Apps screen.





Tap  → **Scan**, and then select a scan option. The FM radio scans and saves available stations automatically.

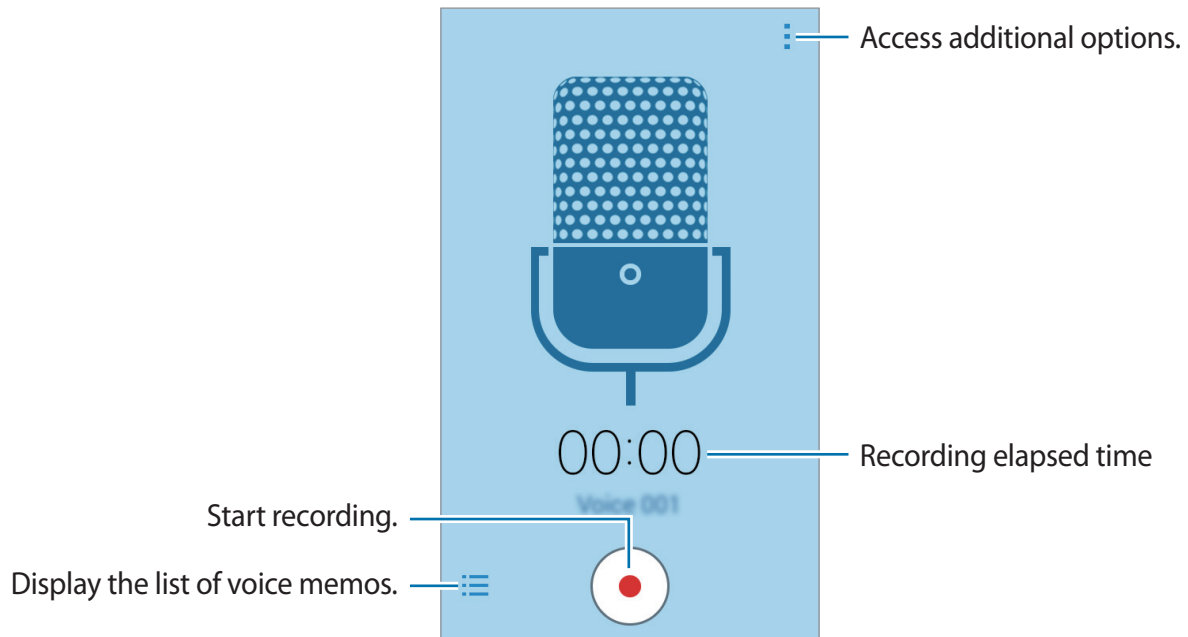
Select the radio station you want from the stations list and tap  to return to the FM radio screen.

Voice Recorder

Recording voice memos


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





Tap  to start recording. Speak into the microphone. Tap  to pause recording. To cancel recording, tap . Tap  to finish recording.



Playing voice memos


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

Tap  and select a voice memo to play.

-  /  : Pause or resume playback.
-  /  : Skip to the previous or next voice memo.

Google apps

Google provides entertainment, social network, and business apps. You may require a Google account to access some apps. Refer to [Setting up accounts](#) for more information.

To view more app information, open the each app's main screen and tap  → **Help**.



Some apps may not be available or may be labelled differently depending on the region or service provider.

Chrome

Search for information and browse webpages.

Gmail

Send or receive emails via the Google Mail service.

Google+

Share your news and follow updates that your family, friends, and others share. You can also back up your photos and videos, and more.

Maps

Find your location on the map, search for locations, and view location information for various places.

Play Music

Discover, listen to, and share music on your device.

Play Movies & TV

Watch videos stored on your device and download various content to watch from **Play Store**.

Play Books

Download various books from **Play Store** and read them.

Play Newsstand

Read news and magazines that interest you in one convenient location.

Play Games

Download games from **Play Store** and play them with others.

Drive

Store your content on the cloud, access it from anywhere, and share it with others.

YouTube

Watch or create videos and share them with others.

Photos

Manage photos, albums, and videos that you have saved on the device and uploaded to **Google+**.

Hangouts

Chat with your friends individually or in groups and use images, emoticons, and video calls while you are chatting.

Google

Search quickly for items on the Internet or your device.

Voice Search

Search quickly for items by saying a keyword or phrase.

Google Settings

Configure settings for some features provided by Google.

