

**SAMSUNG**

# USER MANUAL

SM-M205F  
SM-M205F/DS  
SM-M205FN/DS  
SM-M205G/DS  
SM-M305F/DS

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# Basics

## 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, model specifications, 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.
- Depending on the region or service provider, a screen protector is attached for protection during production and distribution. Damage to the attached screen protector is not covered by the warranty.
- You can see the touchscreen clearly even in strong outdoor sunlight by automatically adjusting the contrast range based on the surrounding environment. Due to the nature of the product, displaying fixed graphics for extended periods may result in afterimages (screen burn-in) or ghosting.
  - It is recommended not to use fixed graphics on part or all of the touchscreen for extended periods and turn off the touchscreen when not using the device.
  - You can set the touchscreen to turn off automatically when you are not using it. Launch the **Settings** app, tap **Display** → **Screen timeout**, and then select the length of time you want the device to wait before turning off the touchscreen.
  - To set the touchscreen to automatically adjust its brightness based on the surrounding environment, launch the **Settings** app and tap **Display** → **Auto brightness**.
- Depending on the region or model, some devices are required to receive approval from the Federal Communications Commission (FCC). If your device is approved by the FCC, you can view the FCC ID of the device. To view the FCC ID, launch the **Settings** app and tap **About phone** → **Status**.
- Depending on the region, you can view the regulatory information on the device. To view the information, launch the **Settings** app and tap **About phone** → **Regulatory information**.

## Instructional icons



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



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



**Notice:** notes, usage tips, or additional information

## Device overheating situations and solutions

### When the device heats up while charging the battery

While charging, the device and the charger may become hot. During wireless charging or fast charging, the device may feel hotter to the touch. This does not affect the device's lifespan or performance and is in the device's normal range of operation. If the battery becomes too hot, the charger may stop charging.

#### Do the following when the device heats up:

- Disconnect the charger from the device and close any running apps. Wait for the device to cool down and then begin charging the device again.
- If the lower part of the device overheats, it could be because the connected USB cable is damaged. Replace the damaged USB cable with a new Samsung-approved one.
- When using a wireless charger, do not place foreign materials, such as metal objects, magnets, and magnetic stripe cards, between the device and the wireless charger.



The wireless charging or fast charging feature is only available on supported models.

## When the device heats up during use

When you use features or apps that require more power or use them for extended periods, your device may temporarily heat up due to increased battery consumption. Close any running apps and do not use the device for a while.

The following are examples of situations in which the device may overheat. Depending on the functions and apps you use, these examples may not apply to your model.

- During the initial setup after purchase or when restoring data
- When downloading large files
- When using apps that require more power or using apps for extended periods
  - When playing high-quality games for extended periods
  - When recording videos for extended periods
  - When streaming videos while using the maximum brightness setting
  - When connecting to a TV
- While multitasking (or, when running many apps in the background)
  - When using Multi window
  - When updating or installing apps while recording videos
  - When downloading large files during a video call
  - When recording videos while using a navigation app
- When using large amount of data for syncing with the cloud, email, or other accounts
- When using a navigation app in a car while the device is placed in direct sunlight
- When using the mobile hotspot and tethering feature
- When using the device in areas with weak signals or no reception
- When charging the battery with a damaged USB cable
- When the device's multipurpose jack is damaged or exposed to foreign materials, such as liquid, dust, metal powder, and pencil lead
- When you are roaming

### **Do the following when the device heats up:**

- Keep the device updated with the latest software.
- Conflicts between running apps may cause the device to heat up. Restart the device.
- Deactivate the Wi-Fi, GPS, and Bluetooth features when not using them.
- Close apps that increase battery consumption or that run in the background when not in use.
- Delete unnecessary files or unused apps.
- Decrease the screen brightness.
- If the device overheats or feels hot for a prolonged period, do not use it for a while. If the device continues to overheat, contact a Samsung Service Centre.

## **Device limitations when the device overheats**

When the device heats up, the features and performance may be limited or the device may turn off to cool down. The feature is only available on supported models.

- If the device becomes hotter than usual, a device overheating message will appear. To lower the device's temperature, the screen brightness and the performance speed will be limited and battery charging will stop. Running apps will be closed and you will only be able to make emergency calls until the device cools down.
- If the device overheats or feels hot for a prolonged period, a power off message will appear. Turn off the device, and wait until it cools down.



## Precautions for operating environment

Your device may heat up due to the environment in the following conditions. Use caution to avoid shortening the battery's lifespan, damaging the device, or causing a fire.

- Do not store your device in very cold or very hot temperatures.
- Do not expose your device to direct sunlight for extended periods.
- Do not use or store your device for extended periods in very hot areas, such as inside a car in the summertime.
- Do not place the device in any areas that may overheat, such as on an electric heating mat.
- Do not store your device near or in heaters, microwaves, hot cooking equipment, or high pressure containers.
- Never use a damaged charger or battery.

# Device layout and functions

## Package contents

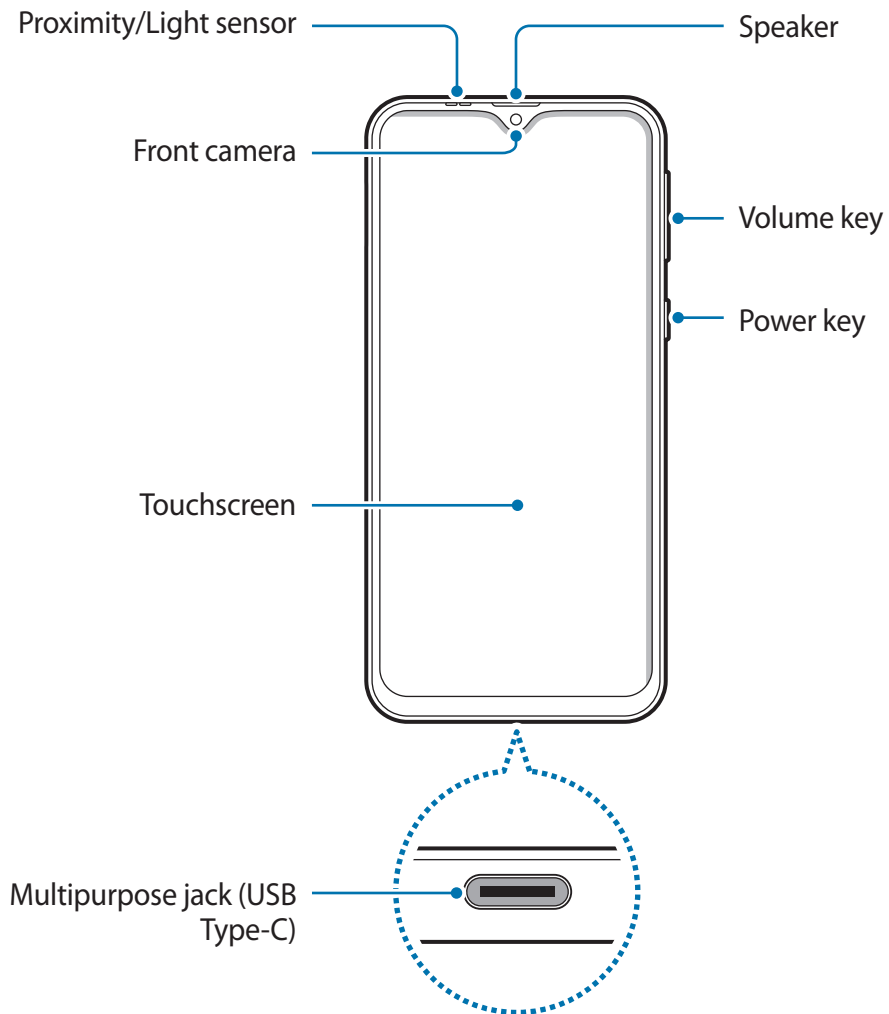
Refer to the quick start guide for package contents.

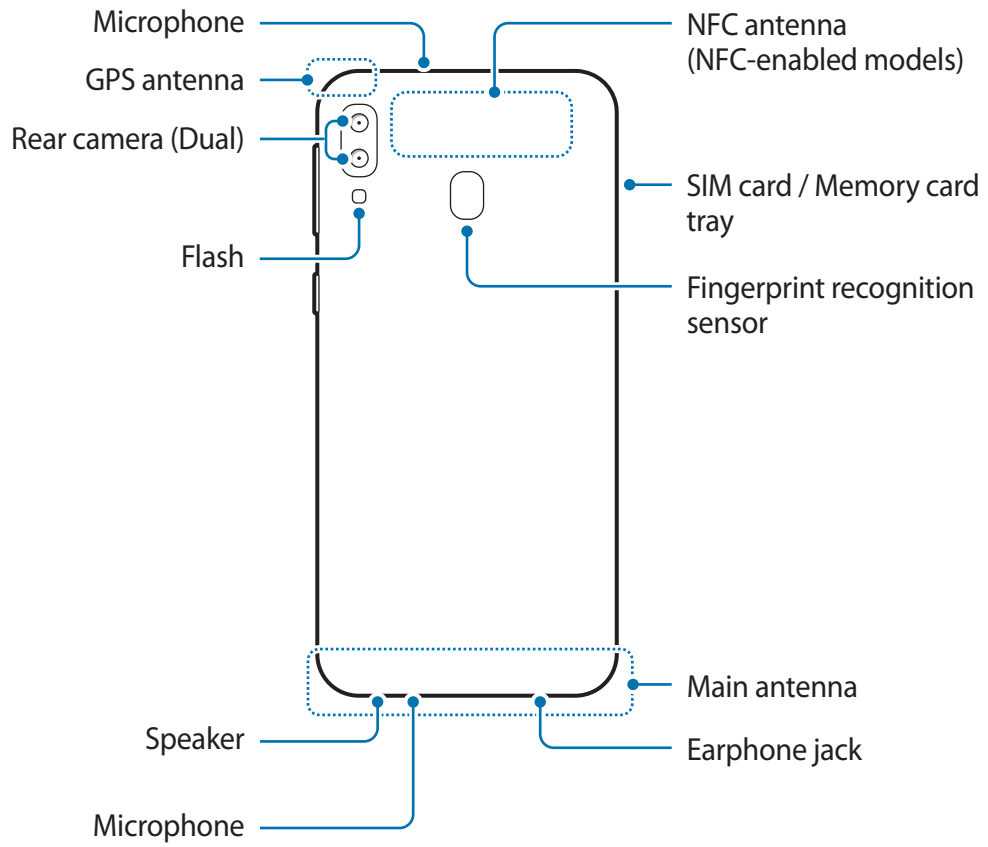


- The items supplied with the device and any available accessories may vary depending on the region or service provider.
- The supplied items are designed only for this device and may not be compatible with other devices.
- Appearances and specifications are subject to change without prior notice.
-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

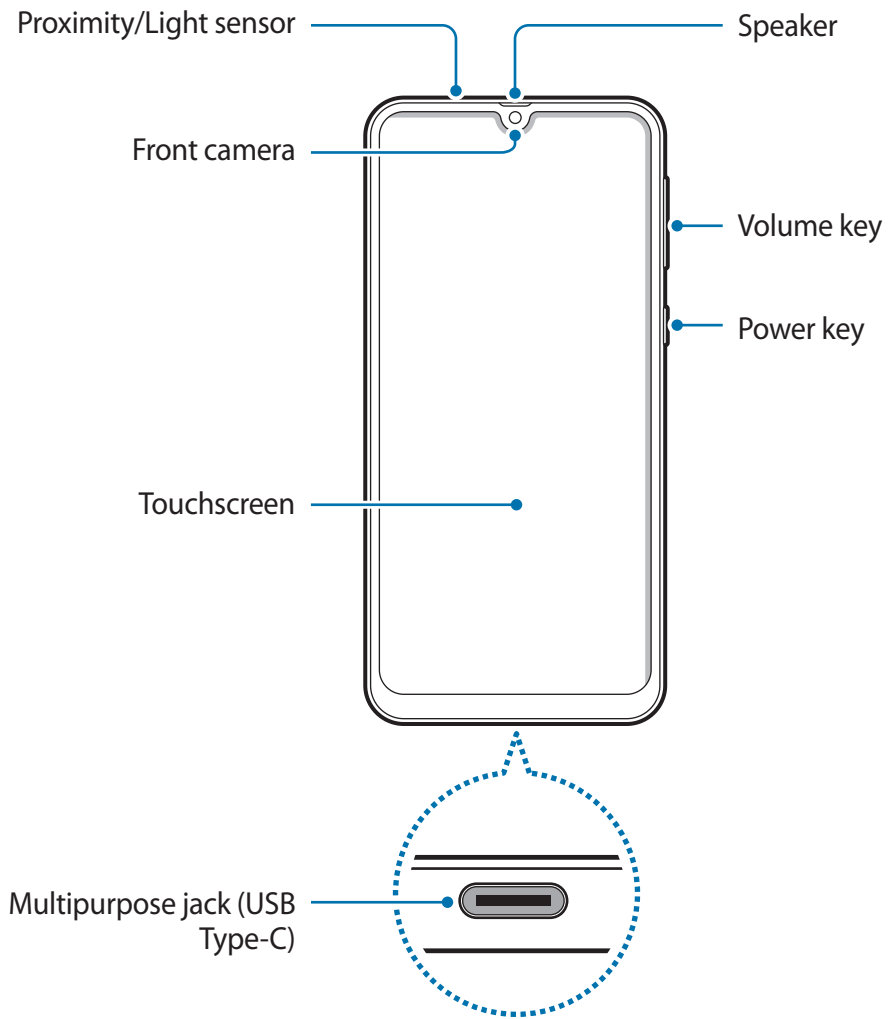
## Device layout

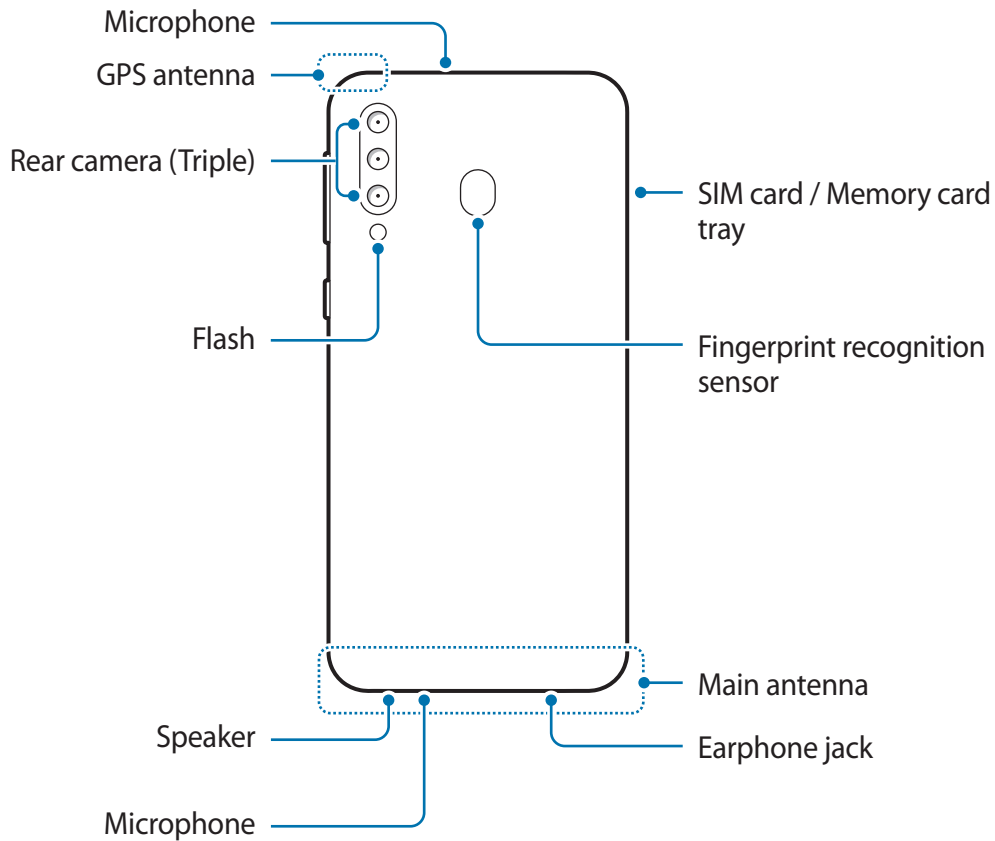
### ► Galaxy M20 models:





► **Galaxy M30 models:**



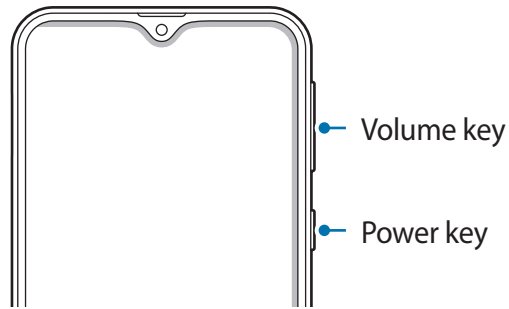


- When using the speakers, such as when playing media files or using speakerphone, do not place the device close to your ears.
- Be careful not to expose the camera lens to a strong light source, such as direct sunlight. If the camera lens is exposed to a strong light source, such as direct sunlight, the camera image sensor may be damaged. A damaged image sensor is irreparable and will cause dots or spots in pictures.
- If you use the device with its glass or acrylic body broken, there may be a risk of injury. Use the device only after it has been repaired at a Samsung Service Centre.



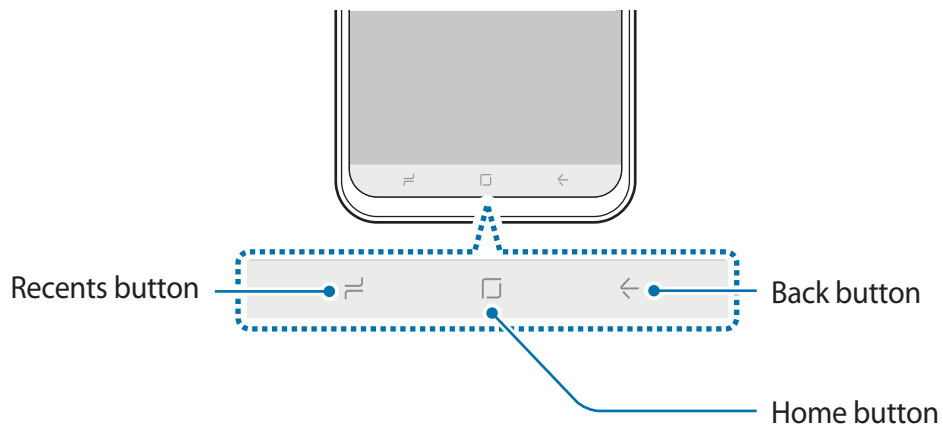
- Connectivity problems and battery drain may occur in the following situations:
  - If you attach metallic stickers on the antenna area of the device
  - If you attach a device cover made with metallic material to the device
  - If you cover the device's antenna area with your hands or other objects while using certain features, such as calls or the mobile data connection
- Using a Samsung-approved screen protector is recommended. Unapproved screen protectors may cause the sensors to malfunction.
- Do not cover the proximity/light sensor area with screen accessories, such as a screen protector or stickers. Doing so may cause the sensor to malfunction.
- Do not allow water to contact the touchscreen. The touchscreen may malfunction in humid conditions or when exposed to water.

## Hard keys



Key	Function
Power	<ul style="list-style-type: none"> <li>• Press and hold to turn the device on or off.</li> <li>• Press to turn on or lock the screen.</li> </ul>
Volume	<ul style="list-style-type: none"> <li>• Press to adjust the device volume.</li> </ul>

## Soft buttons



When you turn on the screen, the soft buttons will appear at the bottom of the screen. The soft buttons are set to the Recents button, Home button, and Back button by default. Refer to [Navigation bar \(soft buttons\)](#) for more information.

# Battery

## Charging the battery

Charge the battery before using it for the first time or when it has been unused for extended periods.



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

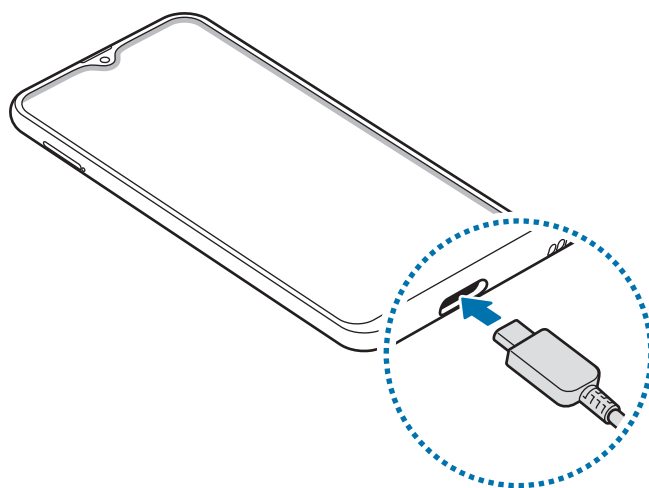


- Connecting the charger improperly may cause serious damage to the device. Any damage caused by misuse is not covered by the warranty.
- Use only USB Type-C cable supplied with the device. The device may be damaged if you use Micro USB cable.



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.

- 1 Connect the USB cable to the USB power adaptor.
- 2 Plug the USB cable into the device's multipurpose jack.





- 3 Plug the USB power adaptor into an electric socket.
- 4 After fully charging, disconnect the charger from the device. Then, unplug the charger from the electric socket.

## **Reducing the battery consumption**

Your device provides various options that help you conserve battery power.

- Optimise the device using the device maintenance feature.
- When you are not using the device, turn off the screen by pressing the Power key.
- Activate power saving mode.
- Close unnecessary apps.
- Deactivate the Bluetooth feature when not in use.
- Deactivate auto-syncing of apps that need to be synced.
- Decrease the backlight time.
- Decrease the screen brightness.

## Battery charging tips and precautions


- 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 losing power during a data transfer, always use these apps after fully charging the battery.
- Using a power source other than the charger, such as a computer, may result in a slower charging speed due to a lower electric current.
- 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 touchscreen may not function. If this happens, unplug the charger from the device.
- While charging, the device and the charger 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 you charge the device while the multipurpose jack is wet, the device may be damaged. Thoroughly dry the multipurpose jack before charging the device.
- If the device is not charging properly, take the device and the charger to a Samsung Service Centre.

## Fast charging

The device has a built-in fast charging feature. You can charge the battery more quickly while the device or its screen is turned off.

### Increasing the charging speed

To increase the charging speed, turn the device or its screen off when you charge the battery. While charging the battery when the device is turned off, the ⚡ icon appears on the screen.

If the fast charging feature is not activated, launch the **Settings** app, tap **Device maintenance** → **Battery** →  → **Advanced settings**, and then tap the **Fast cable charging** switch to activate it.



- You cannot use the built-in fast charging feature when you charge the battery using a standard battery charger.
- If the device heats up or the ambient air temperature rises, the charging speed may decrease automatically. This is a normal operating condition to prevent damage to the device.

## SIM or USIM card (nano-SIM card)

### Installing the SIM or USIM card

Insert the SIM or USIM card provided by the mobile telephone service provider.

For dual SIM models, you can insert two SIM or USIM cards so you can have two phone numbers or service providers for a single device. In some areas, data transfer speeds may be slower if two SIM cards are inserted in the device than when one SIM card is inserted.

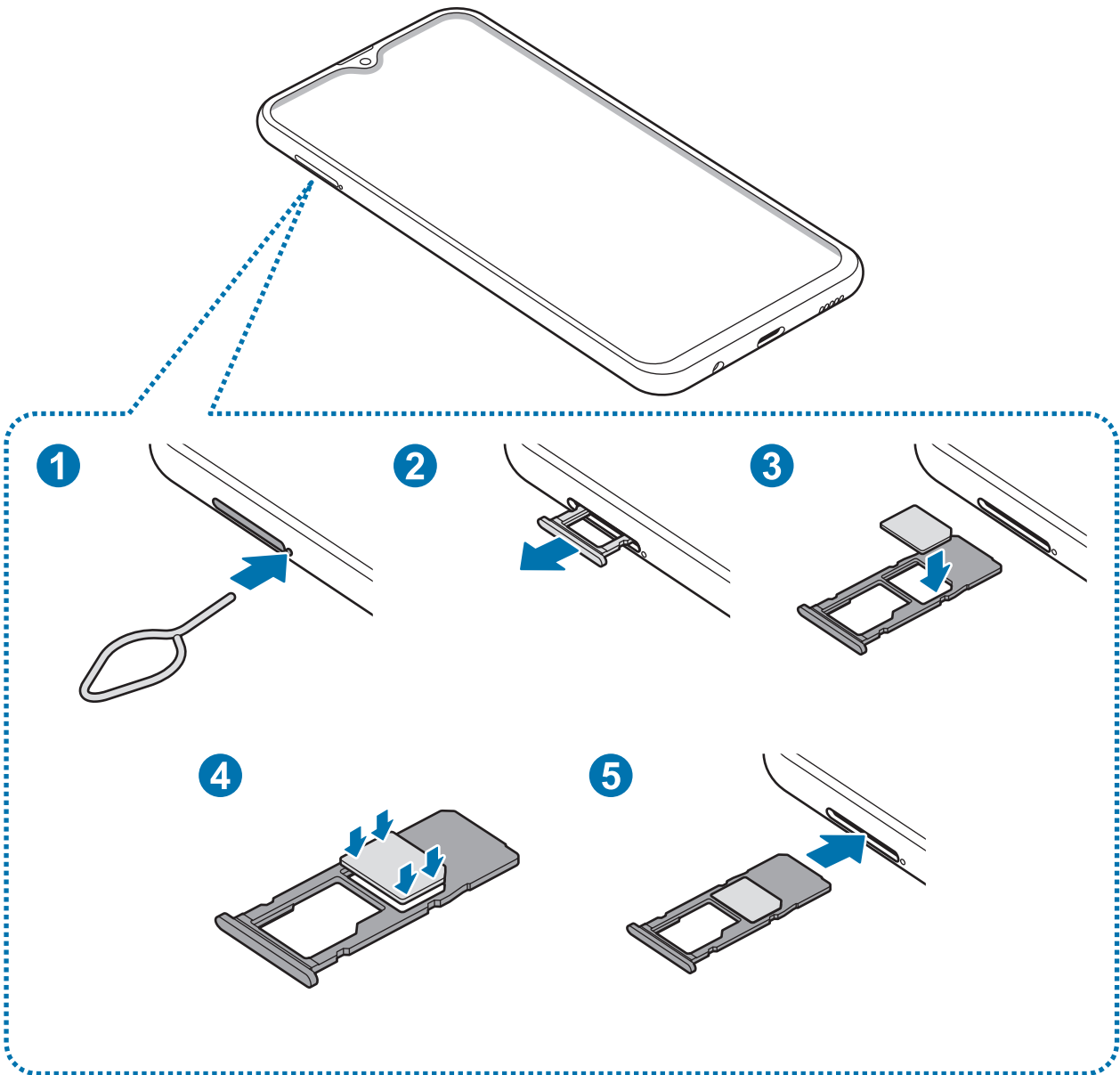


Use caution not to lose or let others use the SIM or USIM card. Samsung is not responsible for any damages or inconveniences caused by lost or stolen cards.