Connecting with other devices

Bluetooth

About 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 Bluetooth.
- 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.

Pairing with other Bluetooth devices

- 1 On the Apps screen, tap **Settings** → **Bluetooth**, tap the **Bluetooth** switch to activate it, and then tap **Scan**.

The detected devices are listed.

To set the device as visible to other devices, tap the device name.

- 2 Select a device to pair with.

If your device has paired with the device before, tap the device name without confirming the auto-generated passkey.

If the device you want to pair with is not in the list, request that the device turns on its visibility option.

- 3 Accept the Bluetooth authorisation request on both devices to confirm.

Sending and receiving data

Many apps support data transfer via Bluetooth. You can share data, such as contacts or media files, with other Bluetooth devices. The following actions are an example of sending an image to another device.

Sending an image

- 1 On the Apps screen, tap **Gallery**.

- 2 Select an image.

- 3 Tap  → **Bluetooth**, and then select a device to transfer the image to.


If the device you want to pair with is not in the list, request that the device turns on its visibility option. Or, set your device as visible to other devices.

- 4 Accept the Bluetooth authorisation request on the other device.

Receiving an image

When another device sends you an image, accept the Bluetooth authorisation request. The received image is saved in the **Gallery** → **Download** folder.

Unpairing Bluetooth devices




- 1 On the Apps screen, tap **Settings** → **Bluetooth**.
The device displays the paired devices in the list.
- 2 Tap  next to the device's name to unpair.
- 3 Tap **Unpair**.

Wi-Fi Direct

About Wi-Fi Direct

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


Connecting to other devices

- 1 On the Apps screen, tap **Settings** → **Wi-Fi**, and then tap the **Wi-Fi** switch to activate it.
- 2 Tap  → **Wi-Fi Direct**.
The detected devices are listed.
- 3 Select a device to connect to.
To connect to multiple devices, tap  → **Multi-connect**.
To change the device name, tap  → **Rename device**.
- 4 Accept the Wi-Fi Direct authorisation request on the other device to confirm.

Sending and receiving data

You can share data, such as contacts or media files, with other devices. The following actions are an example of sending an image to another device.


Sending an image

- 1 On the Apps screen, tap **Gallery**.
- 2 Select an image.
- 3 Tap  → **Wi-Fi Direct**, and then select a device to transfer the image to.
- 4 Accept the Wi-Fi Direct authorisation request on the other device.

Receiving an image

When another device sends you an image, accept the Wi-Fi Direct authorisation request. The received image is saved in the **Gallery** → **Download** folder.

Ending the device connection

- 1 On the Apps screen, tap **Settings** → **Wi-Fi**.
- 2 Tap  → **Wi-Fi Direct**.
The device displays the connected devices on the list.
- 3 Tap **End connection** → **OK** to disconnect the devices.

NFC

About 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 apps.

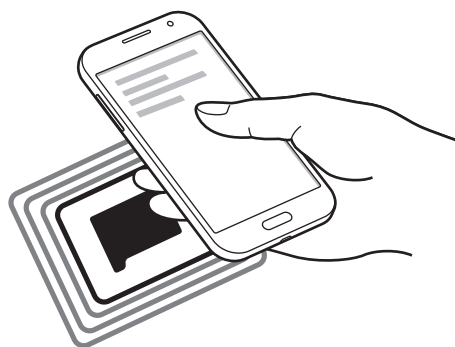
 The battery contains a built-in NFC antenna. Handle the battery carefully to avoid damaging the NFC antenna.

Using the NFC feature

Use the NFC feature to send images or contacts to other devices, and read product information from NFC tags. If you insert a SIM or USIM card that has a payment feature, you can use the device to make payments conveniently.

On the Apps screen, tap **Settings** → **NFC**, and then tap the **NFC** switch to activate it. Alternatively, open the notifications panel and tap **NFC** to activate it.

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



 Ensure that the device's screen is unlocked. Otherwise, the device will not read NFC tags or receive data.

Making a purchase with the NFC feature

Before you can use the NFC feature to make payments, you must register for the mobile payment service. To register or get more information about the service, contact your service provider.

On the Apps screen, tap **Settings** → **NFC**, and then tap the **NFC** switch to activate it. Alternatively, open the notifications panel and tap **NFC** to activate it.

Touch the NFC antenna area on the back of your device to the NFC card reader.

To set the default payment app, tap **Tap and pay** and select an app.



The payment services list may not include all available payment apps.

Sending data

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

- 1 On the Apps screen, tap **Settings** → **NFC**, and then tap the **NFC** switch to activate it. Alternatively, open the notifications panel and tap **NFC** to activate it.
- 2 Tap **Android Beam** and tap the **Android Beam** switch to activate it.
- 3 Select an item and touch the other device's NFC antenna to your device's NFC antenna.
- 4 When **Touch to beam** appears on the screen, tap your device's screen to send the item.

Mobile printing

Connect the device to a printer via Wi-Fi or Wi-Fi Direct, and print images or documents.



Some printers may not be compatible with the device.

Adding printer plug-ins

Add printer plug-ins for printers you want to connect the device to.

On the Apps screen, tap **Settings** → **Printing** → **Add printer**, and search for a printer plug-in in **Play Store**. Select a printer plug-in and install it.

Connecting to a printer

On the Apps screen, tap **Settings** → **Printing**, select a printer plug-in, and then tap the switch at the top right of the screen to activate it. The device searches for printers that are connected to the same Wi-Fi network as your device. Select a printer to use as the default printer.

To add printers manually, select a printer plug-in, tap **⋮** → **Add printer** → **+**, enter details, and then tap **OK**.

To change print settings, select a printer plug-in and tap **⋮** → **Printing settings**.

Printing content

While viewing content, such as images or documents, tap **⋮** → **Print**, and then select a printer.

Device & data manager

Upgrading the device

The device can be upgraded to the latest software.

Upgrading over the air

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

On the Apps screen, tap **Settings** → **About device** → **Software update** → **Update**.

Upgrading with Samsung Kies

Download the latest version of Samsung Kies from the Samsung website. 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 more information about 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.

Transferring files between the device and a computer

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



Do not disconnect the USB cable from the device when you are transferring files. Doing so may cause data loss or device damage.



- Do not disconnect the device from the computer when you play files saved in the device on the connected computer. After you finish playing the file, disconnect the device from the computer.
- The devices may not connect properly if they are connected via a USB hub. Directly connect the device to the computer's USB port.

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.

Connecting with Samsung Kies

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

- 1 Connect the device to the computer using the USB cable.
Samsung Kies launches on the computer automatically. If Samsung Kies does not launch, double-click the Samsung Kies icon on the computer.
- 2 Transfer files between your device and the computer.
Refer to the Samsung Kies help for more information.

Backing up and restoring data

Keep your personal information, app data, and settings safe on your device. You can back up your sensitive information to a backup account and access it later.

- 1 Tap **Settings** on the Apps screen.
- 2 Tap **Backup and reset** and tick **Back up my data**.
- 3 Tap **Backup account** and select an account as the backup account.



To restore data, you must sign in to your Google account via the setup wizard. You can launch and open the setup wizard by performing a factory data reset on the device. If you do not sign in to your Google account via the setup wizard, you cannot restore the backup data.

Performing a data reset

Delete all settings and data on the device. Before performing a factory data reset, ensure you back up all important data stored on the device. Refer to [Backing up and restoring data](#) for more information.

On the Apps screen, tap **Settings** → **Backup and reset** → **Factory data reset** → **Reset device** → **Erase everything**. The device automatically restarts.

Settings

About Settings

Use this app to configure the device, set app options, and add accounts.

Tap **Settings** on the Apps screen.

CONNECTIONS

Wi-Fi

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

On the Settings screen, tap **Wi-Fi**, and then tap the **Wi-Fi** switch to activate it.

The device can maintain a stable network connection by automatically selecting either the Wi-Fi or mobile network to use the strongest signal. To automatically switch between networks, tick **Smart network switch**.

To use options, tap .

- **Scan:** Search for available networks.
- **Wi-Fi Direct:** Activate Wi-Fi Direct and connect devices directly via Wi-Fi to share files.
- **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.

Setting Wi-Fi sleep policy

Tap  → **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 mobile networks if it is set to use them. This may incur data transfer fees. To avoid additional charges, set this option to **Always**.

Bluetooth

Activate the Bluetooth feature to exchange information over short distances.

On the Settings screen, tap **Bluetooth**, and then tap the **Bluetooth** switch to activate it.

To use more options, tap .

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

Tethering and Mobile hotspot

Use the device as a mobile hotspot to share the device's mobile data connection with other devices. Refer to [Tethering and Mobile hotspot](#) for more information.