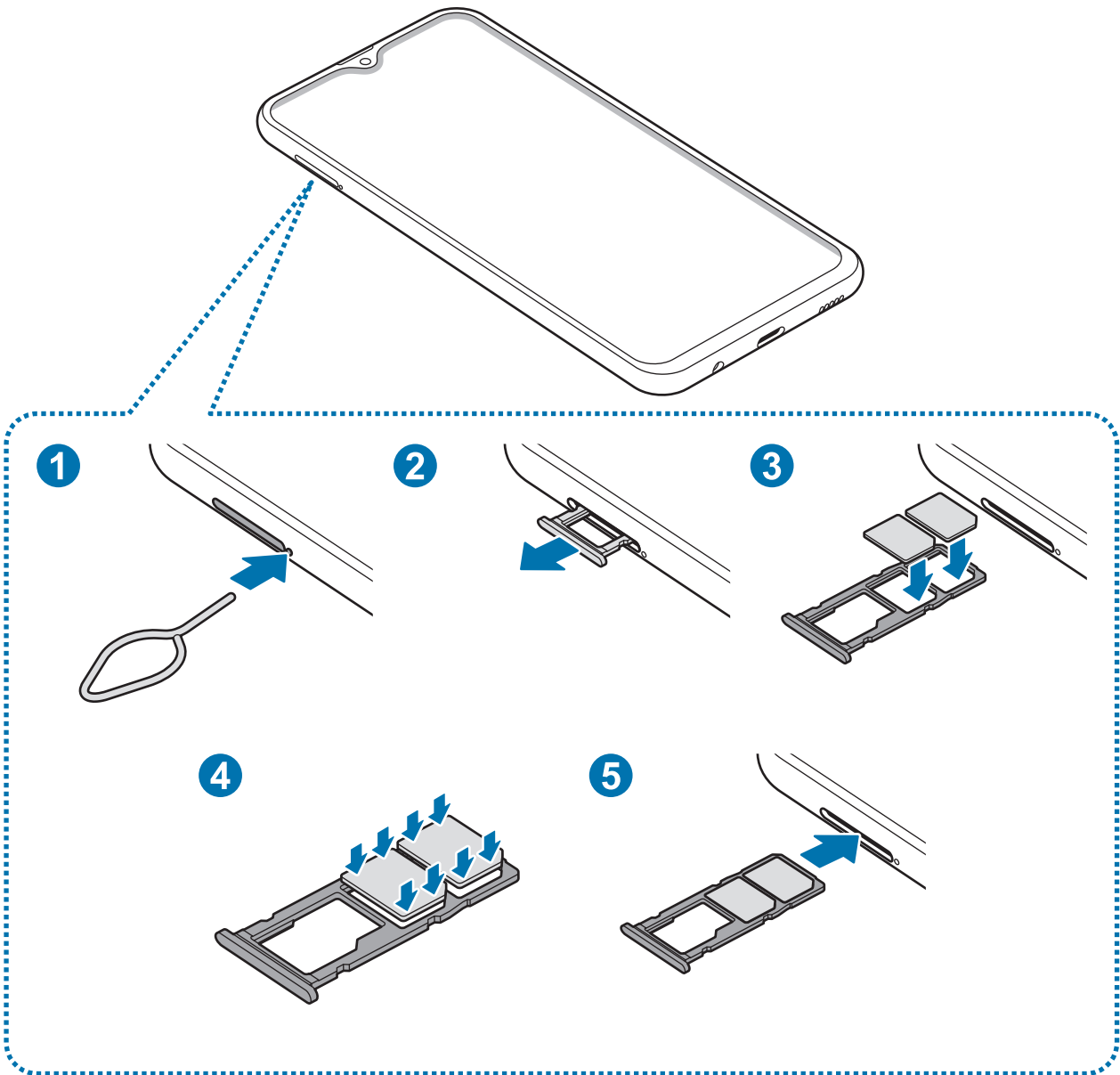


Some LTE services may not be available depending on the service provider. For more information about service availability, contact your service provider.


► Single SIM models:



► Dual SIM models:



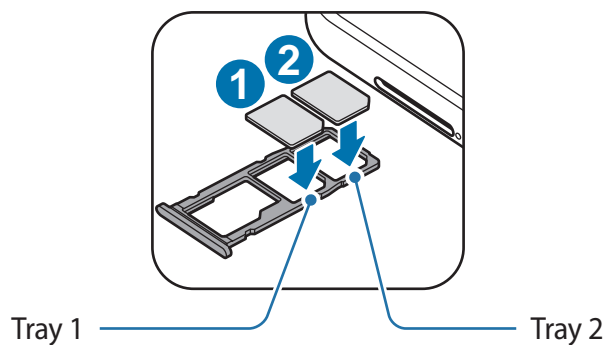
1 Insert the ejection pin into the hole next to the tray to loosen the tray.

 Ensure that the ejection pin is perpendicular to the hole. Otherwise, the device may be damaged.


2 Pull out the tray gently from the tray slot.

3 ► **Single SIM models:** Place the SIM or USIM card on the tray 1 with the gold-coloured contacts facing downwards.


► **Dual SIM models:** Place the SIM or USIM card on the tray with the gold-coloured contacts facing downwards. Place the primary SIM or USIM card on the tray 1 (1) and the secondary SIM or USIM card on the tray 2 (2).



4 Gently press the SIM or USIM card into the tray to secure it.

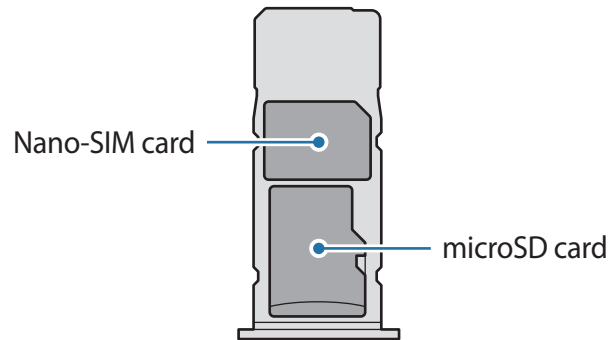
 If the card is not fixed firmly into the tray, the SIM card may leave or fall out of the tray.

5 Insert the tray back into the tray slot.

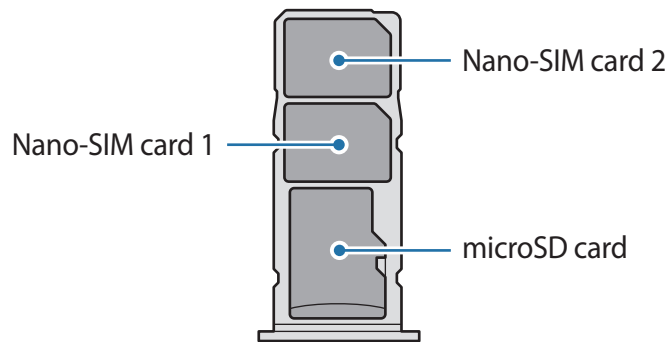
-  • If you insert the tray into your device while the tray is wet, your device may be damaged. Always make sure the tray is dry.
- Fully insert the tray into the tray slot to prevent liquid from entering your device.

## Correct card installation

### ► Single SIM models:



### ► Dual SIM models:



Use only a nano-SIM card.

## Removing the SIM or USIM card

- 1 Insert the ejection pin into the hole next to the tray to loosen the tray.
- 2 Pull out the tray gently from the tray slot.
- 3 Remove the SIM or USIM card.
- 4 Insert the tray back into the tray slot.

## Using dual SIM or USIM cards (dual SIM models)

If you insert two SIM or USIM cards, you can have two phone numbers or service providers for a single device.

### Activating SIM or USIM cards

Launch the **Settings** app and tap **Connections** → **SIM card manager**. Select a SIM or USIM card and tap the switch to activate it.

### Customising SIM or USIM cards

Launch the **Settings** app, tap **Connections** → **SIM card manager**, and then select a SIM or USIM card to access the following options:

- **Icon:** Change the icon of the SIM or USIM card.
- **Name:** Change the display name of the SIM or USIM card.
- **Network mode:** Select a network type to use with the SIM or USIM card.

### Setting preferred SIM or USIM cards

When two cards are activated, you can assign voice calls, messaging, and data services to specific cards.

Launch the **Settings** app, tap **Connections** → **SIM card manager**, and then set the feature preferences for your cards in **PREFERRED SIM CARD**.



## Memory card (microSD card)

### Installing a memory card

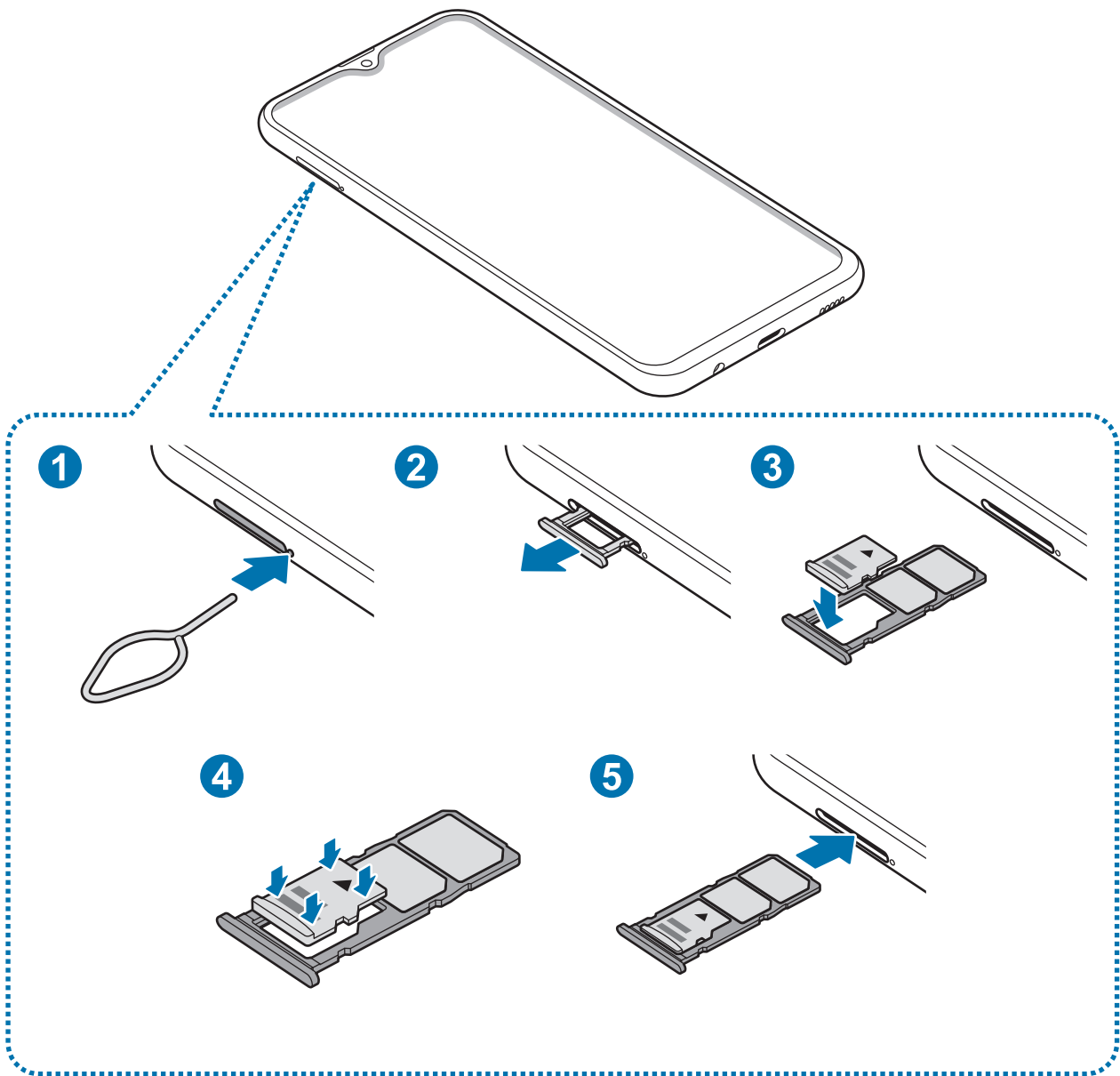
Your device's memory card capacity may vary from other models and some memory cards may not be compatible with your device depending on the memory card manufacturer and type. To view your device's maximum memory card capacity, refer to the Samsung website.




- 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 will ask to reformat the card or will not recognise the card. To use the memory card, you must format it. If your device cannot format or recognise the memory card, contact the memory card manufacturer or a Samsung Service Centre.
- 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.



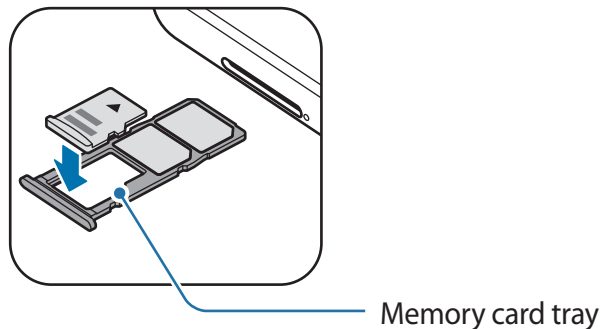
1 Insert the ejection pin into the hole next to the tray to loosen the tray.

 Ensure that the ejection pin is perpendicular to the hole. Otherwise, the device may be damaged.


2 Pull out the tray gently from the tray slot.

 When you remove the tray from the device, the mobile data connection will be disabled.


- 3 Place a memory card on the memory card tray with the gold-coloured contacts facing downwards.



- 4 Gently press the memory card into the tray to secure it.

 If the card is not fixed firmly into the tray, the memory card may leave or fall out of the tray.

- 5 Insert the tray back into the tray slot.

-  If you insert the tray into your device while the tray is wet, your device may be damaged. Always make sure the tray is dry.
- Fully insert the tray into the tray slot to prevent liquid from entering your device.

## Removing the memory card

Before removing the memory card, first unmount it for safe removal.

Launch the **Settings** app and tap **Device maintenance** → **Storage** →  → **Storage settings** → **SD card** → **UNMOUNT**.

- 1 Insert the ejection pin into the hole next to the tray to loosen the tray.
- 2 Pull out the tray gently from the tray slot.

3 Remove the memory card.

4 Insert the tray back into the tray slot.



Do not remove external storage, such as a memory card or USB storage, while the device is transferring or accessing information, or right after transferring data. Doing so can cause data to be corrupted or lost or cause damage to the external storage or device. Samsung is not responsible for losses, including loss of data, resulting from the misuse of external storage devices.

## 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.

Launch the **Settings** app and tap **Device maintenance** → **Storage** →  → **Storage settings** → **SD card** → **Format**.



Before formatting the memory card, remember to make backup copies of all important data stored in the memory card. 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 key 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 key, and then tap **Power off**.

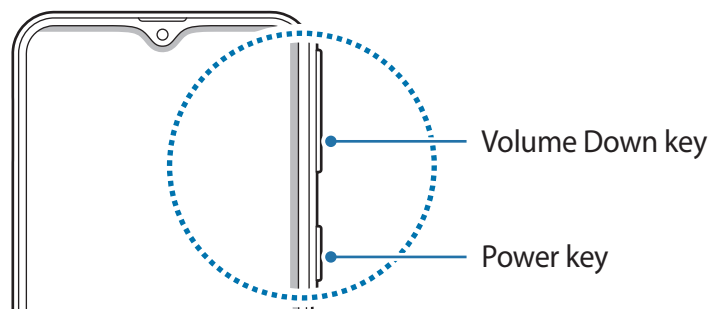


Follow all posted warnings and directions from authorised personnel in areas where the use of wireless devices is restricted, such as aeroplanes and hospitals.

## Restarting the device

To restart the device, press and hold the Power key, and then tap **Restart**.

If your device is frozen and unresponsive, press and hold the Power key and the Volume Down key simultaneously for more than 7 seconds to restart it.



## Emergency mode

You can switch the device to emergency mode to reduce battery consumption. Some apps and functions will be restricted. In emergency mode, you can make an emergency call, send your current location information to others, sound an emergency alarm, and more.

### Activating emergency mode

To activate emergency mode, press and hold the Power key, and then tap **Emergency mode**.



The usage time left shows the time remaining before the battery power runs out. Usage time left may vary depending on your device settings and operating conditions.

## Deactivating emergency mode

To deactivate emergency mode, tap  → **Turn off Emergency mode**. Alternatively, press and hold the Power key, and then tap **Emergency mode**.

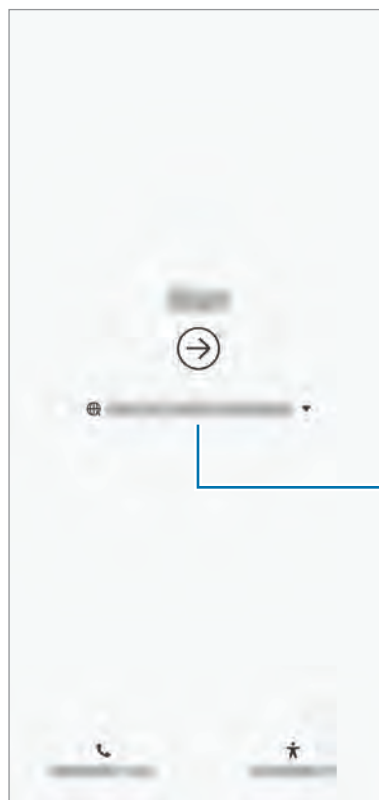
## Initial setup

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.




The initial setup procedures may vary depending on the device's software and your region.

- 1 Turn on the device.
- 2 Select your preferred device language and select .



Select a language.

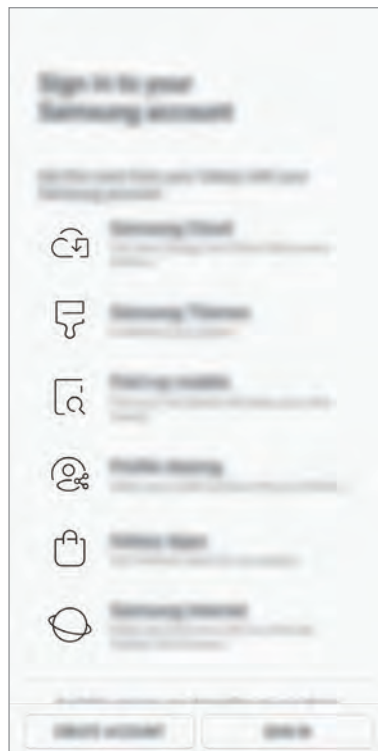
3 Select a Wi-Fi network and connect to it.

 If you do not connect to a Wi-Fi network, you may not be able to set up some device features during the initial setup.

4 Follow the on-screen instructions to proceed the initial setup.

5 Set a screen lock method to protect your device. You can protect your personal information by preventing others from accessing your device. To set the screen lock method later, tap **No, thank you**.

6 Sign in to your Samsung account. You can enjoy Samsung services and keep your data up to date and secure across all of your devices. Refer to [Samsung account](#) for more information.




7 Select features you want to use and complete the initial setup. The Home screen will appear.

# Samsung account

## Introduction

Your Samsung account is an integrated account service that allows you to use a variety of Samsung services provided by mobile devices, TVs, and the Samsung website. Once your Samsung account has been registered, you can keep your data up to date and secure across your Samsung devices with Samsung Cloud, track and control your lost or stolen device, see tips and tricks from Samsung Members, and more.


Create your Samsung account with your email address.

To check the list of services that can be used with your Samsung account, visit [account.samsung.com](https://account.samsung.com). For more information on Samsung accounts, launch the **Settings** app and tap **Cloud and accounts** → **Accounts** → **Samsung account** →  → **Help**.

## Registering your Samsung account

### Registering a new Samsung account

If you do not have a Samsung account, you should create one.

- 1 Launch the **Settings** app and tap **Cloud and accounts** → **Accounts** → **Add account** → **Samsung account**.  
Alternatively, launch the **Settings** app and tap .
- 2 Tap **CREATE ACCOUNT**.
- 3 Follow the on-screen instructions to complete creating your account.



## Registering an existing Samsung account

If you already have a Samsung account, register it to the device.

**1** Launch the **Settings** app and tap **Cloud and accounts** → **Accounts** → **Add account** → **Samsung account**.

Alternatively, launch the **Settings** app and tap .

**2** Tap **SIGN IN**.

**3** Enter your Samsung account ID and password and tap **SIGN IN**.

If you forget your account information, tap **Find ID** or **Reset password**. You can find your account information when you enter the required information.

**4** Read and agree to the terms and conditions and tap **NEXT**.

**5** Tap **DONE** to finish registering your Samsung account.

## Removing your Samsung account

When you remove your registered Samsung account from the device, your data, such as contacts or events, will also be removed.

**1** Launch the **Settings** app and tap **Cloud and accounts** → **Accounts**.

**2** Tap **Samsung account** →  → **Remove account**.

**3** Tap **REMOVE**, enter your Samsung account password, and then tap **REMOVE ACCOUNT**.

## Transferring data from your previous device

You can restore your data, such as images, contacts, messages, and apps from Samsung Cloud. You can also copy them from your previous device via Smart Switch.



- This feature may not be supported on some devices or computers.
- Limitations apply. Visit [www.samsung.com/smartswitch](http://www.samsung.com/smartswitch) for details. Samsung takes copyright seriously. Only transfer content that you own or have the right to transfer.

### Smart Switch

Transfer data between mobile devices via Smart Switch. To use Smart Switch, launch the **Settings** app and tap **Cloud and accounts** → **Smart Switch**. If you do not have the app, download it from **Galaxy Apps**.

### Transferring data from a mobile device

Transfer data from your previous device to your device wirelessly via Wi-Fi Direct.




- 1 On the previous device, launch Smart Switch.  
If you do not have the app, download it from **Galaxy Apps**.
- 2 On your device, launch the **Settings** app and tap **Cloud and accounts** → **Smart Switch**.
- 3 Place the devices near each other.

- 4 On the previous device, tap **Send data** → **Wireless**.
- 5 On the previous device, select an item to transfer and tap **SEND**.
- 6 On your device, tap **RECEIVE**.
- 7 Follow the on-screen instructions to transfer data from your previous device.

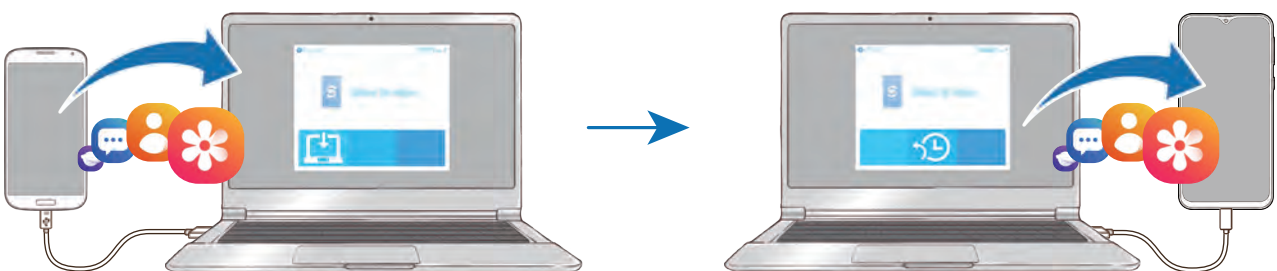
## Transferring data using external storage

Transfer data using external storage, such as a microSD card.

- 1 Transfer data from your previous device to external storage.
- 2 Insert or connect the external storage device to your device.
- 3 On your device, launch the **Settings** app and tap **Cloud and accounts** → **Smart Switch** →  → **Restore**.
- 4 Follow the on-screen instructions to transfer data from external storage.

## Transferring backup data from a computer

Transfer data between your device and a computer. You must download the Smart Switch computer version app from [www.samsung.com/smartswitch](http://www.samsung.com/smartswitch). Back up data from your previous device to a computer and import the data to your device.



- 1 On the computer, visit [www.samsung.com/smartswitch](http://www.samsung.com/smartswitch) to download Smart Switch.
- 2 On the computer, launch Smart Switch.



If your previous device is not a Samsung device, back up data to a computer using a program provided by the device's manufacturer. Then, skip to the fifth step.

- 3 Connect your previous device to the computer using the device's USB cable.
- 4 On the computer, follow the on-screen instructions to back up data from the device. Then, disconnect your previous device from the computer.
- 5 Connect your device to the computer using the USB cable.
- 6 On the computer, follow the on-screen instructions to transfer data to your device.

## Viewing imported data


You can view the imported data on the same app from your previous device.

If your new device does not have the same apps to view or play the imported data, the data will be saved to a similar app.

## Samsung Cloud

Back up data from your previous device to Samsung Cloud and restore the data to your new device. You can also sync data saved in your device with Samsung Cloud and view data saved on the Samsung Cloud. You must register and sign in to your Samsung account to use Samsung Cloud. Refer to [Samsung account](#) for more information.