On the Settings screen, tap **Tethering and Mobile hotspot**.

- **Mobile hotspot:** Use the mobile hotspot to share the device's mobile data connection with computers or other devices through the Wi-Fi network. You can use this feature when the network connection is not available.
- **USB tethering:** Use USB tethering to share the device's mobile data 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 Bluetooth tethering to share the device's mobile data connection with computers or other devices via Bluetooth.

Flight mode

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

On the Settings screen, tap **Flight mode**.

Data usage

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

On the Settings screen, tap **Data usage**.

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

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 apps, such as calendar or email. You can select what information to sync for each account in **Settings** → **PERSONAL**.
- **Show Wi-Fi usage:** Set the device to show your data usage via Wi-Fi.
- **Mobile hotspots:** Select mobile hotspots to prevent apps that are running in the background from using them.

Location

Change settings for location information permissions.

On the Settings screen, tap **Location**, and then tap the **Location** switch to activate it.

- **Mode:** Select a method to collect your location data.
- **RECENT LOCATION REQUESTS:** View which apps request your current location information and their battery usage.
- **LOCATION SERVICES:** View the location services your device is using.

NFC

Activate the NFC feature to read or write NFC tags that contain information.

On the Settings screen, tap **NFC**, and then tap the **NFC** switch to activate it.

- **Android Beam:** Turn on the Android Beam feature to send data, such as webpages and contacts, to NFC-enabled devices.
- **Tap and pay:** Set the default payment app for mobile payments.



The payment services list may not include all available payment apps.

Printing

Configure settings for printer plug-ins installed on the device. You can search for available printers or add one manually to print files.

On the Settings screen, tap **Printing**.

More networks

Customise settings to control networks.

On the Settings screen, tap **More networks**.

Default messaging app

Select the default app to use for messaging.

Mobile networks

- **Mobile data:** Set the device to use data connections on any mobile network.
- **Data roaming:** Set the device to use data connections when you are roaming.
- **Access Point Names:** Set up access point names (APNs).
- **Network mode:** Select a network type.
- **Network operators:** Search for available networks and manually register a network.

VPN

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

DEVICE

Sound

Change settings for various sounds on the device.

On the Settings screen, tap **Sound**.

- **Volume:** Adjust the volume level for call ringtones, music and videos, system sounds, and notifications.
- **Ringtones:** Add or select a ringtone for incoming calls.
- **Notifications:** 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 you tap the buttons on the keypad.
- **Touch sounds:** Set the device to sound when you select an app or option on the touch screen.
- **Screen lock sound:** Set the device to sound when you lock or unlock the touch screen.

Display

Change the display settings.

On the Settings screen, tap **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 screen:** Select a background image for the Home screen and the locked screen.
- **Notification panel:** Customise the items that appear on the notifications panel.
- **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 the device is charging or connected to a desktop dock.
- **Font style:** Change the font type for display text.
- **Font size:** Change the font size.

Lock screen

Change settings for the locked screen.

On the Settings screen, tap **Lock screen**.

- **Screen lock:** Change the screen lock method. The following options may vary depending on the screen lock feature selected.
- **Dual clock:** Set the device to show the dual clock.
- **Show date:** Set the device to show the date with the clock.
- **Camera shortcut:** Set the device to show the camera shortcut on the locked screen.



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

- **Owner information:** Enter your information that is shown with the clock.
- **Unlock effect:** Select an effect that you see when you unlock the screen.
- **Help text:** Set the device to show the help text on the locked screen.

Call

Customise the settings for calling features.

On the Settings screen, tap **Call**.

- **Set up call reject messages:** Add or edit the message sent when you reject a call.
- **Answering/ending calls:**
 - **Pressing the home key:** Set the device to answer a call when you press the Home button.
 - **Pressing the power key:** Set the device to end a call when pressing the Power button.

- **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 automatically insert a prefix (area or country code) before a phone number.
 - **Call barring:** Block incoming or outgoing calls.
 - **Call waiting:** Allow incoming call alerts when a call is in progress.
 - **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:** Add or select a ringtone for incoming 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 buttons on the keypad are tapped.
- **Hide my video:** Select an image to be shown to the other party.
- **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.

Application manager

View and manage the apps on your device.

On the Settings screen, tap **Application manager**.

PERSONAL

Add account

Add email or SNS accounts.

On the Settings screen, tap **Add account**.

Backup and reset

Change the settings for managing settings and data.

On the Settings screen, tap **Backup and reset**.


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

Accessibility

Use this feature to improve accessibility to the device.

On the Settings screen, tap **Accessibility**.

- **Direct access:** Set the device to open selected accessibility menus when you press the Home button three times quickly.
- **Answering/ending calls:**
 - **Pressing the home key:** Set the device to answer a call when you press the Home button.
 - **Pressing the power key:** Set the device to end a call when pressing the Power button.
- **Single tap mode:** Set the device to control incoming calls or notifications by tapping the button instead of dragging it.
- **SERVICES:** View accessibility services installed on the device.

- **TalkBack:** Activate TalkBack, which provides voice feedback. To view help information to learn how to use this feature, tap **Settings** → **Launch “Explore by touch” tutorial**.
- **Speak passwords:** Set the device to read the password aloud when you enter the password while TalkBack is activated.
- **Font size:** Change the font size.
- **Negative colours:** Reverse the display colours to improve visibility.
- **Magnification gestures:** Set the device to magnify the screen and to zoom in on a specific area.
- **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 an engine for the text-to-speech feature. 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.
 - **Default language status:** View the status of the current language set for the text-to-speech feature.
- **Flash notification:** Set the flash to blink when you have incoming calls, new messages, or notifications.
- **Turn off all sounds:** Set the device to mute all device sounds, such as media sounds, and the caller’s voice during a call.
- **Google subtitles (CC):** Set the device to display closed captions on content supported by Google and to change the closed caption settings.
- **Mono audio:** Set the device to switch the sound output from stereo to mono when a headset is connected.
- **Sound balance:** Set the device to adjust the sound balance when using a headset.
- **Tap and hold delay:** Set the recognition time for tapping and holding the screen.
- **Interaction control:** Activate interaction control mode to restrict the device’s reaction to inputs while using apps.

SYSTEM

Language and input

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

On the Settings screen, tap **Language and input**.

Language

Select a display language for all menus and apps.

Default

Select a default keyboard type for text input.

Samsung keyboard

To change the Samsung keyboard settings, tap .



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

- **English(UK):** Select a default keyboard layout.
- **Select 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.
- **Auto replacement:** Set the device to correct misspelled and incomplete words by tapping the space bar or punctuation mark.
- **Auto capitalisation:** Set the device to automatically capitalise the first character after a final punctuation mark, such as a full stop, question mark, or exclamation mark.
- **Auto spacing:** Set the device to automatically insert a space between words.
- **Auto-punctuate:** Set the device to insert a full stop when you double-tap the space bar.

- **Keyboard swipe:**
 - **None:** Set the device to deactivate the keyboard swipe feature.
 - **Continuous input:** Set the device to enter text by sweeping on the keyboard.
- **Sound:** Set the device to sound when a key is touched.
- **Character preview:** Set the device to display a large image of each character tapped.
- **Reset settings:** Reset Samsung keyboard settings.

Google voice typing

To change the voice input settings, tap .

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

Voice search


- **Language:** Select a language for voice recognition.
- **Speech output:** Set the device to provide voice feedback to alert you to the current action.
- **“Ok Google” Detection:** Set the device to begin voice recognition when you say the wake-up command while using the search app.



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

- **Offline speech recognition:** Download and install language data for offline voice input.
- **Block offensive words:** Hide offensive words from voice search results.
- **Bluetooth headset:** Set the device to allow voice input of search keywords via the Bluetooth headset microphone when a Bluetooth headset is connected.

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.
- **Default language status:** View the status of the default language for the text-to-speech feature.

Pointer speed

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

Date and time

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

On the Settings screen, tap **Date and time**.



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.

Ultra power saving mode

Extend standby time and reduce battery consumption by displaying a simpler layout and allowing limited access to an app. Refer to [Ultra power saving mode](#) for more information.

On the Settings screen, tap **Ultra power saving mode**, and then tap the **Ultra power saving mode** switch to activate it.



The estimated maximum standby time shows the time remaining before the battery power runs out if the device is not used. Standby time may vary depending on your device settings and operating conditions.

Battery

View the amount of battery power consumed by your device.

On the Settings screen, tap **Battery**.

- **Display battery percentage:** Set the device to display the remaining battery life.