## Backing up data from your previous device

- 1 On your previous device, sign in to your Samsung account.
- 2 Launch the **Settings** app, select the backup option, and back up your data.
  -  • If your device supports Samsung Cloud, launch the **Settings** app, tap **Cloud and accounts** → **Samsung Cloud** → **Back up this phone**, tick items you want to back up, and then tap **BACK UP** to back up your data.
  - The data backup method may vary depending on your model.
  - Some data will not be backed up. To check which data will be backed up, launch the **Settings** app, tap **Cloud and accounts** → **Samsung Cloud** → **Back up this phone**.
  - To view the backup data in your Samsung account, launch the **Settings** app, tap **Cloud and accounts** → **Samsung Cloud** → **Restore data** → ▼, and then select a device you want.

## Restoring data from your previous device

- 1 On your new device, launch the **Settings** app and tap **Cloud and accounts** → **Samsung Cloud**.
- 2 Tap **Restore data** → ▼ and select a previous device.
- 3 Tick the data types you want to restore and tap **RESTORE**.

## Syncing data from your device

You can sync data saved in your device, such as contacts and events, with Samsung Cloud and access it from other devices.

- 1 On your new device, launch the **Settings** app and tap **Cloud and accounts** → **Samsung Cloud**.
- 2 Tap ☰ → **Settings** → **Sync and auto backup settings**.
- 3 Tap the switches next to the items you want to sync with.



You can check the saved data or change the settings by tapping the **Other synced data** or **Samsung Cloud Drive**.

# Understanding the screen

## Controlling the touchscreen



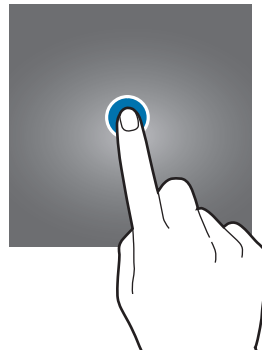
- Do not allow the touchscreen to come into contact with other electrical devices. Electrostatic discharges can cause the touchscreen to malfunction.
- To avoid damaging the touchscreen, do not tap it with anything sharp or apply excessive pressure to it with your fingertips.
- It is recommended not to use fixed graphics on part or all of the touchscreen for extended periods. Doing so may result in afterimages (screen burn-in) or ghosting.



- The device may not recognise touch inputs close to the edges of the screen, which are outside of the touch input area.
- It is recommended to use fingers when you use the touchscreen.

### Tapping

Tap the screen.



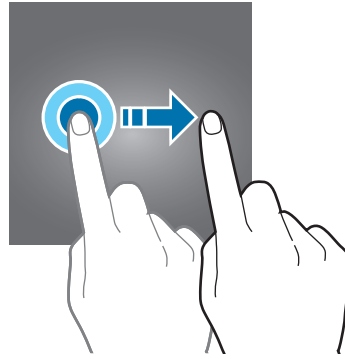
### Tapping and holding

Tap and hold the screen for approximately 2 seconds.



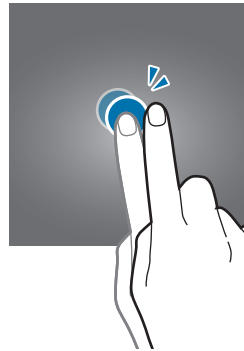
## Dragging

Tap and hold an item and drag it to the target position.



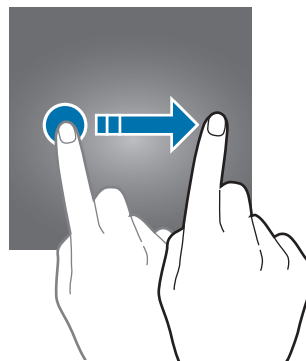
## Double-tapping

Double-tap the screen.



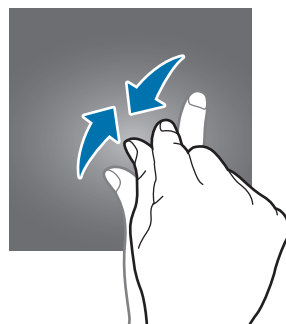
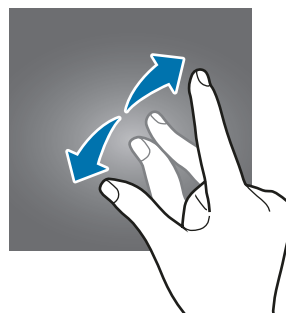
## Swiping

Swipe upwards, downwards, to the left, or to the right.



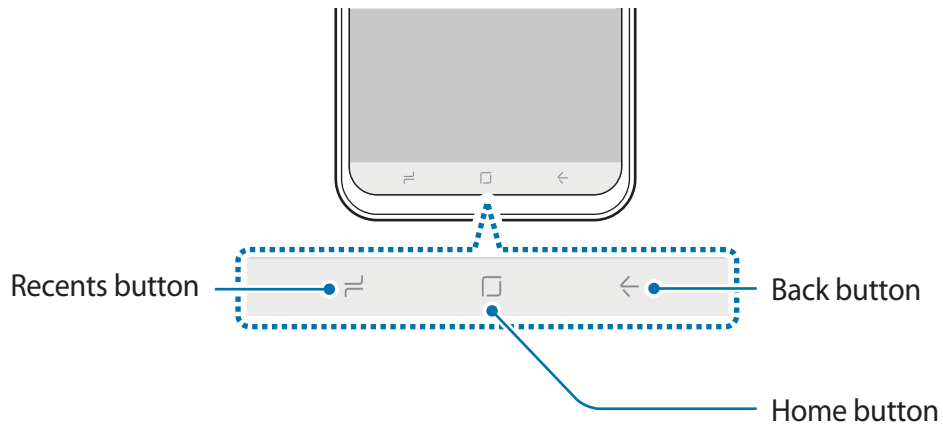
## Spreading and pinching




Spread two fingers apart or pinch on the screen.



## Navigation bar (soft buttons)

When you turn on the screen, the soft buttons will appear at the bottom of the screen. The soft buttons are set to the Recents button, Home button, and Back button by default. The functions of the buttons can change according to the app currently being used or usage environment.



Button	Function
 Recents	<ul style="list-style-type: none"> <li>• Tap to open the list of recent apps.</li> </ul>
 Home	<ul style="list-style-type: none"> <li>• Tap to return to the Home screen.</li> <li>• Tap and hold to launch the <b>Google Assistant</b> app.</li> </ul>
 Back	<ul style="list-style-type: none"> <li>• Tap to return to the previous screen.</li> </ul>

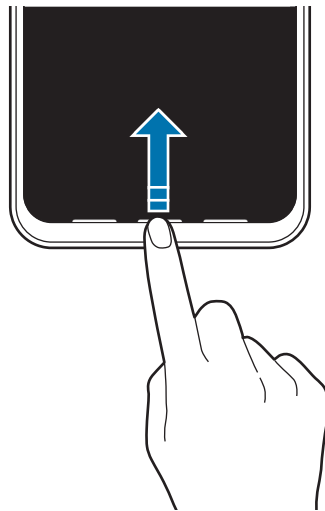


## Hiding the navigation bar

Hide the navigation bar to expand the available area of the screen to view content or use apps in a larger view.

Launch the **Settings** app, tap **Display** → **Navigation bar**, and then select **Full screen gestures** under **NAVIGATION TYPE**. The navigation bar is replaced with the flat indicators for the hidden buttons.

To perform the function of a hidden button, swipe upwards the button's indicator.



To hide the indicators at the bottom of the screen, tap the **Gesture hints** switch to deactivate it.

## Setting the navigation bar

Launch the **Settings** app, tap **Display** → **Navigation bar**, and then select an option.

- **NAVIGATION TYPE:** Set the device to show or hide the navigation bar. To hide the navigation bar, select the **Full screen gestures** feature. When the navigation bar is hidden, you can use the functions of the soft buttons by swiping upwards their indicators.
- **BUTTON ORDER:** Change the order of the buttons on the navigation bar.
- **Gesture hints:** Display the indicators for the hidden buttons so that you can recognise where to swipe up while the navigation bar is hidden. This option appears only when you select the **Full screen gestures** feature.

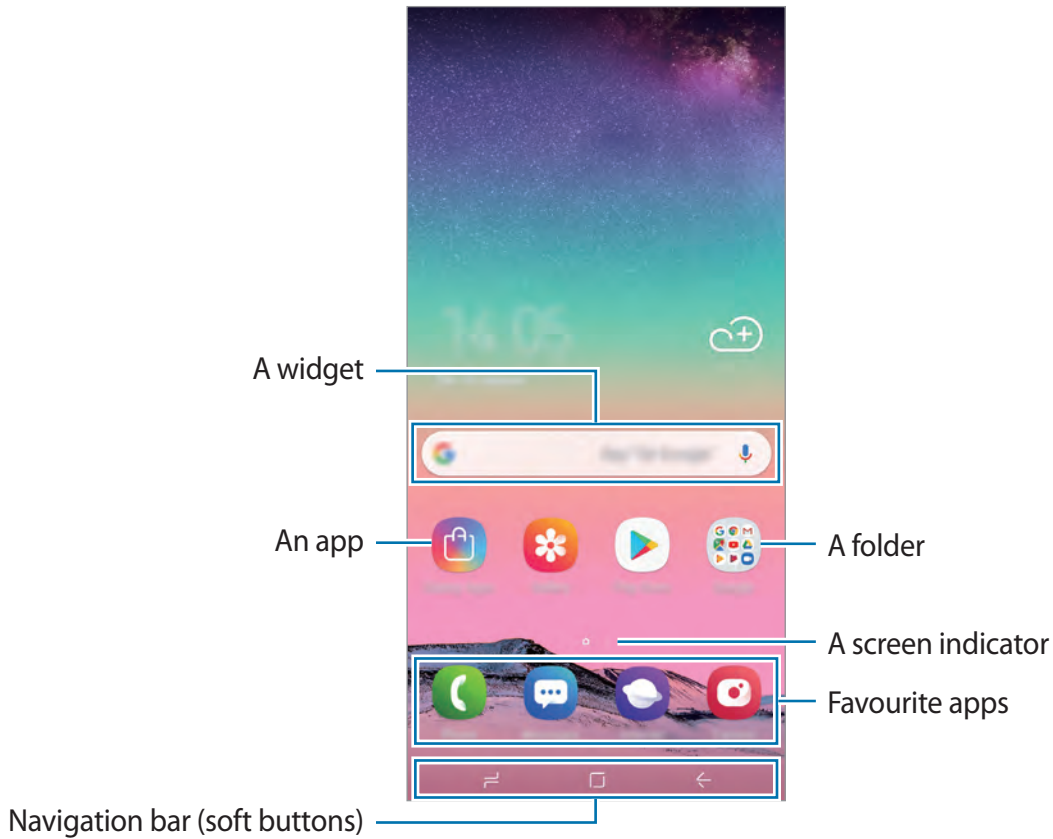
## Home screen and Apps screen

The Home screen is the starting point for accessing all of the device's features. It displays widgets, shortcuts to apps, and more.

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



The screen may appear differently depending on the region or service provider.

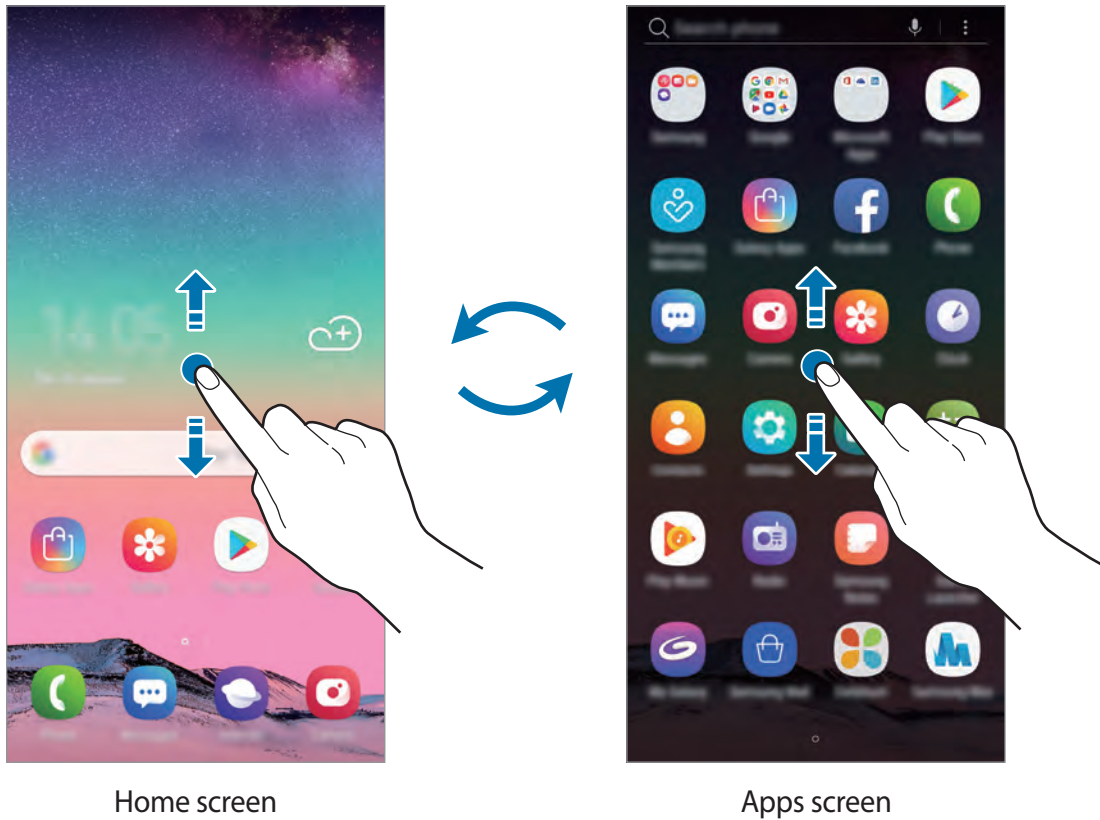


## Switching between Home and Apps screens

On the Home screen, swipe upwards or downwards to open the Apps screen.

To return to the Home screen, swipe upwards or downwards on the Apps screen.

Alternatively, tap the Home button or the Back button.



Home screen

Apps screen

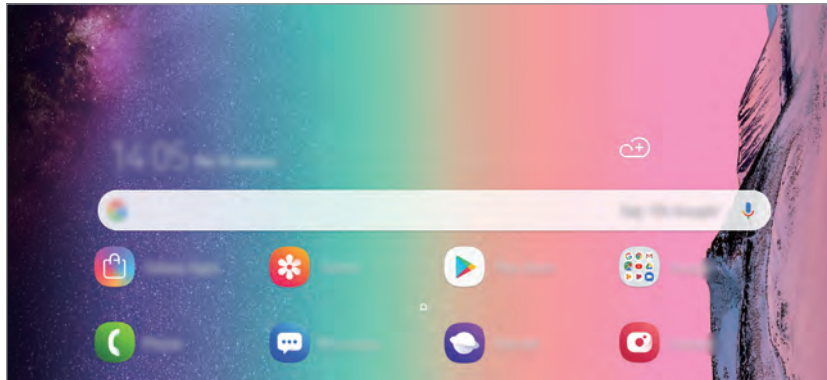
If you add the Apps button on the Home screen, you can open the Apps screen by tapping the button. On the Home screen, tap and hold an empty area and tap **Home screen settings** → **Apps button** → **Show Apps button** → **APPLY**. The Apps button will be added at the bottom of the Home screen.



## Display the screen in landscape mode

On the Home screen, tap and hold an empty area, tap **Home screen settings**, and then tap the **Portrait mode only** switch to deactivate it.

Rotate the device until it is horizontal to view the screen in landscape mode.



## Moving items

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

To add a shortcut to an app on the Home screen, tap and hold an item on the Apps screen, and then drag it to the top of the screen. A shortcut to the app will be added on the Home screen.

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

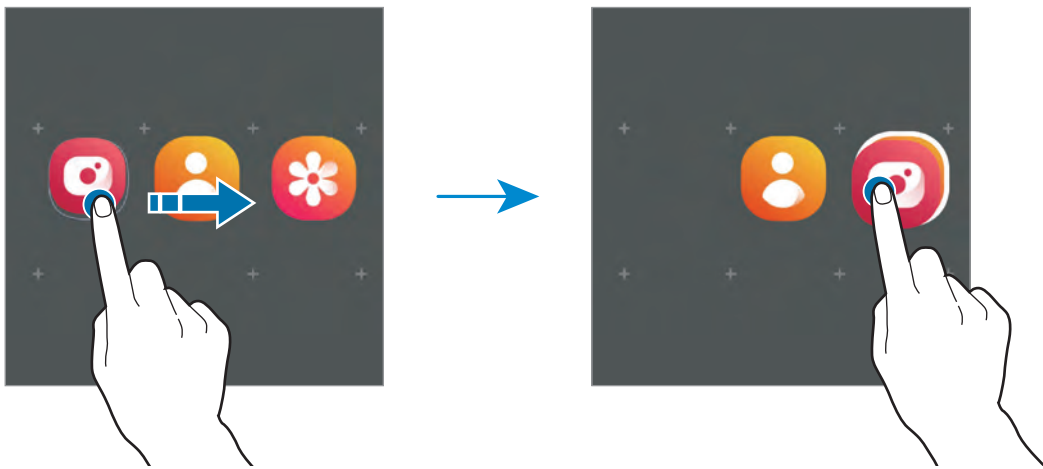
## Creating folders

Create folders and gather similar apps to quickly access and launch apps.

1 On the Home screen or the Apps screen, tap and hold an app, and then drag it over another app.

2 Drop the app when a folder frame appears around the apps.

A new folder containing the selected apps will be created. Tap **Enter folder name** and enter a folder name.



- **Adding more apps**

Tap **ADD APPS** on the folder. Tick the apps to add and tap **ADD**. You can also add an app by dragging it to the folder.

- **Moving apps from a folder**



Tap and hold an app to drag it to a new location.

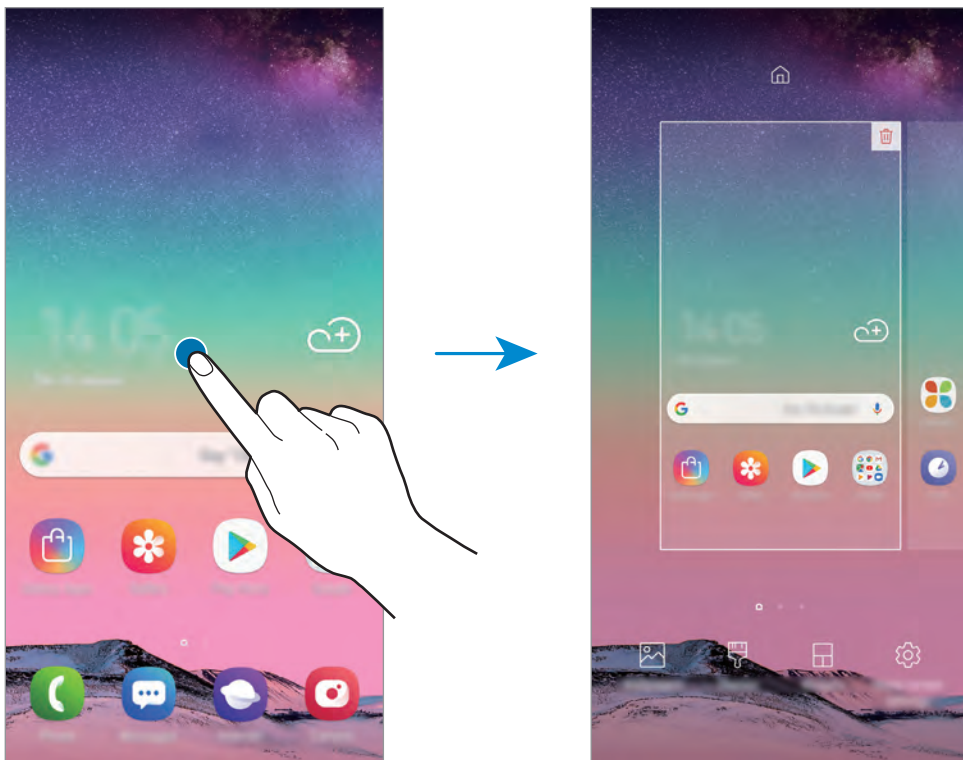
- **Deleting a folder**

Tap and hold a folder, and then tap **Delete folder**. Only the folder will be deleted. The folder's apps will be relocated to the Apps screen.

## Editing the Home screen

On the Home screen, tap and hold an empty area, or pinch your fingers together to access the editing options. You can set the wallpaper, add widgets, and more. You can also add, delete, or rearrange Home screen panels.

- Adding panels: Swipe to the left, and then tap .
- Moving panels: Tap and hold a panel preview, and then drag it to a new location.
- Deleting panels: Tap  on the panel.



- **Wallpapers:** Change the wallpaper settings for the Home screen and the locked screen.
- **Themes:** Change the device's theme. Visual elements of interface, such as colours, icons, and wallpapers, will change depending on the selected theme.
- **Widgets:** Widgets are small apps that launch specific app functions to provide information and convenient access on your Home screen. Tap and hold a widget, and then drag it to the Home screen. The widget will be added on the Home screen.
- **Home screen settings:** Change the size of the grid to display more or fewer items on the Home screen and more.

## Displaying all apps on the Home screen

Without using a separate Apps screen, you can set the device to display all apps on the Home screen. On the Home screen, tap and hold an empty area, and then tap **Home screen settings** → **Home screen layout** → **Home screen only** → **APPLY**.

You can now access all your apps by swiping to the left on the Home 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.
- Some indicator icons appear only when you open the notification panel.

Icon	Meaning
	No signal
	Signal strength
	Roaming (outside of normal service area)
	Preferred SIM or USIM card for calls (dual SIM models)
	GPRS network connected
	EDGE network connected
	UMTS network connected
	HSDPA network connected
	HSPA+ network connected
	LTE network connected

Icon	Meaning
	Wi-Fi connected
	Bluetooth feature activated
	Location services being used
	Call in progress
	Missed call
	New text or multimedia message
	Alarm activated
	Mute mode activated
	Vibration mode activated
	Flight mode activated
	Error occurred or caution required
	Battery charging
	Battery power level

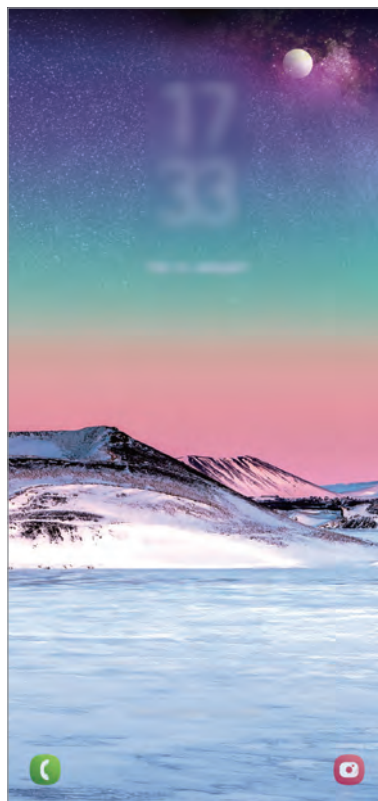


## Lock screen

Pressing the Power key 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, swipe in any direction when the screen turns on.

If the screen is off, press the Power key to turn on the screen.



Locked screen

## Setting the Lock screen stories

You can set the device to display various images and content on the locked screen. If this feature is activated, the content on the locked screen changes every time you turn on the screen.



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

1 Launch the **Settings** app, tap **Lock screen** → **Lock Screen Stories** and tap the switch to activate it.

2 Tap **Follow categories** and select the categories of the content you want to display on the locked screen. Or, tap **+** to add your own images.

To change the auto update settings for the stories, tap **Update Stories**, and then select an option.



You may incur additional charges when updating the stories via the mobile network.

## Changing the screen lock method

To change the screen lock method, launch the **Settings** app, tap **Lock screen** → **Screen lock type**, and then select a method.

When you set a pattern, PIN, password, or your biometric data for the screen lock method, you can protect your personal information by preventing others from accessing your device. After setting the screen lock method, the device will require an unlock code whenever unlocking it.

- **Swipe:** Swipe in any direction on the screen to unlock it.
- **Pattern:** Draw a pattern with four or more dots to unlock the screen.
- **PIN:** Enter a PIN with at least four numbers to unlock the screen.
- **Password:** Enter a password with at least four characters, numbers, or symbols to unlock the screen.
- **None:** Do not set a screen lock method.
- **Face:** Register your face to unlock the screen. Refer to [Face recognition](#) for more information.
- **Fingerprints:** Register your fingerprints to unlock the screen. Refer to [Fingerprint recognition](#) for more information.



You can set your device to perform a factory data reset if you enter the unlock code incorrectly several times in a row and reach the attempt limit. Launch the **Settings** app, tap **Lock screen** → **Secure lock settings**, unlock the screen using the preset screen lock method, and then tap the **Auto factory reset** switch to activate it.

## Screen capture

Capture a screenshot while using the device.

Use the following methods to capture a screenshot. Captured screenshots will be saved in **Gallery**.

- **Key capture:** Press and hold the Volume Down key and the Power key simultaneously.
- **Swipe capture:** Swipe your hand to the left or right across the screen.

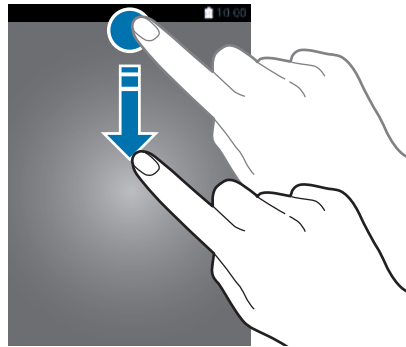


- Some methods may not be available depending on the region or service provider.
- It is not possible to capture a screenshot while using some apps and features.
- If capturing a screenshot by swiping is not activated, launch the **Settings** app, tap **Advanced features**, and then tap the **Palm swipe to capture** switch to activate it.

# Notification panel

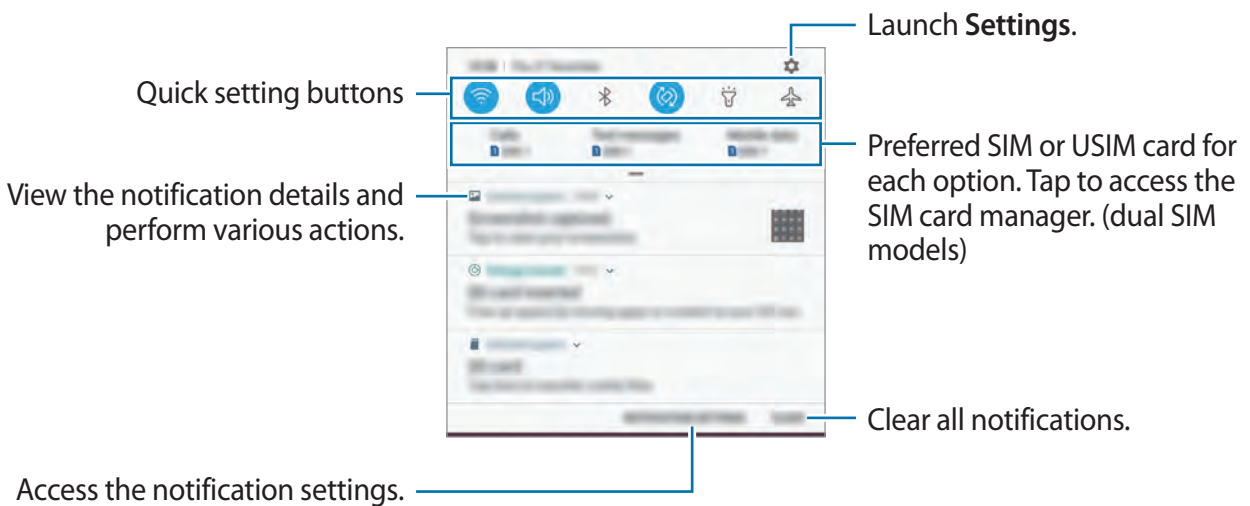
When you receive new notifications, such as messages or missed calls, indicator icons appear on the status bar. To see more information about the icons, open the notification panel and view the details.

To open the notification panel, drag the status bar downwards. To close the notification panel, swipe upwards on the screen.



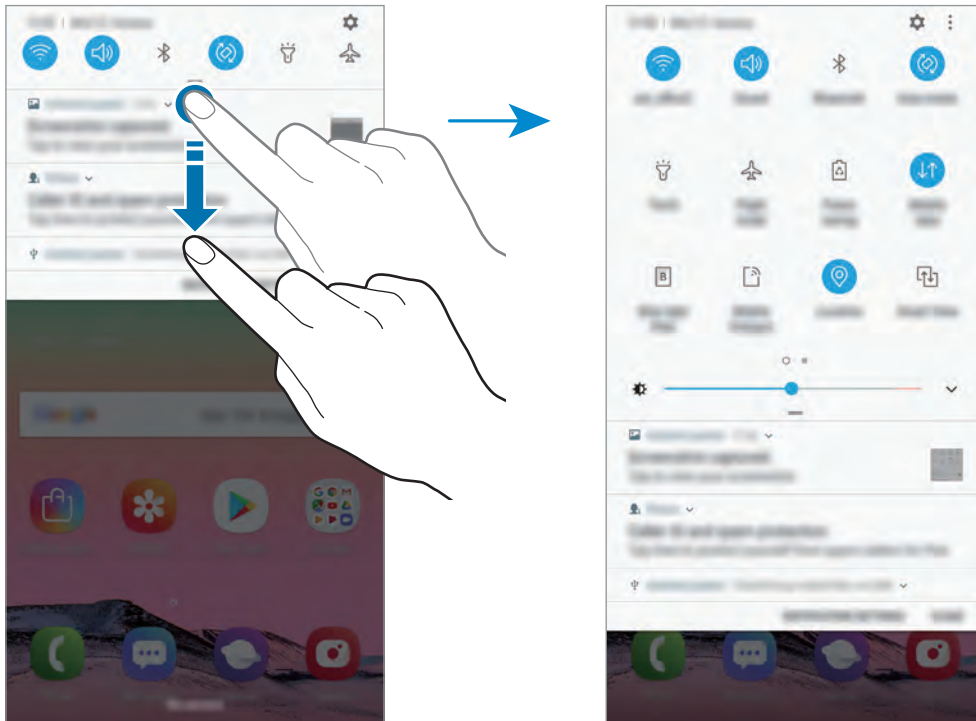
You can open the notification panel, even on the locked screen.

You can use the following functions on the notification panel.




## Using quick setting buttons

Tap quick setting buttons to activate certain features. Swipe downwards on the notification panel to view more buttons.



To change feature settings, tap the text under each button. To view more detailed settings, tap and hold a button.

To rearrange buttons, tap  → **Button order**, tap and hold a button, and then drag it to another location.

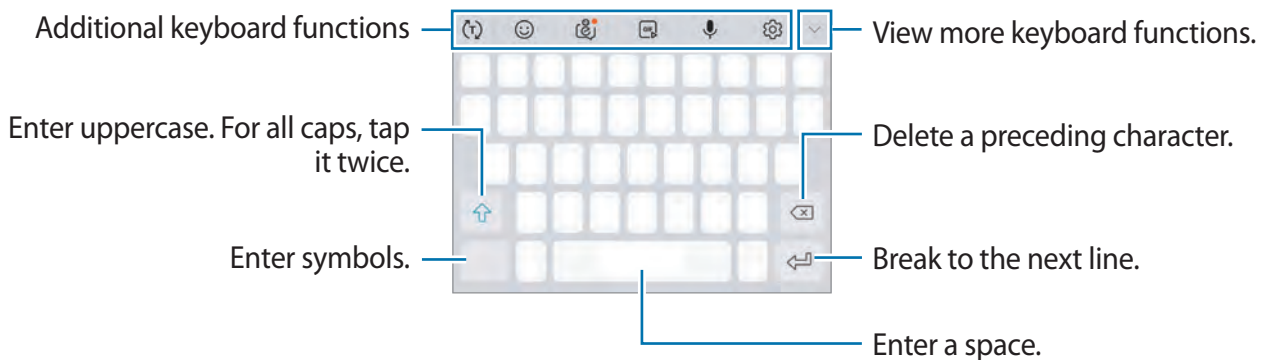
# Entering text

## Keyboard layout


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



- When the keyboard is opened for the first time, the keyboard setup screen will appear. Set the input language, keyboard type, and keyboard settings and then tap **START**.
- 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  → **Languages and types** → **MANAGE INPUT LANGUAGES**, and then select the languages to use. When you select two or more languages, you can switch between the input languages by swiping to the left or right on the space key.

## Changing the keyboard

Tap  to change the keyboard.

To change the keyboard type, tap  → **Languages and types**, select a language, and then select the keyboard type you want.














- If the keyboard button () does not appear on the navigation bar, launch the **Settings** app, tap **General management** → **Language and input**, and then tap the **Show Keyboard button** switch to activate it.
- On a **3x4 keyboard**, a key has three or four characters. To enter a character, tap the corresponding key repeatedly until the desired character appears.



## Additional keyboard functions



Some features may not be available depending on the region or service provider.






- : Predict words based on your input and show word suggestions. To return to the keyboard functions list, tap .
- : Enter emoticons.
- : Enter avatar stickers. Refer to [Enjoying avatar stickers while chatting](#) for more information.
- : Attach animated GIFs.
- : Enter text by voice.
- : Change the keyboard settings.
-  → : Enter stickers.
-  → : Change the keyboard for one-handed operation.

## 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 Tap and hold where the text is to be inserted and tap **Paste**.

## Dictionary

Look up definitions for words while using certain features, such as when browsing webpages.

- 1 Tap and hold over a word that you want to look up.  
If the word you want to look up is not selected, drag  or  to select the desired text.
- 2 Tap **Dictionary** on the options list.  
If a dictionary is not preinstalled on the device, tap **Move to Manage dictionaries** →  next to a dictionary to download it.
- 3 View the definition in the dictionary pop-up window.  
To switch to the full screen view, tap . Tap the definition on the screen to view more definitions. In the detailed view, tap  to add the word to your favourite words list or tap **Search Web** to use the word as a search term.



# Apps and features

## Installing or uninstalling apps

### Galaxy Apps

Purchase and download apps. You can download apps that are specialised for Samsung Galaxy devices.

Launch the **Galaxy Apps** app.



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

### Installing apps

Browse apps by category or tap the search field 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.

### Play Store

Purchase and download apps.


Launch the **Play Store** app.

### Installing apps

Browse apps by category or search for apps by 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

Tap and hold an app and select an option.

- **Disable:** Disable selected default apps that cannot be uninstalled from the device.
- **Uninstall:** Uninstall downloaded apps.

### Enabling apps

Launch the **Settings** app, tap **Apps** → ▼ → **Disabled**, select an app, and then tap **ENABLE**.

### Setting app permissions

For some apps to operate properly, they may need permission to access or use information on your device. When you open an app, a pop-up window may appear and request access to certain features or information. Tap **ALLOW** on the pop-up window to grant permissions to the app.

To view your app permission settings, launch the **Settings** app and tap **Apps**. Select an app and tap **Permissions**. You can view the app's permissions list and change its permissions.

To view or change app permission settings by permission category, launch the **Settings** app and tap **Apps** → ⋮ → **App permissions**. Select an item and tap the switches next to apps to grant permissions.






If you do not grant permissions to apps, the basic features of the apps may not function properly.

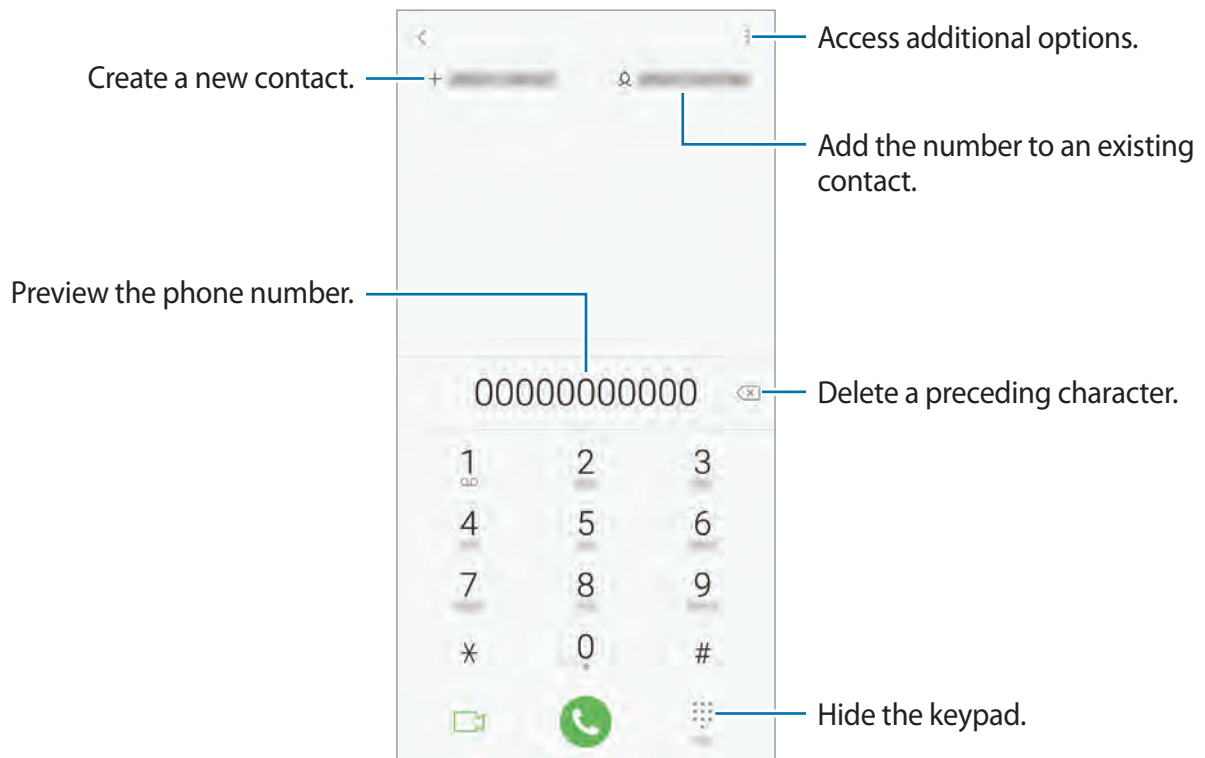
# Phone

## Introduction

Make or answer voice and video calls.

## Making calls

- 1 Launch the **Phone** app and enter a phone number.  
If the keypad does not appear on the screen, tap  to open the keypad.
- 2 Tap  to make a voice call, or tap  to make a video call.




## Making calls from call logs or contacts list

Tap **RECENTS** or **CONTACTS**, and then swipe to the right on a contact or a phone number to make a call.

If this feature is deactivated, launch the **Settings** app, tap **Advanced features**, and then tap the **Swipe to call or send messages** switch to activate it.

## Using speed dial

Set speed dial numbers to quickly make calls.

To set a number to speed dial, tap **CONTACTS** →  → **Speed dial numbers**, select a speed dial number, and then add a phone number.



To make a call, tap and hold a speed dial number on the keypad. For speed dial numbers 10 and up, tap the first digit(s) of the number, and then tap and hold the last digit.

For example, if you set the number **123** as a speed dial number, tap **1**, tap **2**, and then tap and hold **3**.

## Making calls from the locked screen

On the locked screen, drag  outside the circle.

## Making an international call

- 1 Tap  to open the keypad if the keypad does not appear on the screen.
- 2 Tap and hold **0** until the + sign appears.
- 3 Enter the country code, area code, and phone number, and then tap .

## 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 **SEND MESSAGE** bar upwards. If **Add reminder** is selected, a reminder will be saved to alert you of the rejected call one hour later.

To create various rejection messages, launch the **Phone** app, tap  → **Settings** → **Quick decline messages**, enter a message, and then tap .

### Missed calls


If a call is missed, the  icon appears on the status bar. Open the notification panel to view the list of missed calls. Alternatively, launch the **Phone** app and tap **RECENTS** to view missed calls.

## Blocking phone numbers

Block calls from specific numbers added to your block list.

1 Launch the **Phone** app and tap  → **Settings** → **Block numbers**.

2 Tap , select contacts, and then tap **DONE**.

To manually enter a number, tap **Enter phone number**, enter a phone number, and then tap .

When blocked numbers try to contact you, you will not receive notifications. The calls will be logged in the call log.



You can also block incoming calls from people that do not show their caller ID. Tap the **Block unknown callers** switch to activate the feature.

## Options during calls



If the area around the rear camera and the fingerprint recognition sensor is covered, unwanted noises may incur during a call. Remove accessories, such as a screen protector or stickers, around the rear camera area.

### During a voice call

The following actions are available:

- : Access additional options.
- **Add call:** Dial a second call. The first call will be put on hold. When you end the second call, the first call will be resumed.



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

- **Record:** Record a call conversation.



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

- **Extra volume:** Increase the volume.
- **Bluetooth:** Switch to a Bluetooth headset if it is connected to the device.
- **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.
- **Keypad / Hide:** Open or close the keypad.
- : End the current call.


### During a video call

Tap the screen to use the following options:

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

## Adding a phone number to Contact

### Adding a phone number to Contacts from the keypad

- 1 Launch the **Phone** app.
- 2 Enter the number.  
If the keypad does not appear on the screen, tap  to open the keypad.
- 3 Tap **CREATE CONTACT** to create a new contact, or tap **UPDATE EXISTING** to add the number to an existing contact.

### Adding a phone number to Contacts from the calls list

- 1 Launch the **Phone** app and tap **RECENTS**.
- 2 Tap a caller's image, or tap a phone number → **Details**.
- 3 Tap **Create contact** to create a new contact, or tap **Update existing** to add the number to an existing contact.

## Adding a tag to a phone number

You can add tags to numbers without saving them to Contact. This allows you to view the caller's information when they call without having them listed in Contact.

- 1 Launch the **Phone** app and tap **RECENTS**.
- 2 Tap a caller's image, or tap a phone number → **Details**.
- 3 Tap **Add tag**, enter a tag, and then tap **DONE**.  
When a call comes from that number, the tag will show under the number.


# Contacts

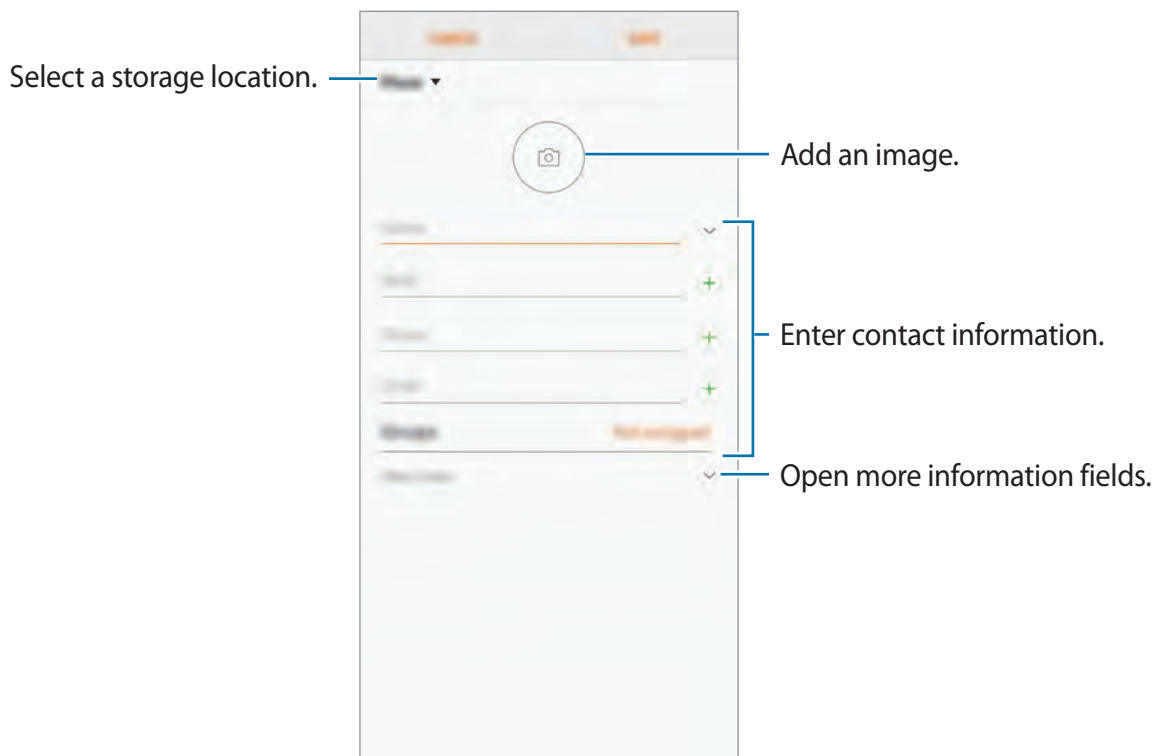
## Introduction

Create new contacts or manage contacts on the device.

## Adding contacts

### Creating a new contact

- 1 Launch the **Contacts** app, tap , and then select a storage location.
- 2 Enter contact information.




Depending on the selected storage location, the types of information you can save may vary.

- 3 Tap **SAVE**.




## Importing contacts

Add contacts by importing them from other storages to your device.

- 1 Launch the **Contacts** app and tap  → **Manage contacts** → **Import/Export contacts** → **IMPORT**.
- 2 Select a storage location to import contacts from.
- 3 Tick VCF files or contacts to import and tap **DONE**.
- 4 Select a storage location to save contacts to and tap **IMPORT**.

## Syncing contacts with your web accounts

Sync your device contacts with online contacts saved in your web accounts, such as your Samsung account.

- 1 Launch the **Settings** app, tap **Cloud and accounts** → **Accounts** and select the account to sync with.
- 2 Tap **Sync account** and tap the **Sync Contacts** switch to activate it.  
For the Samsung account, tap  → **Sync settings** and tap the **Contacts** switch to activate it.

## Searching for contacts

Launch the **Contacts** app.

Use one of the following search methods:


- Scroll up or down the contacts list.
- Drag a finger along the index at the right side of the contacts list to scroll through it quickly.
- Tap the search field at the top of the contacts list and enter search criteria.

Tap the contact's image, or tap the contact's name → **Details**. Then take one of the following actions:

- ★: Add to favourite contacts.
- 📞 / 📺: Make a voice or video call.
- 💬: Compose a message.
- ✉️: Compose an email.

## Sharing contacts

You can share contacts with others by using various sharing options.


- 1 Launch the **Contacts** app and tap  → **Share**.
- 2 Select contacts and tap **SHARE**.
- 3 Select a sharing method.

## Saving and sharing profile

Save and share your profile information, such as your photo and status message, with others using the profile sharing feature.



- The profile sharing feature may not be available depending on the region or service provider.
- The profile sharing feature is only available for contacts who have activated the profile sharing feature on their device.

- 1 Launch the **Contacts** app and select your profile.
- 2 Tap **EDIT**, edit your profile, and tap **SAVE**.
- 3 Tap  → **Profile sharing**, and then tap the switch to activate it.

To use the profile sharing feature, your phone number must be verified. You can view your contacts' updated profile information in **Contacts**.

To change the scope of contacts to share your profile with, tap **Share with**, select an item to share, and then select an option.

## Creating groups

You can add groups, such as family or friends, and manage contacts by group.

- 1 Launch the **Contacts** app and tap **Groups** → **CREATE**.
- 2 Enter a group name.  
To set a group ringtone, tap **Group ringtone** and select a ringtone.
- 3 Tap **Add member**, select contacts to add to the group, and then tap **DONE**.
- 4 Tap **SAVE**.

## Sending a group message

You can send a group message to a group's members at the same time.


Launch the **Contacts** app, tap **Groups**, select a group, and then tap  → **Send message**.


## Merging duplicate contacts

When you import contacts from other storages, or sync contacts with other accounts, your contacts list may include duplicate contacts. Merge duplicate contacts into one to streamline your contacts list.

- 1 Launch the **Contacts** app and tap  → **Manage contacts** → **Merge contacts**.
- 2 Tick contacts and tap **MERGE**.

## Deleting contacts

- 1 Launch the **Contacts** app and tap  → **Delete**.
- 2 Select contacts and tap **DELETE**.

To delete contacts one by one, open the contacts list and tap a contact's image or tap a contact's name → **Details**. Then tap  → **Delete**.

# Messages


## Introduction


Send and view messages by conversation.

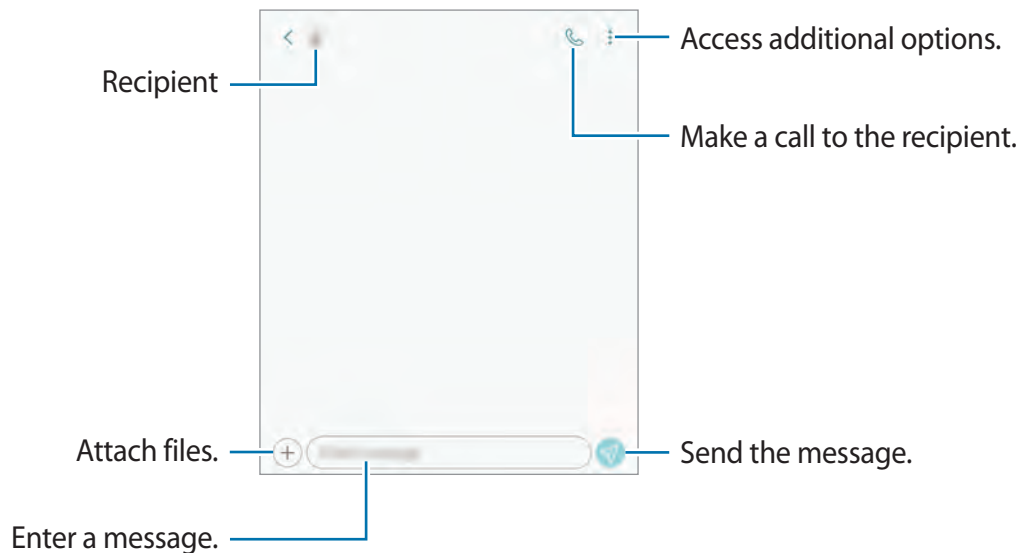
## Sending messages



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

- 1 Launch the **Messages** app and tap .
- 2 Add recipients and tap **START**.
- 3 Enter a message.


To record and send a voice message, tap and hold , say your message, and then release your finger. The recording icon appears only while the keyboard is hidden.



- 4 Tap  to send the message.

## Enjoying avatar stickers while chatting

You can use avatar stickers during a conversation via messages or on a social network.

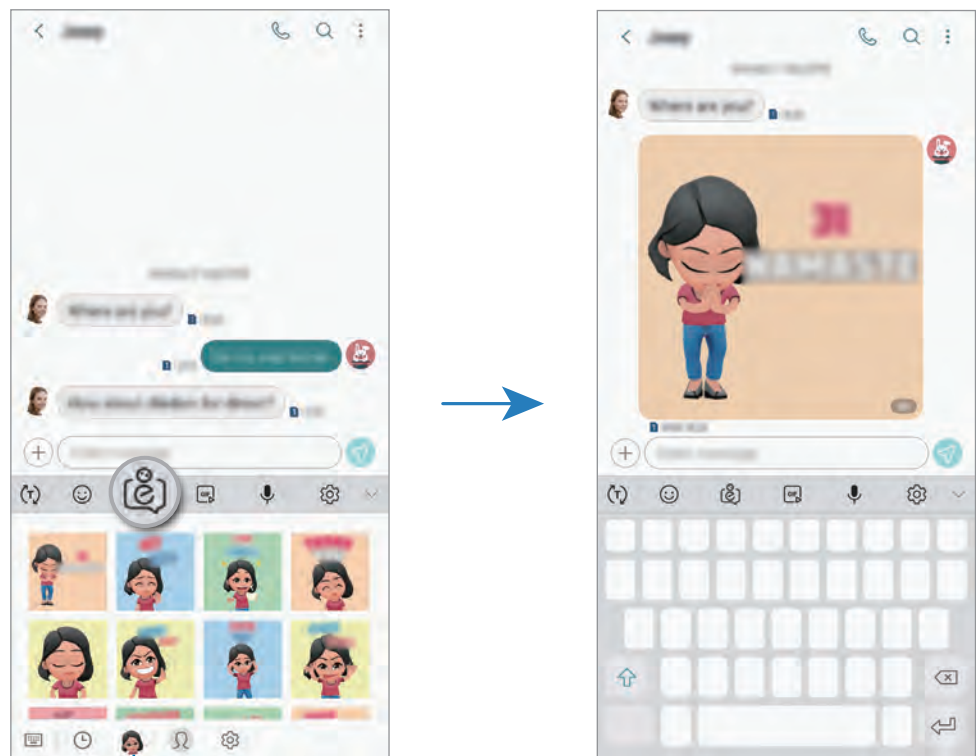
1 On the Samsung keyboard, tap .