Storage

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

On the Settings screen, tap **Storage**.



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 apps occupy part of the memory. The available capacity may change when you upgrade the device.

Security

Change settings for securing the device and the SIM or USIM card.

On the Settings screen, tap **Security**.

- **Device administrators:** View device administrators installed on the device. You can allow device administrators to apply new policies to the device.
- **Unknown sources:** Set the device to allow the installation of apps from unknown sources.
- **Verify apps:** Set the device to check the apps for harmful content before installing them.
- **Encrypt device:** Set a password to encrypt data saved on the device. You must enter the password each time you turn on the device.



Charge the battery before enabling this setting because it may take more than an hour to encrypt your data.

- **Encrypt external SD card:** Set the device to encrypt files on a memory card.



If you reset your device to the factory defaults with this setting enabled, the device will not be able to read your encrypted files. Disable this setting before resetting the device.

- **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.
- **SIM Change Alert:** Activate or deactivate the Find my mobile feature which helps locate the device when lost or stolen.
- **Go to website:** Access the Find my mobile website (findmymobile.samsung.com). You can track and control your lost or stolen device from the Find my mobile 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:** Set the device to display passwords as they are entered.

- **Security policy updates:** Set the device to check and download security updates.
- **Send security reports:** Set the device to automatically send the updated security reports to Samsung.
- **Storage type:** Set a storage type for credential files.
- **Trusted credentials:** Use certificates and credentials to ensure secure use of various apps.
- **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.

About device

Access device information, edit the device name, or update device software.

On the Settings screen, tap **About device**.

Troubleshooting

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

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 more information, 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. While moving, error messages may appear repeatedly.
- You cannot access some options without a subscription. For more information, contact your service provider.

Your device does not turn on

- When the battery is completely discharged, your device will not turn on. Fully charge the battery before turning on the device.
- The battery may not be inserted properly. Insert the battery again.
- Wipe both gold-coloured contacts and insert the battery again.

The touch screen responds slowly or improperly

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

Your device freezes or has fatal errors

If your device freezes or hangs, you may need to close apps or reinsert the battery and turn on the device to regain functionality. If your device is frozen and unresponsive, press and hold the Power button and the Volume button down simultaneously for more than 7 seconds to restart it.

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

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

Calls are not connected

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

Sound echoes during a call

Adjust the volume by pressing the Volume button or move to another area.

A cellular network or the Internet is often disconnected or 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. You may have connectivity problems due to issues with the service provider's base station. Move to another area and try again.
- When using the device while moving, wireless network services may be disabled due to issues with the service provider's network.

The battery icon is empty

Your battery is low. Recharge or replace the battery.

The battery does not charge properly (For Samsung-approved chargers)

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

The battery depletes faster than when first purchased

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

Your device is hot to the touch

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

Error messages appear when launching the camera

Your device must have sufficient available memory and battery power to operate the camera app. 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 app after trying these tips, contact a Samsung Service Centre.

Photo quality is poorer than the preview

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

Error messages appear when opening multimedia files

If you receive error messages or multimedia files do not play when you open them 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 the file formats are supported by the device. If a file format is not supported, such as DivX or AC3, install an app that supports it. To confirm the file formats that your device supports, visit www.samsung.com.

- Your device supports photos and videos captured with the device. Photos and videos captured by other devices may not work properly.
- Your device supports multimedia files that are authorised by your network service provider or providers of additional services. Some content circulated on the Internet, such as ringtones, videos, or wallpapers, may not work properly.

Another Bluetooth device is not located

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

If the tips above do not solve the problem, contact a Samsung Service Centre.

A connection is not established when you connect the device to a computer

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

Your device cannot find your current location

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

Data stored in the device has been lost

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

A small gap appears around the outside of the device case

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

Copyright

Copyright © 2014 Samsung Electronics

This guide is protected under international copyright laws.

No part of this guide may be reproduced, distributed, translated, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or storing in any information storage and retrieval system, without the prior written permission of Samsung Electronics.

Trademarks

- SAMSUNG and the SAMSUNG logo are registered trademarks of Samsung Electronics.
- Bluetooth® is a registered trademark of Bluetooth SIG, Inc. worldwide.
- Wi-Fi®, Wi-Fi Protected Setup™, Wi-Fi Direct™, Wi-Fi CERTIFIED™, and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- All other trademarks and copyrights are the property of their respective owners.