 If you are using this feature for the first time, tap **GET STARTED!** and decorate your avatar.

2 Tap the avatar icon.



3 Select one of the avatar stickers.

The avatar sticker will be inserted.





Avatar icon

## Adding avatar stickers

On the Samsung keyboard, tap  and tap  at the bottom of the keyboard. To edit details, such as the clothes, face shape or glasses, tap **CREATE NEW AVATAR**. When you are finished editing the characters, tap **SAVE**. Then, avatar stickers will be automatically generated.

## Deleting avatar stickers


On the Samsung keyboard, tap  and tap  at the bottom of the keyboard. Select the avatar stickers you want to delete and tap **DELETE**.

## Viewing messages

Messages are grouped into message threads by contact.





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

- 1 Launch the **Messages** app.
- 2 On the messages list, select a contact.
- 3 View your conversation.  
To reply to the message, tap **Enter message**, enter a message, and then tap .  
To adjust the font size, spread two fingers apart or pinch on the screen.

## Blocking unwanted messages

Block messages from specific numbers added to your block list.

- 1 Launch the **Messages** app and tap  → **Settings** → **Block numbers and messages** → **Block numbers**.
- 2 Tap **INBOX** and select a contact. Or, tap **CONTACTS**, select contacts, and then tap **DONE**.  
To manually enter a number, tap **Enter number**, enter a phone number, and then tap .

## Setting the message notification

You can change notification sound, display options, and more.

- 1 Launch the **Messages** app, tap **⋮** → **Settings** → **Notifications**, and then tap the switch to activate it.
- 2 Change the notification settings.

## Setting a message reminder

You can set an alert at an interval to let you know that you have unchecked notifications. If this feature is not activated, launch the **Settings** app, tap **Accessibility** → **Notification reminder**, and then tap the switch to activate it. Then, tap the **Messages** switch to activate it.

## Deleting messages

- 1 Launch the **Messages** app.
- 2 On the messages list, select a contact.
- 3 Tap and hold a message, tap **Delete**.  
To delete multiple messages, tick messages you want to delete.
- 4 Tap **DELETE**.

# Internet

## Introduction

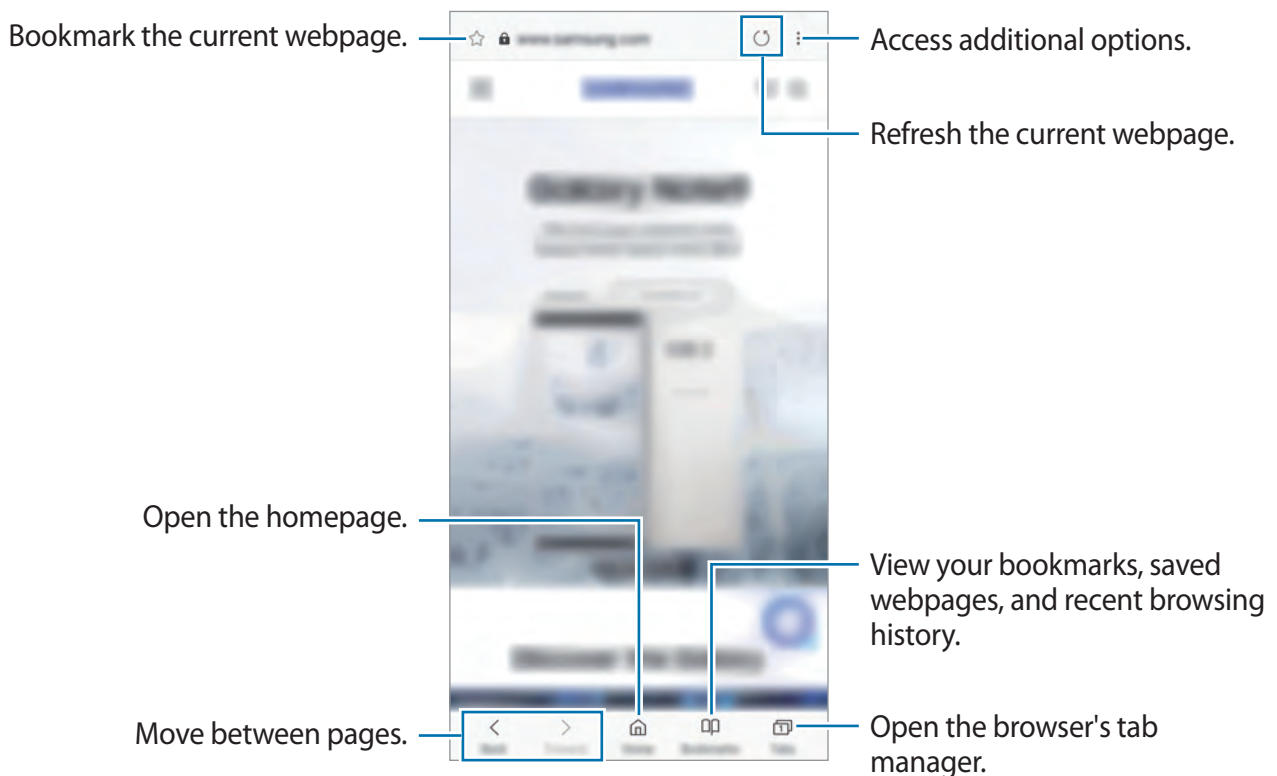
Browse the Internet to search for information and bookmark your favourite webpages to access them conveniently.

## Browsing webpages

- 1 Open the **Samsung** folder and launch the **Internet** app.
- 2 Tap the address field.
- 3 Enter the web address or a keyword, and then tap **Go**.

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

To switch between tabs quickly, swipe to the left or right on the address field.





## Using secret mode

In secret mode, you can separately manage open tabs, bookmarks, and saved pages. You can lock secret mode using a password and your fingerprint.

### Activating secret mode

In the toolbar at the bottom of the screen, tap **Tabs** → **TURN ON SECRET MODE**. If you are using this feature for the first time, set whether to use a password for secret mode.


In secret mode, the device will change the colour of the toolbars.



In secret mode, you cannot use some features, such as screen capture.

### Changing security settings

You can change your password or the lock method.

Tap  → **Settings** → **Privacy** → **Secret mode security** → **Change password**. To set your registered fingerprint as the lock method along with the password, tap the **Fingerprints** switch to activate it. Refer to [Fingerprint recognition](#) for more information about using your fingerprints.

### Deactivating secret mode



In the toolbar at the bottom of the screen, tap **Tabs** → **TURN OFF SECRET MODE**.




# Email

## Setting up email accounts


Set up an email account when opening **Email** for the first time.

- 1 Open the **Samsung** folder and launch the **Email** app.
- 2 Enter the email address and password, and then tap **SIGN IN**.  
To manually register an email account, tap **MANUAL SETUP**.
- 3 Follow the on-screen instructions to complete the setup.

To set up another email account, tap  →  → **Add account**.

If you have more than one email account, you can set one as the default account. Tap  →  →  → **Set default account**.

## Sending emails



- 1 Tap  to compose an email.
- 2 Add recipients and enter a subject line and text.
- 3 Tap **SEND** to send the mail.

## Reading emails

When **Email** is open, the device will automatically retrieve new emails. To manually retrieve emails, swipe downwards on the top of the emails list.

Tap an email on the screen to read it.



If email syncing is disabled, new emails cannot be retrieved. To enable email syncing, tap  →  → your account name, and then tap the **Sync account** switch to activate it.

# Camera

## Introduction


Take photos and record videos using various modes and settings.

### 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.

## Launching Camera

Use the following methods to launch Camera:



- Launch the **Camera** app.
- Press the Power key twice quickly.
- On the locked screen, drag  outside the circle.

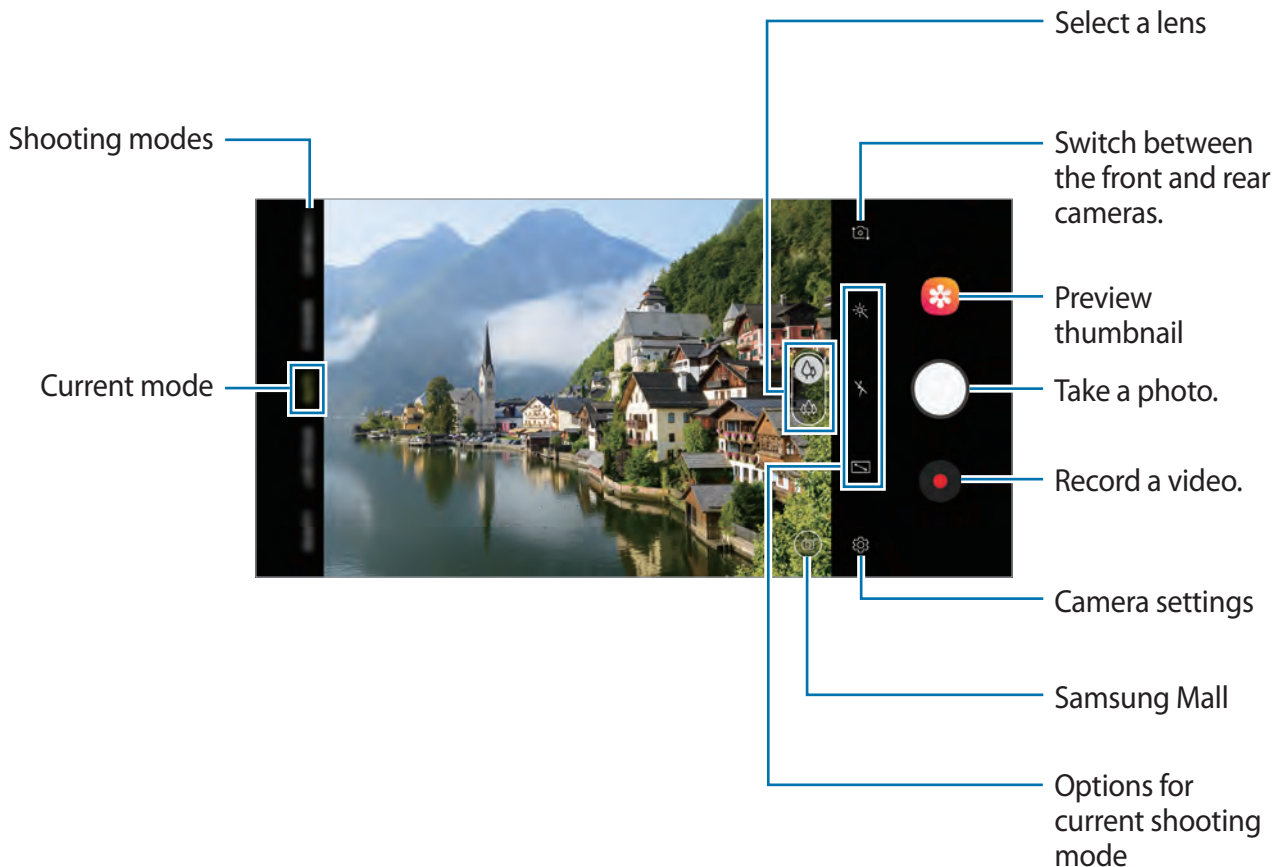





- Some methods may not be available depending on the region or service provider.
- Some camera features are not available when you launch the **Camera** app from the locked screen or when the screen is turned off while the screen lock method is set.
- If photos you take appear blurry, clean the camera lens and try again.

## Basic shooting

### Taking photos or recording videos

- 1 Tap the image on the preview screen where the camera should focus.
- 2 Tap  to take a photo or tap  to record a video.



- To adjust the brightness of photos or videos, tap the screen. When the adjustment bar appears, drag  on the adjustment bar towards **+** or **-**.
- To capture an image from the video while recording, tap .
- To change the focus while recording a video, tap where you want to focus. To use auto focus mode, tap .



- The preview screen may vary depending on the shooting mode and which camera is being used.
- The camera automatically shuts off when unused.
- Make sure that the lens is not damaged or contaminated. Otherwise, the device may not work properly in some modes that require high resolutions.
- Your device's camera features a wide-angle lens. Minor distortion may occur in wide-angle photos or videos and does not indicate device performance problems.



## Selecting a lens for shooting

Take a photo or record a video after selecting the camera lens you want.

On the preview screen, select a lens.



This feature is available only in **AUTO** mode.

-  : You can take a basic photo or record a normal video with the normal lens.
-  : You can take a photo or record a video of a larger scene clearly with the Ultra wide lens.



 Basic shooting



 Ultra wide lens shooting

## Zooming in and out

Use various methods to zoom in or out.



- Spread two fingers apart on the screen to zoom in, and pinch to zoom out.



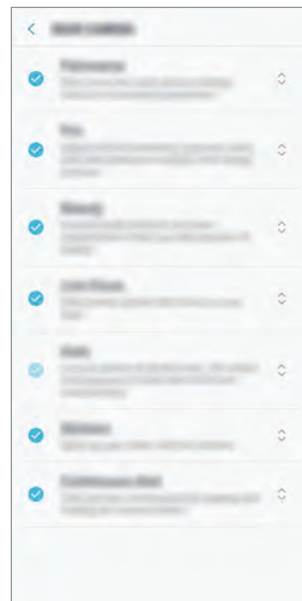
Zooming features are available only when using the rear camera.

## Editing the shooting modes list

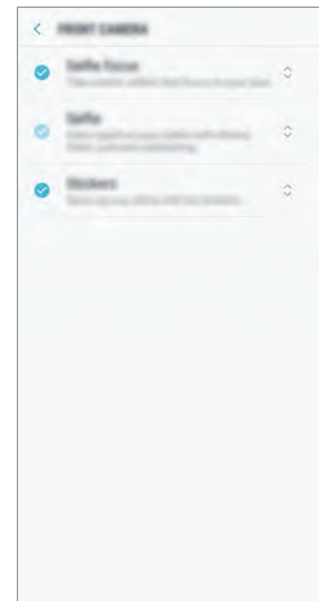
You can edit the shooting modes list on the preview screen.

- 1 On the preview screen, tap  → **Edit camera modes** → **Rear camera** or **Front camera**.  
Alternatively, tap and hold the shooting modes list on the preview screen.
- 2 Tick modes to use.  
To change the order of shooting modes, drag  to another location.

Shooting modes list




Rear camera




Front camera

## Adding another camera button

Add another camera button to the location you want on the screen to capture photos more conveniently.

Drag  to the preview screen.



If another camera button is not added, tap  on the preview screen and tap the **Floating Camera button** switch to activate it.

## Locking the focus (AF) and exposure (AE)

You can lock the focus or exposure on a selected area to prevent the camera from automatically adjusting based on changes to the subjects or light sources.

Tap and hold the area to focus, the AF/AE frame will appear on the area and the focus and exposure setting will be locked. The setting remains locked even after you take a photo.



This feature is available only in **AUTO** and **PRO** modes.

## Using shooting modes

To change the shooting mode, drag the shooting modes list to the left or right, or swipe to the left or right on the preview screen.

Select a shooting mode you want.

### Auto mode

Auto mode allows the camera to evaluate the surroundings and determine the ideal mode for the photo.

On the shooting modes list, tap **AUTO**.

### Live focus mode

Take photos that focus on the face by blurring the background.

1 On the shooting modes list, tap **LIVE FOCUS**.

2 Face the camera lens.

3 Tap  to take a photo.

### Applying beauty effects

You can adjust the skin tone before taking portraits.

1 On the preview screen, tap .

2 Select the options to apply beauty effects and take a photo.



## Beauty mode



Take a photo with lightened skin tone and modified facial features.

On the shooting modes list, tap **BEAUTY**.




To apply beauty effect, tap  and select options.

## Pro mode

Capture photos and videos while manually adjusting various shooting options, such as exposure value and ISO value.

On the shooting modes list, tap **PRO**. Select options and customise the settings, and then tap  to take a photo or tap  to record a video.

### Available options

-  : Change the exposure value. This determines how much light the camera's sensor receives. For low-light situations, use a higher exposure.
-  : Select an ISO value. This controls camera light sensitivity. Low values are for stationary or brightly lit objects. Higher values are for fast-moving or poorly lit objects. However, higher ISO settings can result in noise in photos.
-  : Select an appropriate white balance, so images have a true-to-life colour range. You can set the colour temperature.



## Panorama mode

Using panorama mode, take a series of photos and then stitch them together to create a wide scene.




To get the best shots using panorama mode, follow these tips:

- Move the camera slowly in one direction.
- Keep the image within the frame on the camera's viewfinder. If the preview image is out of the guide frame or you do not move the device, the device will automatically stop taking photos.
- Avoid taking photos of indistinct backgrounds, such as an empty sky or a plain wall.


- 1 On the shooting modes list, tap **PANORAMA**.
- 2 Tap  and move the device slowly in one direction.
- 3 Tap  to stop taking photos.

## Stickers mode

Capture photos with various live stickers. As you move your face, stickers will track with your movements.

- 1 On the shooting modes list, tap **STICKERS**.
- 2 Tap  and select a sticker you want.



- 3 Tap  to take a photo.

### Applying stickers randomly

You can apply stickers randomly, instead of selecting one from the stickers list. Tap **Random** repeatedly until the sticker you want appears.

## Continuous shot mode

Take a series of photos of moving subjects.

On the shooting modes list, tap **CONTINUOUS SHOT**.

Tap and hold  to take several photos continuously.

## Scene optimiser mode

Your device will adjust the colour settings automatically after recognising a subject or scene, such as people, food, or night scene.

When the camera recognises the subject or scene, an icon will appear on the screen and the optimised colour will be applied.

On the shooting modes list, tap **SCENE OPTIMISER**.





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

View information.




## Selfie mode

Take self-portraits with the front camera. You can preview various beauty effects on the screen.

- 1 On the preview screen, swipe upwards or downwards, or tap  to switch to the front camera for self-portraits.
- 2 On the shooting modes list, tap **SELFIE**.
- 3 Face the front camera lens.
- 4 Tap  to take a photo.  
Alternatively, show your palm to the front camera. After recognising your palm, a countdown timer will appear. When the time is up, the device will take a photo.

## Applying beauty effects

You can modify facial features, such as your skin tone or face shape, before taking self-portraits.

- 1 On the preview screen, tap .
- 2 Select the options to apply beauty effects to your face and take a photo of yourself.








## Customising camera settings

### Options for current shooting mode


On the preview screen, use the following options.



The available options may vary depending on the shooting mode and which camera is being used.

- : Turn on and off the full preview screen.
- : Activate or deactivate the flash.
- : Select a filter effect to use when taking photos or recording videos.
- : Select a metering method. This determines how light values are calculated.  **Centre-weighted** uses the light in the centre portion of the shot to calculate the exposure of the shot.  **Spot** uses the light in a concentrated centre area of the shot to calculate the exposure of the shot.  **Matrix** averages the entire scene.

### Camera settings

On the preview screen, tap . Some options may not be available depending on the shooting mode.


#### REAR CAMERA

- **Picture size:** Select a resolution for photos. Using a higher resolution will result in higher quality photos, but they will take up more memory.
- **Video size:** Select a resolution for videos. Using a higher resolution will result in higher quality videos, but they will take up more memory.
- **Timer:** Select the length of the delay before the camera automatically takes a photo.
- **HDR (rich tone):** Take photos with rich colours and reproduce details even in bright and dark areas.
- **Watermark:** Add a watermark in the bottom left corner when taking pictures.

## FRONT CAMERA

- **Picture size:** Select a resolution for photos. Using a higher resolution will result in higher quality photos, but they will take up more memory.
- **Video size:** Select a resolution for videos. Using a higher resolution will result in higher quality videos, but they will take up more memory.
- **Timer:** Select the length of the delay before the camera automatically takes a photo.
- **HDR (rich tone):** Take photos with rich colours and reproduce details even in bright and dark areas.
- **Save pictures as previewed:** Invert the image to create a mirror-image of the original scene, when taking photos with the front camera.
- **Show palm:** Set the device to take a photo when the camera recognises your palm.

## COMMON

- **Edit camera modes:** View available shooting modes or edit the shooting modes list.
  - **Grid lines:** Display viewfinder guides to help composition when selecting subjects.
  - **Location tags:** Attach a GPS location tag to the photo.
-  GPS signal strength may decrease in locations where the signal is obstructed, such as between buildings or in low-lying areas, or in poor weather conditions.
  - Your location may appear on your photos when you upload them to the Internet. To avoid this, deactivate the location tag setting.
- **Review pictures:** Set the device to show photos after capturing them.
  - **Quick launch:** Set the device to launch the camera by pressing the Power key twice quickly.



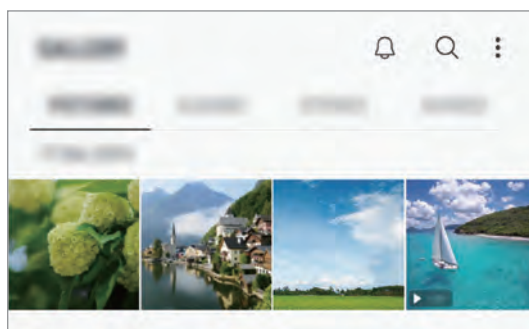
This feature may not be available depending on the region or service provider.

- **Storage location:** Select the memory location for storage. This feature will appear when you insert a memory card.
- **Floating Camera button:** Add a camera button that you can place anywhere on the screen.
- **Press Volume key to:** Set the device to use the Volume key to control the shutter, zoom in or out, or adjust the volume level for system sounds.
- **Reset settings:** Reset the camera settings.
- **Contact us:** Ask questions or view frequently asked questions. Refer to [Samsung Members](#) for more information.

## Gallery

### Introduction

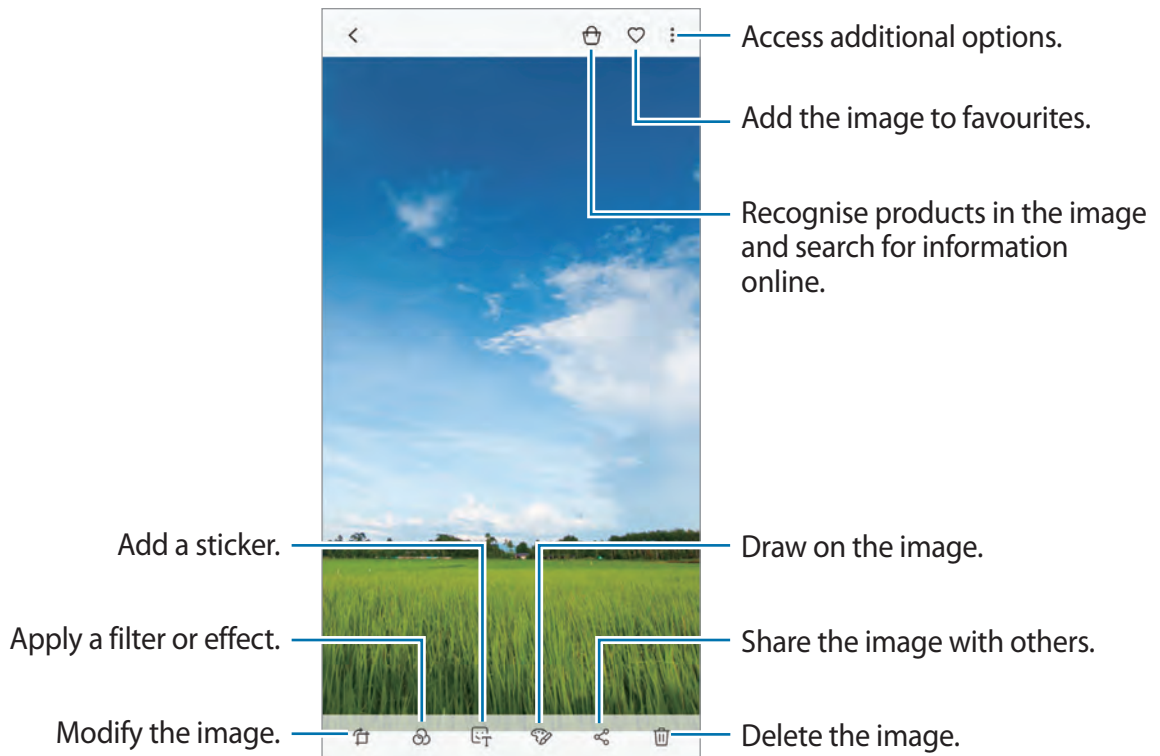
View images and videos stored in your device. You can also manage images and videos by album or create stories.



## Viewing images

1 Launch the **Gallery** app and tap **PICTURES**.

2 Select an image.



You can create a GIF animation or collage from multiple images. Tap **⋮** → **Create GIF** or **Create collage**, and then select images.

## Searching for images

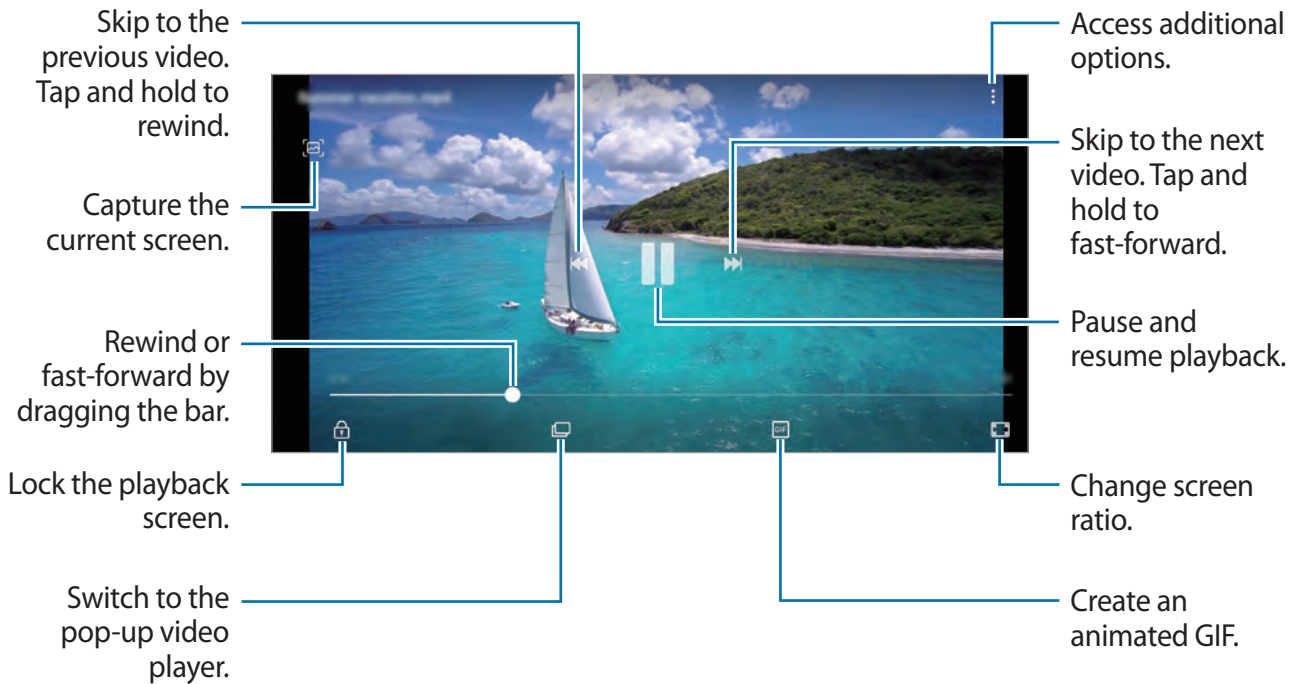
Launch the **Gallery** app and tap **Q** to view images sorted by category, such as types, locations, or documents.

To search for images by entering keywords, tap the search field.



## Viewing videos

- 1 Launch the **Gallery** app and tap **PICTURES**.
- 2 Select a video to play. Video files show the ► icon on the preview thumbnail.
- 3 Tap ► to play the video.



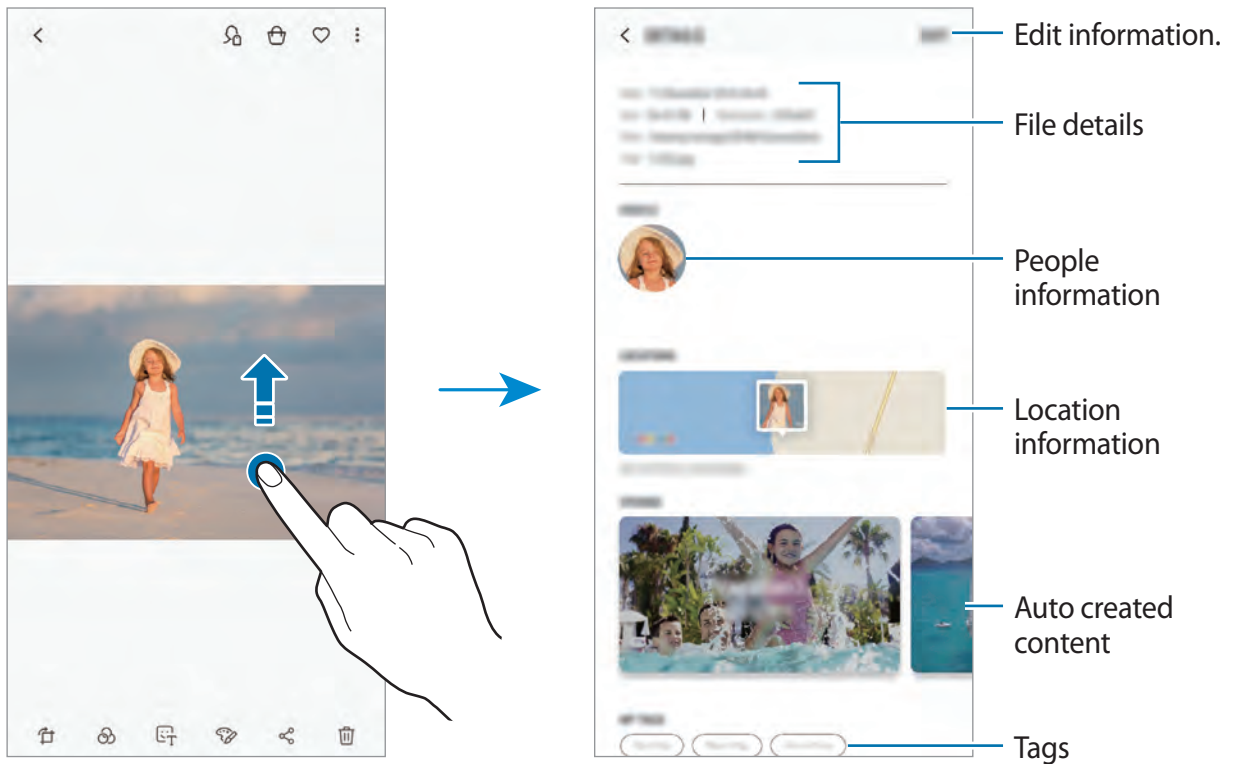
Drag your finger up or down on the left side of the playback screen to adjust the brightness, or drag your finger up or down on the right side of the playback screen to adjust the volume. To rewind or fast-forward, swipe to the left or right on the playback screen.

## Viewing the details of images and videos

You can view file details, such as people, location, and basic information. If there is auto created content, such as a story or a GIF, the content will also be displayed.

While viewing an image or on the video preview screen, drag upwards on the screen. File details will appear.

You can also view related content by tapping information on the screen.



## Viewing albums

You can view your images and videos sorted by folders or albums. The animations or collages you have created will also be sorted in your folders on the albums list.

Launch the **Gallery** app, tap **ALBUMS**, and then select an album.

## Hiding albums

You can hide albums.



You cannot hide albums created by default, such as the **Camera** and **Screenshots** albums.

1 Launch the **Gallery** app and tap **ALBUMS**.

2 Tap → **Hide or unhide albums**.

3 Select albums to hide and tap **APPLY**.

To show albums again, tap → **Hide or unhide albums**, deselect albums to show, and then tap **APPLY**.

## Viewing stories

When you capture or save images and videos, the device will read their date and location tags, sort the images and videos, and then create stories. To create stories automatically, you must capture or save multiple images and videos.

Launch the **Gallery** app, tap **STORIES**, and then select a story.

## Creating stories



Create stories with various themes.

1 Launch the **Gallery** app and tap **STORIES**.

2 Tap → **Create story**.

- 3 Enter a title for the story and tap **CREATE**.
- 4 Tick images or videos to include in the story and tap **DONE**.

To add images or videos to a story, select a story and tap **ADD**.

To remove images or videos from a story, select a story, tap  → **Edit**, tick images or videos to remove, and then tap  → **Remove from story**.

## Deleting stories

- 1 Launch the **Gallery** app and tap **STORIES**.
- 2 Tap and hold a story to delete, and tap **DELETE**.


## Sharing albums

Create albums and share them with your family and friends saved in your contacts. They can view shared albums on devices signed in to their Samsung account, such as smartphones, TVs, or refrigerators.



- To use this feature, your phone number must be verified.
- To use this feature, you must register and sign in to your Samsung account.
- You may incur additional charges when sharing files via the mobile network.

## Creating albums to share

- 1 Launch the **Gallery** app and tap **SHARED**.  
When you use this feature for the first time, tap **GET STARTED** and agree to the terms and conditions of Samsung Social.
- 2 Tap .

**3** Enter a title for the album.

**4** Select a group to share with.

If you want to create a group, tap **Add group**, enter a group name, and select contacts to add to the group.

**5** Tap **DONE**.

The recipients will receive a notification.

## Adding images or videos to an album

**1** Launch the **Gallery** app and tap **SHARED**.

**2** Select an album to add images or videos.

**3** Tap **ADD** and tick images or videos to add.

**4** Tap **DONE**.

## Deleting images or videos

### Deleting an image or a video

Select an image or a video and tap  at the bottom of the screen.

### Deleting multiple images and videos

**1** On the Gallery screen, tap and hold an image or a video to delete.

**2** Tick the images or videos to delete.

**3** Tap **DELETE**.

## Always On Display

You can always view information, such as the clock or calendar, or control music playback on the screen when it is turned off.

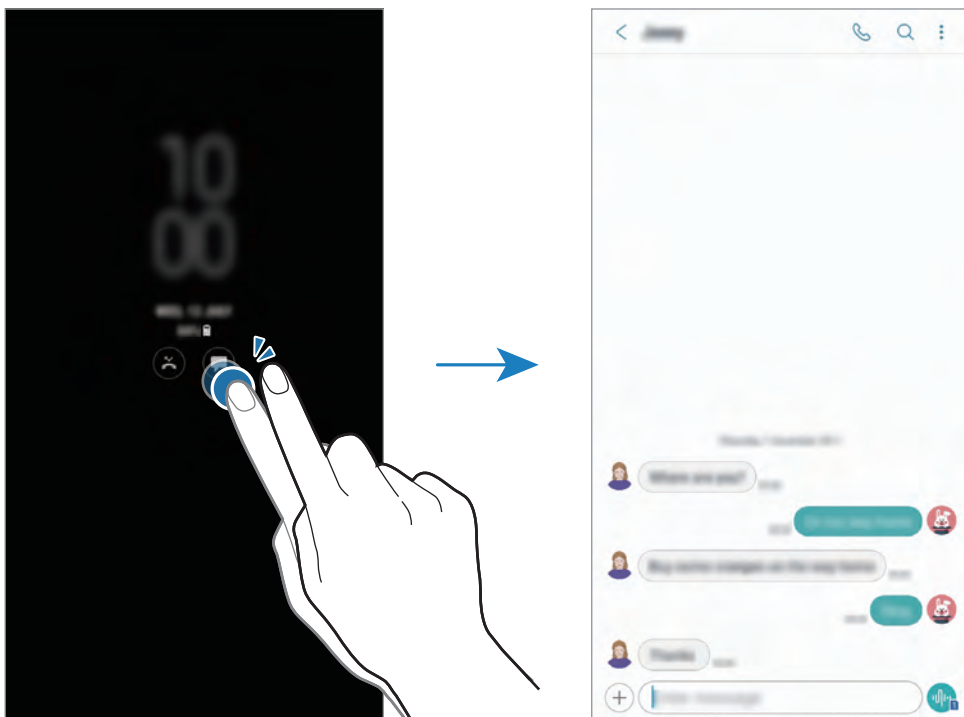
You can also check notifications for new messages or missed calls.



- This feature may not be available depending on the region or service provider.
- The brightness of the Always On Display may change automatically depending on the lighting conditions.
- If the sensor at the top of the device is covered for a certain period, the Always On Display will turn off.

### Opening notifications on the Always On Display

When you receive message, missed call, or app notifications, notification icons will appear on the Always On Display. Double-tap a notification icon to view its notification.



If the screen is locked, you must unlock it to view notifications.

## Controlling music playback on the Always On Display

You can control music playback on the Always On Display.

- 1 Launch the **Settings** app, tap **Lock screen** → **FaceWidgets**, and then tap the **Music Controller** switch to activate it.
- 2 To control music playback on the Always On Display, double-tap the clock.
- 3 Swipe to the left or right on the clock to move to the music controller.
- 4 Tap the icons to control the playback.

## Deactivating the Always On Display feature

Launch the **Settings** app, tap **Lock screen**, and then tap the **Always On Display** switch to deactivate it.

# Multi window

## Introduction

Multi window lets you run two apps at the same time in the split screen view. You can also run multiple apps at the same time in the pop-up view.



Some apps may not support this feature.




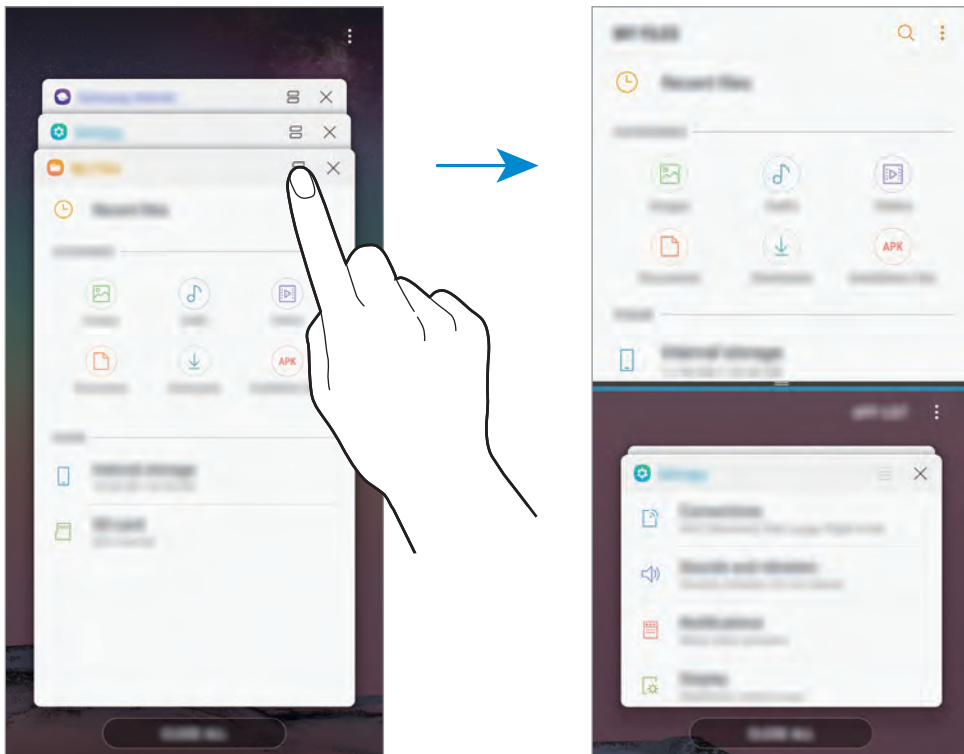
Split screen view



Pop-up view

## Split screen view

- 1 Tap the Recents button to open the list of recently used apps.
- 2 Swipe upwards or downwards and tap  on a recent app window.  
The selected app will launch in the upper window.

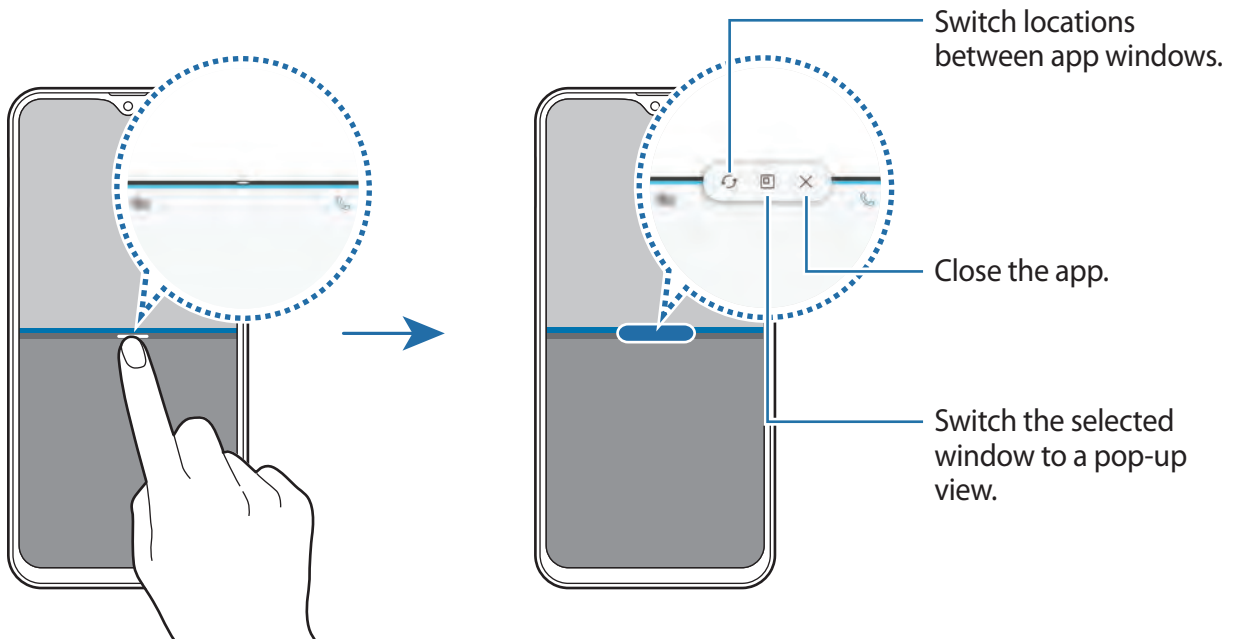


- 3 In the lower window, swipe upwards or downwards to select another app to launch.  
To launch apps not in the list of recently used apps, tap **APP LIST** and select an app.



## Using additional options

Tap the bar between the app windows to access additional options.




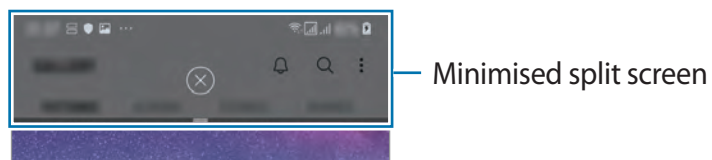
## Adjusting the window size

Drag the bar between the app windows up or down to adjust the size of the windows.

When you drag the bar between the app windows to the top or bottom edge of the screen, the window will be maximised.

## Minimising the split screen view

Tap the Home button to minimise the split screen view. The  icon will appear on the status bar. The app in the lower window will close and the app in the upper window will remain active in the minimised split screen view.

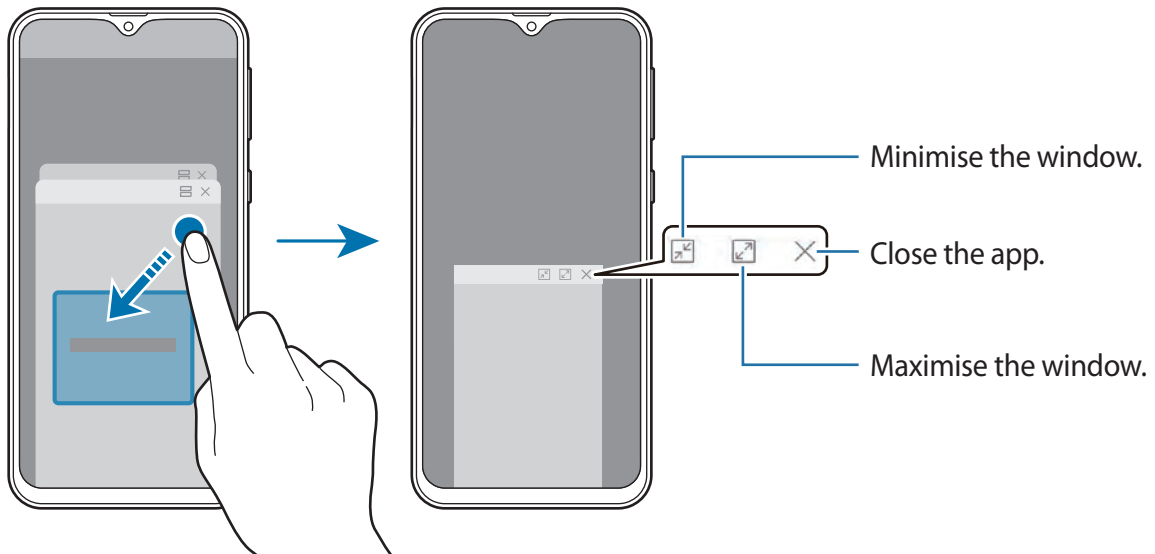


To close the minimised split screen view, tap .

## Pop-up view

- 1 Tap the Recents button to open the list of recently used apps.
- 2 Swipe upwards or downwards, tap and hold an app window, and then drag it to **Drop here for pop-up view**.

The app screen will appear in the pop-up view.

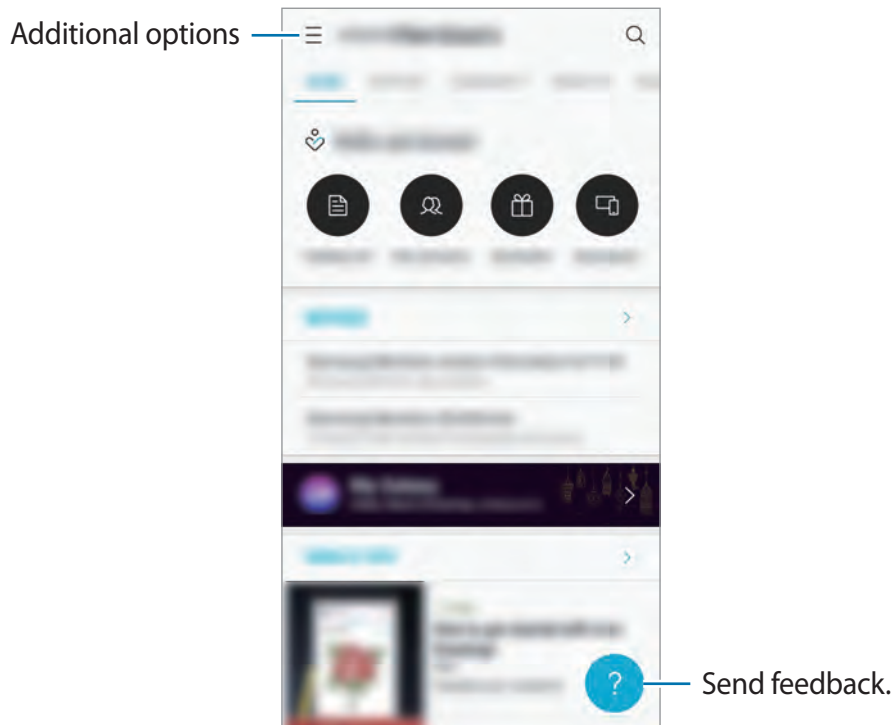


## Moving pop-up windows

To move a pop-up window, tap the window's toolbar and drag it to a new location.

## Samsung Members

**Samsung Members** offers support services to customers, such as device problem diagnosis, and lets users submit questions and error reports. You can also share information with others in the Galaxy users' community or view the latest Galaxy news and tips. **Samsung Members** can help you solve any problems you might encounter while using your device.




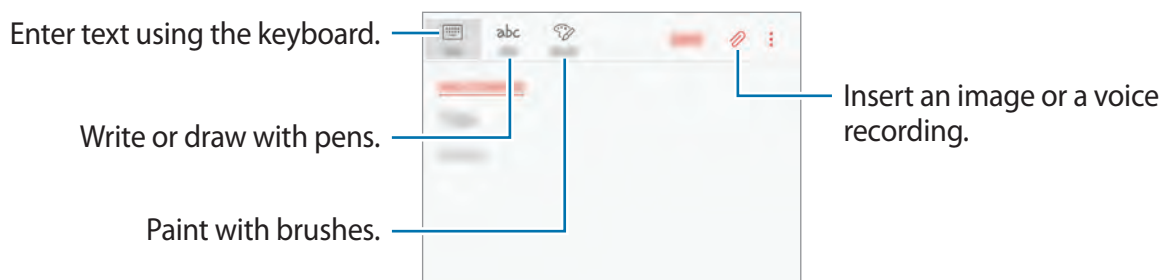
- This app's availability and supported features may vary depending on the region or service provider.
- To submit your feedback or post your comments, you must register and sign in to your Samsung account. Refer to [Samsung account](#) for more information.

## Samsung Notes

Create notes by entering text from the keyboard or by handwriting or drawing on the screen. You can also insert images or voice recordings into your notes.


### Creating notes

- 1 Launch the **Samsung Notes** app and tap .
- 2 Select an input method from the toolbar at the top of the screen and compose a note.



- 3 When you are finished composing the note, tap **SAVE**.



### Deleting notes

- 1 Launch the **Samsung Notes** app.
- 2 Tap and hold a note to delete.  
To delete multiple notes, tick more notes to delete.
- 3 Tap .

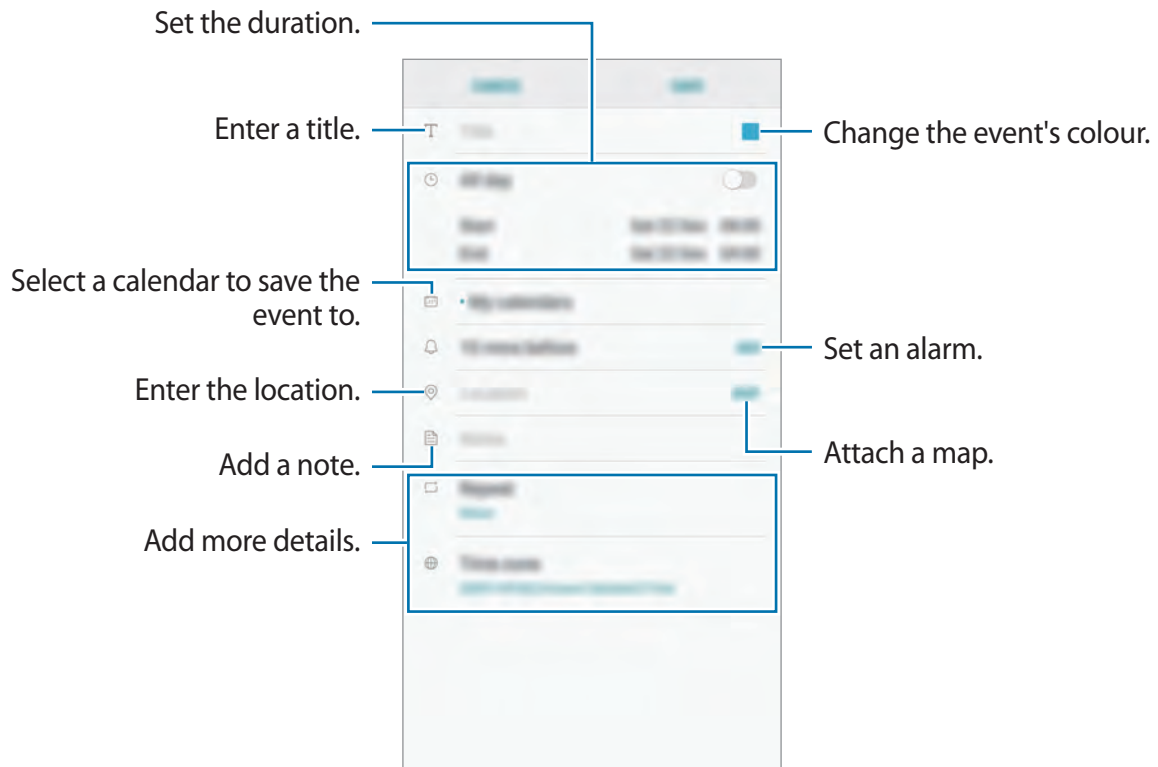
## Calendar

Manage your schedule by entering upcoming events in your planner.

### Creating events

- 1 Launch the **Calendar** app and tap  or double-tap a date.  
If the date already has saved events in it, tap the date and tap .

## 2 Enter event details.



## 3 Tap **SAVE** to save the event.

### Syncing events with your accounts

- 1 Launch the **Settings** app, tap **Cloud and accounts** → **Accounts** and select the account to sync with.
- 2 Tap **Sync account** and tap the **Sync Calendar** switch to activate it.  
For the Samsung account, tap **⋮** → **Sync settings** and tap the **Calendar** switch to activate it.


To add accounts to sync with, launch the **Calendar** app and tap **⋮** → **Manage calendars** → **Add account**. Then, select an account to sync with and sign in. When an account is added, it will appear on the list.

# Radio

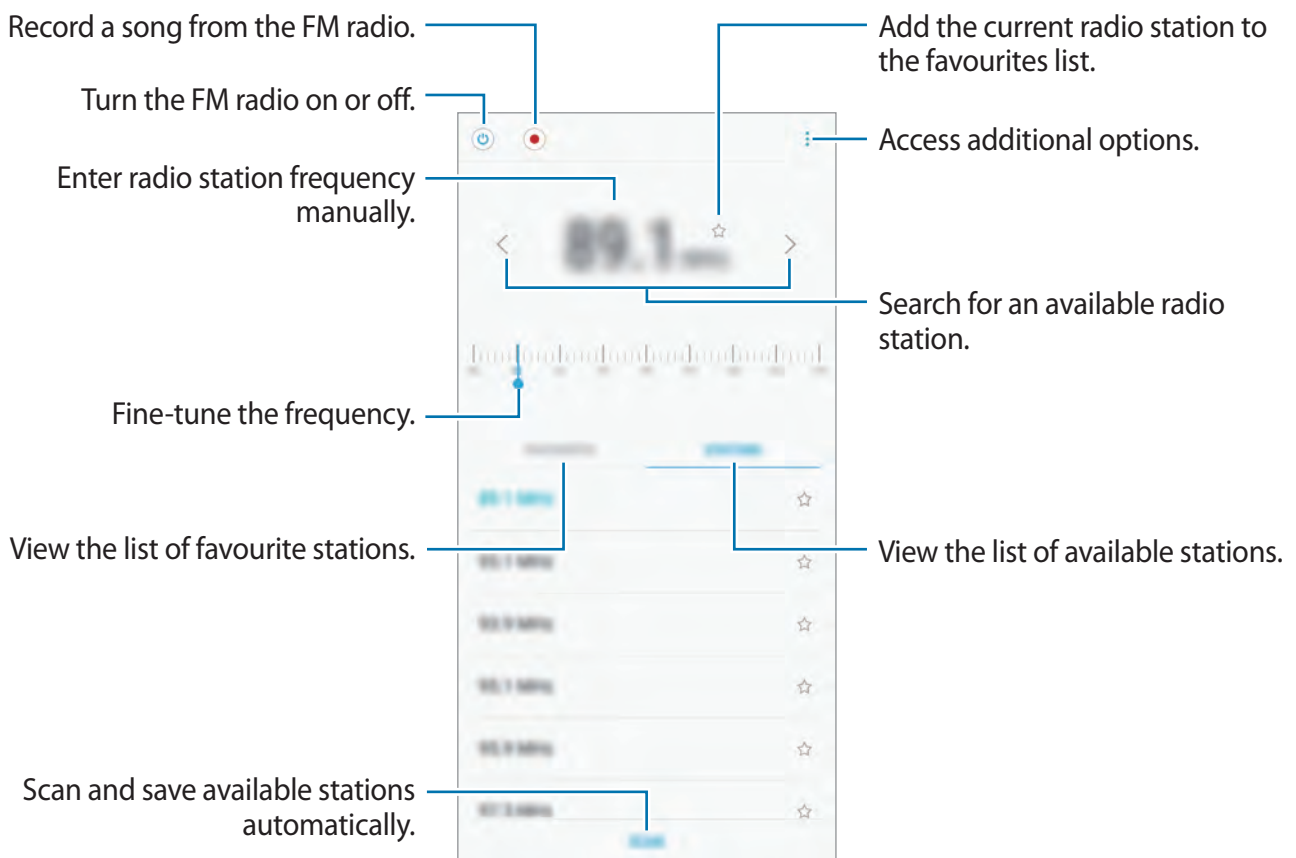
## Listening to the FM radio

Launch the **Radio** app.

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.



## Playing through the speaker

You can listen to the radio through the speaker instead of the connected earphone.

Tap  → **Play through speaker.**

## Scanning radio stations

Launch the **Radio** app.


Tap **STATIONS** → **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.

## Voice Recorder

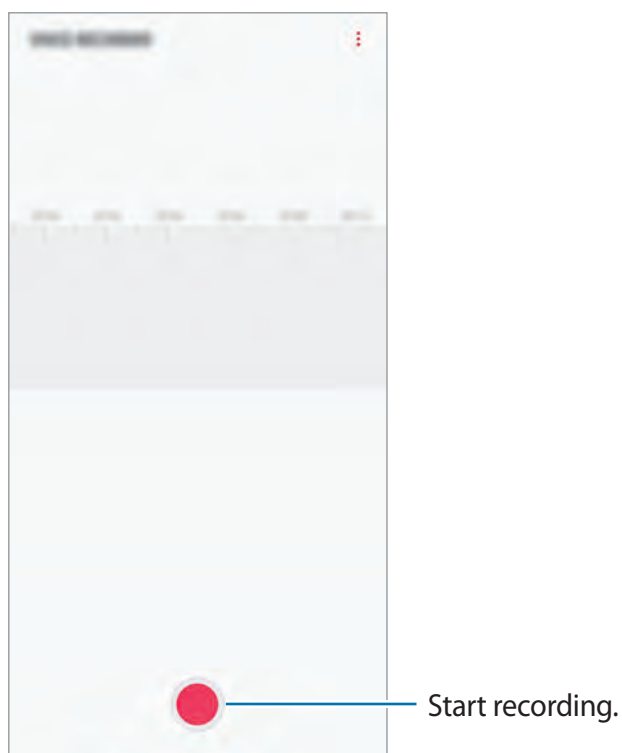
Use this app to record or play voice memos.


1 Open the **Samsung** folder and launch the **Voice Recorder** app.

2 Tap  to start recording. Speak into the microphone.

Tap  to pause recording.

While making a voice recording, tap **BOOKMARK** to insert a bookmark.



3 Tap  to finish recording.

4 Enter a file name and tap **SAVE**.

## My Files

Access and manage various files stored in the device.

Open the **Samsung** folder and launch the **My Files** app.

View files that are stored in each storage.

To free up the device's storage, tap  → **Get more space**.

To search for files or folders, tap .

## Clock


### Introduction

Set alarms, check the current time in many cities around the world, time an event, or set a specific duration.

### ALARM

Launch the **Clock** app and tap **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 open the keypad to enter an alarm time, tap the time input field.

To activate or deactivate alarms, tap the switch next to the alarm in the alarms list.

### Stopping alarms

Tap **DISMISS** to stop an alarm. If you have previously enabled the snooze option, tap **SNOOZE** to repeat the alarm after a specified length of time.

### Deleting alarms

Tap and hold an alarm, tick alarms to delete, and then tap **DELETE**.



## WORLD CLOCK

Launch the **Clock** app and tap **WORLD CLOCK**.

### Creating clocks

Tap , enter a city name or select a city from the globe, and then tap **ADD**.

To use the time zone converter, tap .


### Deleting clocks

Tap and hold a clock, tick clocks to delete, and then tap **DELETE**.

## STOPWATCH

- 1 Launch the **Clock** app and tap **STOPWATCH**.
- 2 Tap **START** to time an event.  
To record lap times while timing an event, tap **LAP**.
- 3 Tap **STOP** to stop timing.  
To restart the timing, tap **RESUME**.  
To clear lap times, tap **RESET**.


## TIMER

- 1 Launch the **Clock** app and tap **TIMER**.  
To add a frequently used timer, tap , set the duration and name, and then tap **ADD**.
- 2 Set the duration, and then tap **START**.  
To open the keypad to enter the duration, tap the duration input field.
- 3 Tap **DISMISS** when the timer goes off.

## Calculator


Perform simple or complex calculations.

Launch the **Calculator** app.

Rotate the device to landscape orientation to display the scientific calculator. If **Auto-rotate** is disabled, tap  to display the scientific calculator.

To see the calculation history, tap **HISTORY**. To close the calculation history panel, tap **KEYPAD**.

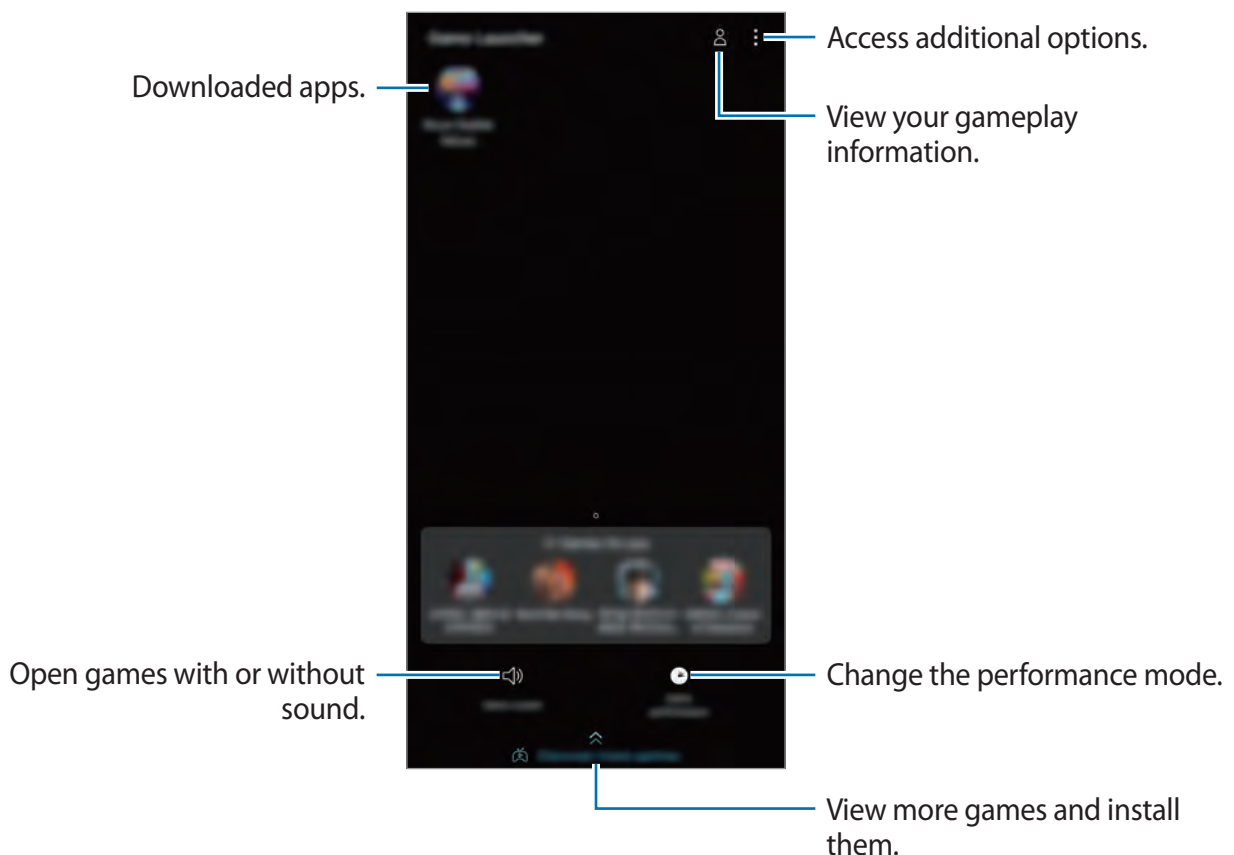
To clear the history, tap **HISTORY** → **CLEAR HISTORY**.

To use the unit conversion tool, tap . You can convert various values, such as area, length, or temperature, into other units.

## Game Launcher

### Introduction

Game Launcher gathers your games downloaded from **Play Store** and **Galaxy Apps** into one place for easy access. You can set the device to game mode to play games more easily.



## Using Game Launcher

1 Launch the **Game Launcher** app.




If **Game Launcher** does not appear, launch the **Settings** app, tap **Advanced features** → **Games**, and then tap the **Game Launcher** switch to activate it.

2 Tap a game from the games list.

To find more games, drag the screen upwards.



Games downloaded from **Play Store** and **Galaxy Apps** will be automatically shown on the Game Launcher screen. If you cannot see your games, tap  → **Add a game**.

## Removing a game from Game Launcher

Tap and hold a game and tap **Remove**.

## Changing the performance mode

You can change the game performance mode.

Launch the **Game Launcher** app, tap **Game performance**, and then drag the bar to select the mode you want.


- **Focus on power saving:** This saves battery power while playing games.
- **Balanced:** This balances the performance and the battery usage time.
- **Focus on performance:** This focuses on giving you the best possible performance while playing games.

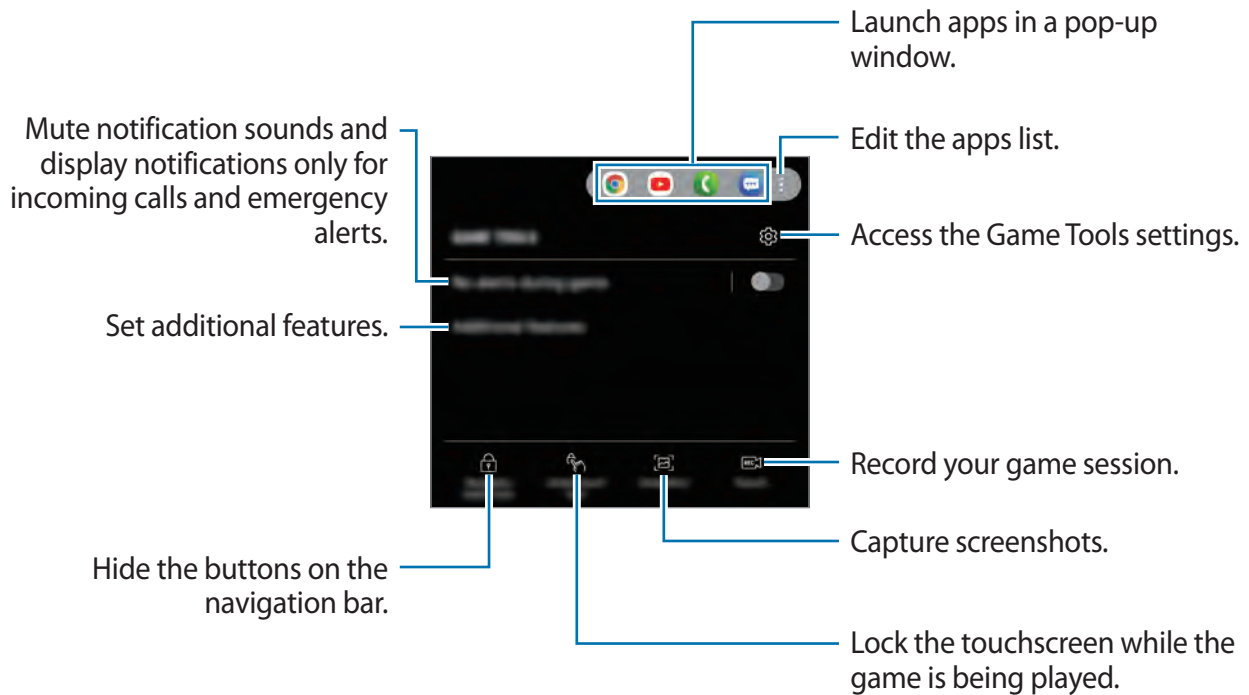
To change the settings for each game, tap the **Settings for each game** switch to activate it.



Battery power efficiency may vary by game.


## Using Game Tools

You can use various options on the Game Tools panel while playing a game. To open the Game Tools panel, tap  on the navigation bar. If the navigation bar is hidden, drag upwards from the bottom of the screen to show it.



Available options may vary depending on the game.

## Blocking notifications during games


Tap  and tap the **No alerts during game** switch to activate it. The device will mute notification sounds and display only notifications for incoming calls and emergency alerts, so that you can enjoy your games without being disturbed. If you receive an incoming call, a small notification will appear at the top of the screen.

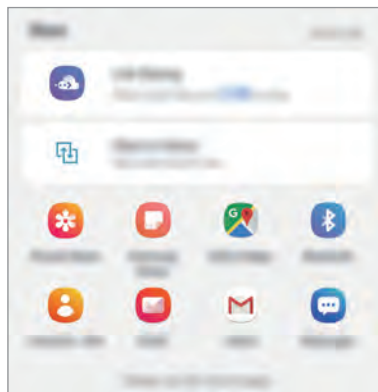
## Sharing content

Share content by using various sharing options. The following actions are an example of sharing images.



You may incur additional charges when sharing files via the mobile network.

- 1 Launch the **Gallery** app and select an image.
- 2 Tap  and select a sharing method, such as message and email.



When you have a communication or sharing history, the people you contacted will appear on the sharing options panel. To directly share content with them via the corresponding app, select a person's icon. If the feature is not activated, launch the **Settings** app, tap **Advanced features**, and then tap the **Direct share** switch to activate it.

### Using additional features

- **Link Sharing:** Share large files. Upload files to the Samsung storage server and share them with others via a Web link or a code. To use this feature, your phone number must be verified.
- **Share to device:** View your device's displayed content on a large screen by connecting your device to a screen mirroring-enabled TV or monitor.

When the image is sent to the recipients' devices, a notification will appear on their devices. Tap the notification to view or download the image.

## Google apps

Google provides entertainment, social network, and business apps. You may require a Google account to access some apps.

To view more app information, access each app's help menu.



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.

### Maps

Find your location on the map, search the world map, and view location information for various places around you.

### Play Music

Discover, listen to, and share music on your device. You can upload music collections stored on your device to the cloud and access them later.

### Play Movies & TV

Purchase or rent videos, such as movies and TV programmes, from **Play Store**.

### 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**

Search for, manage, and edit all your photos and videos from various sources in one place.

## **Google**

Search quickly for items on the Internet or your device.

## **Duo**

Make a simple video call.

# Settings

## Introduction

Customise device settings. You can make your device more personalised by configuring various setting options.

Launch the **Settings** app.

To search for settings by entering keywords, tap **Search**.

## Connections

### Options

Change settings for various connections, such as the Wi-Fi feature and Bluetooth.

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

- **Wi-Fi:** Activate the Wi-Fi feature to connect to a Wi-Fi network and access the Internet or other network devices. Refer to [Wi-Fi](#) for more information.
- **Bluetooth:** Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices. Refer to [Bluetooth](#) for more information.
- **Data usage:** Keep track of your data usage amount and customise the settings for the limitation. Set the device to automatically disable the mobile data connection when the amount of mobile data you have used reaches your specified limit.

You can also activate the data saver feature to prevent some apps running in the background from sending or receiving data. Refer to [Data saver](#) for more information.

- **Flight mode:** Set the device to disable all wireless functions on your device. You can use only non-network services.



Follow the regulations provided by the airline and the instructions of aircraft personnel. In cases where it is allowed to use the device, always use it in flight mode.





- 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**.
- If you cannot connect to a Wi-Fi network properly, restart your device's Wi-Fi feature or the wireless router.

## Wi-Fi Direct

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

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

**2** Tap **Wi-Fi Direct**.

The detected devices are listed.

If the device you want to connect to is not in the list, request that the device turns on its Wi-Fi Direct feature.

**3** Select a device to connect to.

The devices will be connected when the other device accepts the Wi-Fi Direct connection request.

## 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.

**1** Launch the **Gallery** app and select an image.

**2** Tap  → **Wi-Fi Direct** and select a device to transfer the image to.

**3** Accept the Wi-Fi Direct connection request on the other device.

If the devices are already connected, the image will be sent to the other device without the connection request procedure.

## Ending the device connection

- 1 On the Settings screen, tap **Connections** → **Wi-Fi**.
- 2 Tap **Wi-Fi Direct**.  
The device displays the connected devices in the list.
- 3 Tap the device name to disconnect the devices.

## Bluetooth

Use Bluetooth to exchange data or media files with other Bluetooth-enabled 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 Settings screen, tap **Connections** → **Bluetooth**, and then tap the switch to activate it.  
The detected devices will be listed.

- 2 Select a device to pair with.  
If the device you want to pair with is not on the list, set the device to enter Bluetooth pairing mode. Refer to the other device's user manuals.



Your device is visible to other devices while the Bluetooth settings screen is open.

- 3 Accept the Bluetooth connection request on your device to confirm.

The devices will be connected when the other device accepts the Bluetooth connection request.

## 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.

- 1 Launch the **Gallery** app and select an image.

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

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 connection request on the other device.

## Unpairing Bluetooth devices

- 1 On the Settings screen, tap **Connections** → **Bluetooth**.

The device displays the paired devices in the list.

- 2 Tap  next to the device name to unpair.

- 3 Tap **Unpair**.

## Mobile Hotspot and Tethering

Use the device as a mobile hotspot to share the device's mobile data connection with other devices when the network connection is not available. Connections can be made via Wi-Fi, USB, or Bluetooth.

On the Settings screen, tap **Connections** → **Mobile Hotspot and Tethering**.



You may incur additional charges when using this feature.


- **Mobile Hotspot:** Use the mobile hotspot to share the device's mobile data connection with computers or other devices.
- **Bluetooth tethering:** Use Bluetooth tethering to share the device's mobile data connection with computers or other devices via Bluetooth.
- **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.


### 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 Settings screen, tap **Connections** → **Mobile Hotspot and Tethering** → **Mobile Hotspot**.



**2** Tap the switch to activate it.

The  icon 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 Mobile 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.



- If the mobile hotspot is not found, on your device, tap  → **Configure Mobile Hotspot** and deselect **Hide my device**.
- If the other device cannot connect to the mobile hotspot, on your device, tap  → **Allowed devices** and tap the **Allowed devices only** switch to deactivate it.

**4** On the connected device, use the device's mobile data connection to access the Internet.

## SIM card manager (dual SIM models)

Activate your SIM or USIM cards and customise the SIM card settings. Refer to [Using dual SIM or USIM cards \(dual SIM models\)](#) for more information.

On the Settings screen, tap **Connections** → **SIM card manager**.

- **Calls:** Select a SIM or USIM card for voice calls.
- **Text messages:** Select a SIM or USIM card for messaging.
- **Mobile data:** Select a SIM or USIM card for data services.
- **Confirm SIM card for calls:** Set the device to display the SIM or USIM card selection pop-up window when returning a call or calling from a message. The pop-up window will appear only if the SIM or USIM card used for the previous call or message is different from your preferred SIM or USIM card.
- **Dual SIM always on / Smart dual SIM:** Set the device to allow incoming calls from the other SIM or USIM card during a call.



When this feature is enabled, you may incur additional charges for call forwarding depending on the region or service provider.

## More connection settings

Customise settings to control other connection features.

On the Settings screen, tap **Connections** → **More connection settings**.

- **Nearby device scanning:** Set the device to scan for nearby devices to connect to.
- **Printing:** Configure settings for printer plug-ins installed on the device. You can search for available printers or add one manually to print files. Refer to [Printing](#) for more information.
- **VPN:** Set up virtual networks (VPNs) on your device to connect to a school or company's private network.
- **Ethernet:** When you connect an Ethernet adaptor, you can use a wired network and configure network settings.

## Printing

Configure settings for printer plug-ins installed on the device. You can 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.

- 1 On the Settings screen, tap **Connections** → **More connection settings** → **Printing** → **Add service**.
- 2 Search for a printer plug-in in **Play Store**.
- 3 Select a printer plug-in and install it.
- 4 Select the printer plug-in and tap the switch to activate it.  
The device will automatically search for printers that are connected to the same Wi-Fi network as your device.
- 5 Select a printer to add.



To add printers manually, tap  → **Add printer**.

### Printing content

While viewing content, such as images or documents, access the options list, tap **Print** → ▼ → **All printers...**, and then select a printer.



Printing methods may vary depending on the content type.

# Sounds and vibration

## Options

Change settings for various sounds on the device.

On the Settings screen, tap **Sounds and vibration**.

- **Sound mode:** Set the device to use sound mode, vibration mode, or silent mode.
- **Vibrate while ringing:** Set the device to vibrate and play a ringtone for incoming calls.
- **Use Volume keys for media:** Set the device to adjust the media volume level when you press the Volume key.
- **Volume:** Adjust the volume level for call ringtones, music and videos, system sounds, and notifications.
- **Ringtone:** Change the call ringtone.
- **Vibration pattern:** Select a vibration pattern.
- **Notification sounds:** Change the notification sound.
- **Do not disturb:** Set the device to mute incoming calls, notification sounds, and media, except for allowed exceptions.
- **Touch sounds:** Set the device to sound when you select an app or option on the touchscreen.
- **Screen lock sounds:** Set the device to sound when you lock or unlock the touchscreen.
- **Charging sound:** Set the device to sound when it is connected to a charger.
- **Dialling keypad tones:** Set the device to sound when you tap the buttons on the keypad.
- **Keyboard sound:** Set the device to sound when a key is touched.
- **Sound quality and effects:** Configure additional sound settings.

You can also activate the surround sound mode. Refer to [Dolby Atmos \(surround sound\)](#) for more information.

## Dolby Atmos (surround sound)

Select a surround sound mode optimised for various types of audio, such as movies, music, and voice. With Dolby Atmos, you can experience moving audio sounds that flows all around you.

On the Settings screen, tap **Sounds and vibration** → **Sound quality and effects** → **Dolby Atmos**, tap the switch to activate it, and then select a mode.



Before you use this feature, you must connect an earphone.

## Notifications

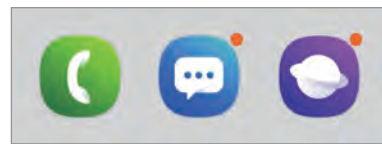
Change the notification settings for each app.

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

To display icon badges, tap the **App icon badges** switch to activate it. To change the badge style, tap **App icon badges**.



With number



Without number

To customise notification settings for more apps, tap **ADVANCED** and select an app.



# Display

## Options

Change the display and the Home screen settings.

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

- **Brightness:** Adjust the brightness of the display.
- **Auto brightness:** Set the device to save power by adjusting the brightness of the display automatically.



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

- **Outdoor mode:** Activate outdoor mode to make the display easier to see in bright conditions.



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

- **Blue light filter:** Activate the blue light filter and change the filter settings. Refer to [Blue light filter](#) for more information.



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

- **Font and screen zoom:** Change the screen zoom setting or font size and style.
- **Screen mode:** Change the screen mode to adjust the display's colour and contrast. Refer to [Changing the screen mode or adjusting the display colour](#) for more information.



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

- **Home screen:** Change the size of the grid to display more or fewer items on the Home screen and more.
- **Full screen apps:** Select apps to use with the full screen aspect ratio.



If the app does not work properly with this feature activated, deselect the app on the list.

- **Icon frames:** Set whether to display shaded backgrounds to make icons stand out.
- **Status bar:** Customise the settings for displaying notifications or indicators on the status bar.
- **Navigation bar:** Change the navigation bar settings. Refer to [Navigation bar \(soft buttons\)](#) for more information.
- **Screen timeout:** Set the length of time the device waits before turning off the display's backlight.
- **Screensaver:** Set the device to launch a screensaver when the device is charging. Refer to [Screensaver](#) for more information.
- **Double tap to wake up:** Set the device to turn on the screen by double-tapping anywhere on the screen while the screen is turned off.



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

## Blue light filter

Reduce eye strain by limiting the amount of blue light emitted by the screen.



While you are watching HDR videos from HDR-exclusive video services, the blue light filter may not be applied.

- 1 On the Settings screen, tap **Display** → **Blue light filter**, and then tap the **Turn on now** switch to activate it.
- 2 Drag the adjustment bar to adjust the filter's opacity.
- 3 To set the schedule to apply the blue light filter to the screen, tap the **Turn on as scheduled** switch to activate it and select an option.
  - **Sunset to sunrise:** Set the device to apply the blue light filter at night and turn it off in the morning based on your current location.
  - **Custom schedule:** Set a specific time to apply the blue light filter.

## Changing the screen mode or adjusting the display colour

Select a screen mode suitable for viewing movies or images, or adjust the display colour to your preference. If you select the **Adaptive display** mode, you can adjust the display colour balance by colour value.

### Changing the screen mode

On the Settings screen, tap **Display** → **Screen mode** and select a mode you want.

- **Adaptive display:** This optimises the colour range, saturation, and sharpness of your display. You can also adjust the display colour balance by colour value.
- **AMOLED cinema:** This is suitable for watching videos.
- **AMOLED photo:** This is suitable for viewing images.
- **Basic:** This is set as default and is suitable for general use.



- You can adjust the display colour only in **Adaptive display** mode.
- **Adaptive display** mode may not be compatible with third-party apps.
- You cannot change the screen mode while applying the blue light filter.

### Optimising the full screen colour balance

Optimise the display colour by adjusting the colour tones to your preference.

When you drag the colour adjustment bar towards **Cool**, the blue colour tone will increase. When you drag the bar towards **Warm**, the red colour tone will increase.

- 1 On the Settings screen, tap **Display** → **Screen mode** → **Adaptive display**.
- 2 Adjust the colour adjustment bar under **Full screen colour balance**.  
The colour balance of the screen will be optimised.




## Adjusting the screen tone by colour value

Increase or lower certain colour tones by adjusting the **Red**, **Green**, or **Blue** value individually.

- 1 On the Settings screen, tap **Display** → **Screen mode** → **Adaptive display**.
- 2 Tick **Advanced options**.
- 3 Adjust the **Red**, **Green**, or **Blue** colour bar to your preference.  
The screen tone screen will be adjusted.

## Screensaver

You can set to display images as a screensaver when the screen turns off automatically. The screensaver will be displayed when the device is charging.

- 1 On the Settings screen, tap **Display** → **Screensaver** and tap the switch to activate it.
- 2 Select an option.  
If you select **Photo Frame**, a slideshow with selected images will start. If you select **Photo Table**, selected images will appear as small cards and overlap.
- 3 Tap  to select albums for displaying images.
- 4 When you are finished, tap the Back button.  
To preview the selected option, tap **PREVIEW**.



When you tap the screen while your screensaver is displayed, the screen will turn on.

## Wallpapers and themes

Change the wallpaper settings for the Home screen and the locked screen or apply various themes to the device.

On the Settings screen, tap **Wallpapers and themes**.

- **Wallpapers:** Change the wallpaper settings for the Home screen and the locked screen.
- **Themes:** Change the device's theme.
- **Icons:** Change the icon style.
- **AODs:** Select an image to display on the Always On Display.



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

## Advanced features

### Options

Activate advanced features and change the settings that control them.

On the Settings screen, tap **Advanced features**.



- Excessive shaking or an impact to the device may cause an unintended input for some features using sensors.
- Some features may not be available depending on the region or service provider.
- **Games:** Activate the Game Launcher. Refer to [Game Launcher](#) for more information.
- **One-handed mode:** Activate one-handed operation mode for your convenience when using the device with one hand.
- **Finger sensor gestures:** Set the device to open or close the notification panel when you swipe upwards or downwards on the fingerprint recognition sensor. This feature is not available when the sensor is detecting your fingerprint.
- **Quick launch Camera:** Set the device to launch the camera by pressing the Power key twice quickly.
- **Device assistance app:** Select a device assistance app to launch when you tap and hold the Home button. The device assistance app will gather information from the current screen and provide related information, apps, and features.

- **Multi window:** Select a Multi window launch method.
- **Palm swipe to capture:** Set the device to capture a screenshot when you swipe your hand to the left or right across the screen. You can view the captured images in **Gallery**.



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

- **Direct call:** Set the device to make a voice call by picking up and holding the device near your ear while viewing message or contact details.
- **Smart alert:** Set the device to alert you if you have missed calls or new messages when you pick up the device.



This feature may not work if the screen is turned on or the device is not on a flat surface.

- **Easy mute:** Set the device to mute incoming calls or alarms by using palm motions or facing the device's screen downwards.
- **Swipe to call or send messages:** Set the device to make a call or send a message when you swipe to the right or left on a contact or a phone number in the **Phone** or **Contacts** app.
- **Chat over video:** Set the device to chat and watch videos at the same time.
- **Dual Messenger:** Install the second app and use two separate accounts for the same messenger app. Refer to [Dual Messenger](#) for more information.
- **Send SOS messages / Panic mode:** Set the device to make an emergency call by pressing the Power key three times. You can also send help messages and attach pictures to the recipients.
- **Direct share:** Set the device to display the people you contacted on the sharing options panel to allow you to share content directly.
- **Touch sensitivity:** Increase the touch sensitivity of the screen for use with screen protectors.



## Dual Messenger

Install the second app and use two separate accounts for the same messenger app.

1 On the Settings screen, tap **Advanced features** → **Dual Messenger**.

Supported apps will appear.

2 Tap the switch of an app to install the second app.

The second app will be installed. The second app's icon will be displayed with . When you receive notifications from the second app, the notifications will be displayed with  to distinguish them from the first app's notifications.



- The Dual Messenger feature may not be available depending on the app.
- Some features of the app may be limited for the second app.

## Uninstalling a second app

1 On the Settings screen, tap **Advanced features** → **Dual Messenger**.

2 Tap the switch of the app you want to disable and tap **DISABLE** or **UNINSTALL**.

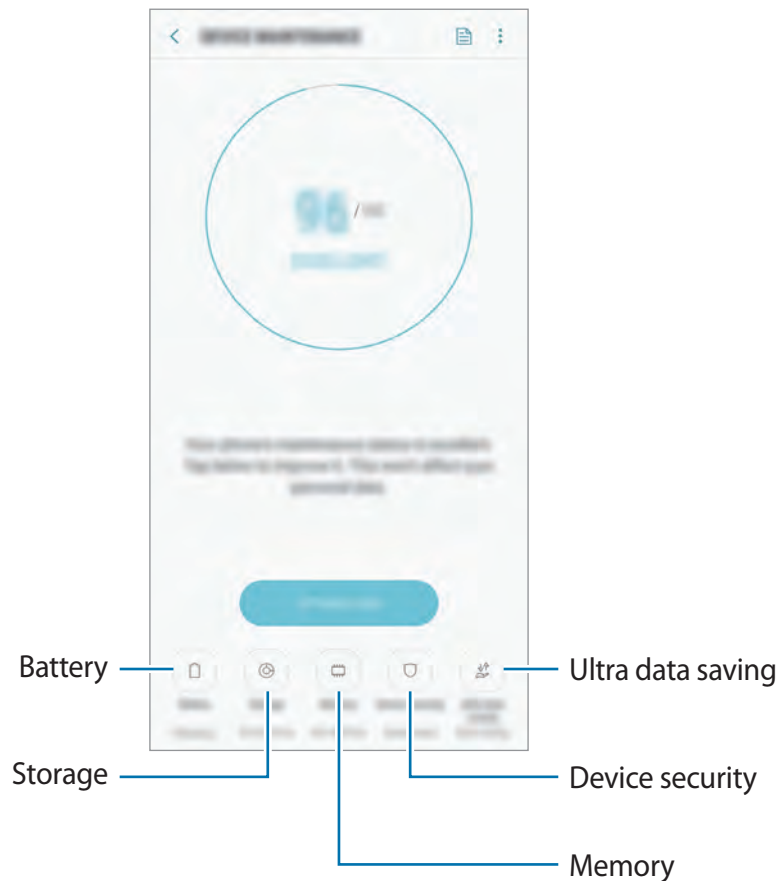
All data related to the second app will be deleted.



If you uninstall the first app, the second app will also be deleted.

## Device maintenance

The device maintenance feature provides an overview of the status of your device's battery, storage, memory, and system security. You can also automatically optimise the device with a tap of your finger, and ultra data saving mode helps you manage your mobile data usage.



### Using the quick optimisation feature

On the Settings screen, tap **Device maintenance** → **FIX NOW** or **OPTIMISE NOW**.

The quick optimisation feature improves device performance through the following actions.

- Clearing some memory.
- Deleting unnecessary files and closing apps running in the background.
- Managing abnormal battery usage.
- Scanning for crashed apps and malware.
- Saving mobile data usage by preventing background apps from using mobile data.



## Battery

Check the remaining battery power and time to use the device. For devices with low battery levels, conserve battery power by activating power saving features.

On the Settings screen, tap **Device maintenance** → **Battery**.





- The usage time left shows the time remaining before the battery power runs out. Usage time left may vary depending on your device settings and operating conditions.
- You may not receive notifications from some apps that use power saving mode.

### Power saving mode

- **MID:** Activate power saving mode to extend the battery's usage time.
- **MAX:** In maximum power saving mode, the device decreases battery consumption by applying the dark theme and limiting the apps and features available. Network connections, except for the mobile network, will be deactivated.

### Managing the battery

You can save battery power by preventing apps that are running in the background from using battery power when they are not being used. Tick apps from the apps list and tap **SAVE POWER**. Also, tap  → **Advanced settings** and set the **App power monitor** options.

You can set the device to charge the battery more quickly. Tap  → **Advanced settings** and tap the **Fast cable charging** switch to activate it.

## Storage

Check the status of the used and available memory.

On the Settings screen, tap **Device maintenance** → **Storage**.



- 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 update the device.
- You can view the available capacity of the internal memory in the Specification section for your device on the Samsung website.

## Managing the memory

To delete residual files, such as cache, tap **CLEAN NOW**. To delete files or uninstall apps that you do not use any more, select a category under **USER DATA**.

To delete files, tick items and tap **DELETE**.

To uninstall apps, tap and hold items and tap **UNINSTALL**.

You can also schedule a cleaning task, or move apps and their content to a memory card. Tap **Storage booster** and select options.



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

## Memory

On the Settings screen, tap **Device maintenance** → **Memory**.

To speed up your device by stopping apps running in the background, tick apps from the apps list, and tap **CLEAN NOW**.

## Device security

Check the device's security status. This feature scans your device for malware.

On the Settings screen, tap **Device maintenance** → **Device security** → **SCAN PHONE**.

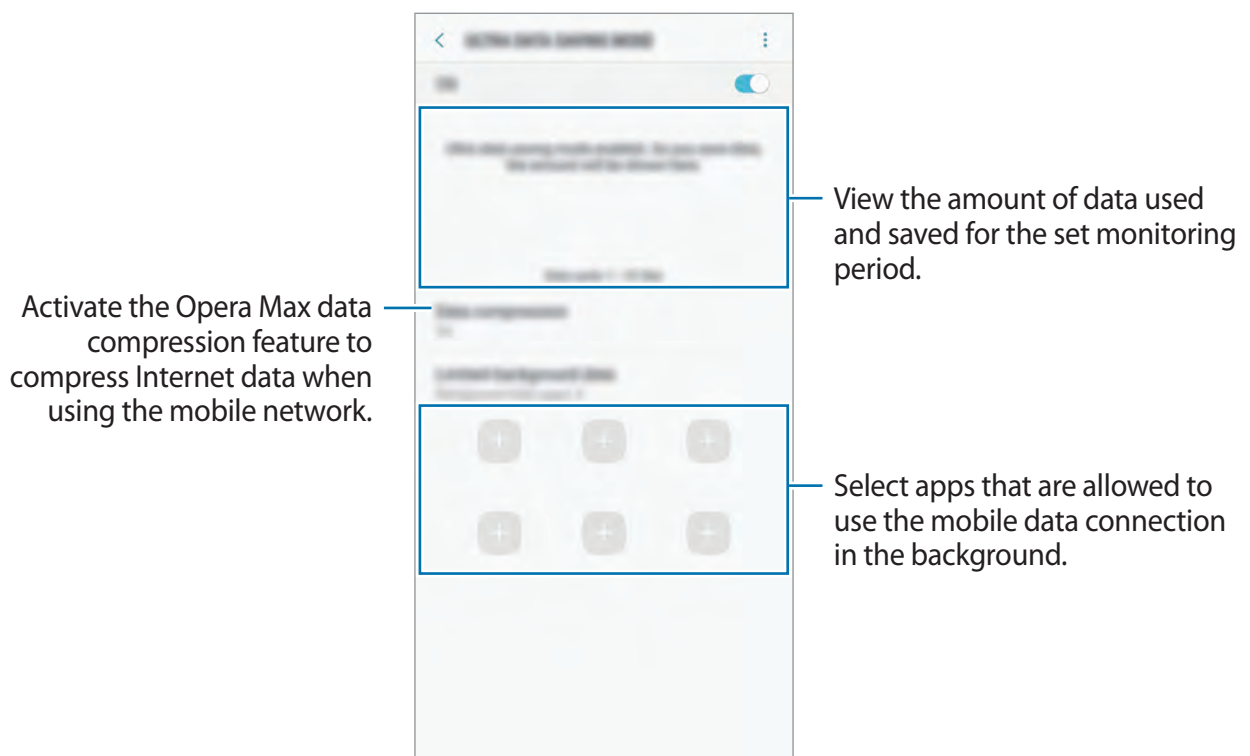
## Ultra data saving

Monitor and reduce your mobile data usage by preventing background apps from using the mobile data connection. You can also use the data compression feature to compress Internet data, such as images, videos, and webpages, accessed via the mobile network.



- This feature may not be available depending on the region or service provider.
- Some webpages or content may not be available when this feature is activated, depending on the service provider or the mobile network conditions.

On the Settings screen, tap **Device maintenance** → **Ultra data saving**, and then tap the switch to activate it.



You can change the data usage monitoring period. On the Settings screen, tap **Connections** → **Data usage** → **Billing cycle and data warning**.

## Apps

Manage the device's apps and change their settings. You can view the apps' usage information, change their notification or permission settings, or uninstall or disable unnecessary apps.

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

## Lock screen

### Options

Change the settings for the locked screen.

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



- The available options may vary depending on the screen lock method selected.
- Some features may not be available depending on the region or service provider.
- **Screen lock type:** Change the screen lock method.
- **Smart Lock:** Set the device to unlock itself when trusted locations or devices are detected. Refer to [Smart Lock](#) for more information.
- **Secure lock settings:** Change screen lock settings for the selected lock method.
- **Lock Screen Stories:** Set the device to display various wallpapers and content on the locked screen. Refer to [Setting the Lock screen stories](#) for more information.
- **Always On Display:** Set the device to display information while the screen is turned off. Refer to [Always On Display](#) for more information.
- **Clock style:** Change the type and colour of the clock on the Always On Display or the locked screen.
- **Roaming clock:** Change the clock to show both the local and home time zones on the locked screen when roaming.
- **FaceWidgets:** Change the settings of the items displayed on the Always On Display or the locked screen.
- **Contact information:** Set the device to show contact information, such as your email address, on the locked screen.

- **Notifications:** Set how to show notifications on the Always On Display or the locked screen.
- **App shortcuts:** Select apps to display shortcuts to them on the locked screen.
- **About Lock screen:** View the Locked screen version and legal information.

## Smart Lock

You can set the device to unlock itself and remain unlocked when trusted locations or devices are detected.

For example, if you have set your home as a trusted location, when you get home your device will detect the location and automatically unlock itself.



- This feature will be available to use after you set a screen lock method.
- If you do not use your device for four hours or when you turn on the device, you must unlock the screen using the pattern, PIN, or password you set.

- 1 On the Settings screen, tap **Lock screen** → **Smart Lock**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Select an option and follow the on-screen instructions to complete the setting.

## Biometrics and security

### Options

Change the settings for securing the device.

On the Settings screen, tap **Biometrics and security**.

- **Face Recognition:** Set the device to unlock the screen by recognising your face. Refer to [Face recognition](#) for more information.
- **Fingerprint Scanner:** Register your fingerprints to unlock the screen. Refer to [Fingerprint recognition](#) for more information.
- **Screen transition effect:** Set the device to show a transition effect when you unlock the screen using your biometric data.

- **Google Play Protect:** Set the device to check for harmful apps and behaviour and warn about potential harm and remove them.
- **Find My Mobile:** Activate or deactivate the Find My Mobile feature. Access the Find My Mobile website ([findmymobile.samsung.com](http://findmymobile.samsung.com)) to track and control your lost or stolen device.

You can also allow the Google location service to provide more accurate information about the location of your device.

- **Security update:** View the version of your device's software and check for updates.
- **Install unknown apps:** Set the device to allow the installation of apps from unknown sources.
- **Secure startup:** Protect your device by setting it to require a screen unlock code when turning on the device. You must enter the unlock code to start the device and receive messages and notifications.
- **Encrypt 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.

- **Other security settings:** Configure additional security settings.

## Face recognition

You can set the device to unlock the screen by recognising your face.



- If you use your face as a screen lock method, your face cannot be used to unlock the screen for the first time after turning on the device. To use the device, you must unlock the screen using the pattern, PIN, or password you set when registering the face. Be careful not to forget your pattern, PIN, or password.
- If you change the screen lock method to **Swipe** or **None**, which are not secure, all of your biometric data will be deleted. If you want to use your biometric data in apps or features, you must register your biometric data again.

## Precautions for using face recognition

Before using the face recognition to unlock your device, keep the following precautions in mind.

- Your device could be unlocked by someone or something that looks like your image.
- Face recognition is less secure than Pattern, PIN, or Password.

## For better face recognition

Consider the following when using face recognition:

- Consider the conditions when registering, such as wearing glasses, hats, masks, beards, or heavy makeup
- Ensure that you are in a well-lit area and that the camera lens is clean when registering
- Ensure your image is not blurry for better match results

## Registering your face

For better face registration, register your face indoors and out of direct sunlight.

- 1 On the Settings screen, tap **Biometrics and security** → **Face Recognition**.
- 2 Unlock the screen using the preset screen lock method.  
If you have not set a screen lock method, create one.
- 3 Select whether you are wearing glasses or not and tap **CONTINUE**.
- 4 Hold the device with the screen facing towards you and look at the screen.



5 Position your face inside the frame on the screen.

The camera will scan your face.

When a face lock screen appears, tap **TURN ON** to use your face to unlock the screen.



If unlocking the screen with your face is not working properly, tap **Remove face data** to remove your registered face and register your face again.

## Deleting the registered face data

You can delete face data that you have registered.

1 On the Settings screen, tap **Biometrics and security** → **Face Recognition**.

2 Unlock the screen using the preset screen lock method.

3 Tap **Remove face data**.

Once the registered face is deleted, all the related features will also be deactivated.

## Unlocking the screen with your face

You can unlock the screen with your face instead of using a pattern, PIN, or password.

1 On the Settings screen, tap **Biometrics and security** → **Face Recognition**.

2 Unlock the screen using the preset screen lock method.

3 Tap the **Face unlock** switch to activate it.



If you want to reduce the possibility of recognising faces in photos or videos, tap the **Faster recognition** switch to deactivate it. This may decrease the face recognition speed.

4 On the locked screen, look at the screen.

When your face is recognised, you can unlock the screen without using any additional screen lock method. If your face is not recognised, use the preset screen lock method.



## Fingerprint recognition

In order for fingerprint recognition to function, your fingerprint information needs to be registered and stored in your device. After registering, you can set the device to use your fingerprint for the features below:

- Web sign-in
- Samsung account verification
- Screen lock



- This feature may not be available depending on the region or service provider.
- Fingerprint recognition uses the unique characteristics of each fingerprint to enhance the security of your device. The likelihood of the fingerprint sensor confusing two different fingerprints is very low. However, in rare cases where separate fingerprints are very similar the sensor may recognise them as identical.
- If you use your fingerprint as a screen lock method, your fingerprint cannot be used to unlock the screen for the first time after turning on the device. To use the device, you must unlock the screen using the pattern, PIN, or password you set when registering the fingerprint. Be careful not to forget your pattern, PIN, or password.
- If your fingerprint is not recognised, unlock the device using the pattern, PIN, or password you set when registering the fingerprint, and then re-register your fingerprints. If your pattern, PIN, or password is forgotten, you will not be able to use the device if you do not reset it. Samsung is not responsible for any data loss or inconvenience caused by forgotten unlock codes.
- If you change the screen lock method to **Swipe** or **None**, which are not secure, all of your biometric data will be deleted. If you want to use your biometric data in apps or features, you must register your biometric data again.

## For better fingerprint recognition

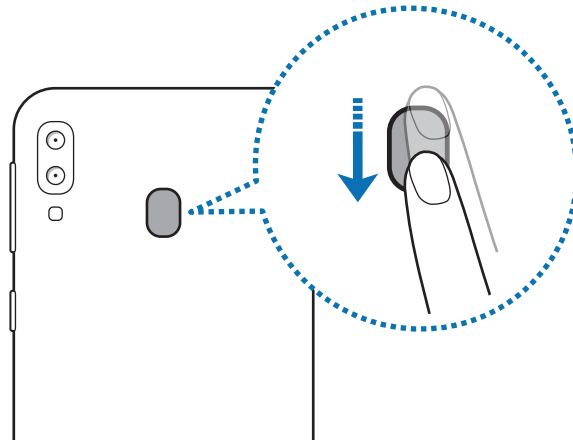
When you scan your fingerprints on the device, be aware of the following conditions that may affect the feature's performance:

- The fingerprint recognition sensor recognises fingerprints. Ensure that the fingerprint recognition sensor is not scratched or damaged by metal objects, such as coins, keys, and necklaces.
- Covering the fingerprint recognition sensor with protective films, stickers, or other accessories may decrease the fingerprint recognition rate. If the fingerprint recognition sensor is initially covered with a protective film, remove it before using the fingerprint recognition sensor.
- Ensure that the fingerprint recognition sensor and your fingers are clean and dry.
- The device may not recognise fingerprints that are affected by wrinkles or scars.
- The device may not recognise fingerprints from small or thin fingers.
- If you bend your finger or use a fingertip, the device may not recognise your fingerprints. Make sure to cover the entire fingerprint recognition sensor with your finger.
- To improve recognition performance, register fingerprints of the hand used most often to perform tasks on the device.
- In dry environments, static electricity can build up in the device. Avoid using this feature in dry environments or before using the feature, discharge static electricity by touching a metal object.

## Registering fingerprints

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprint Scanner**.
- 2 Unlock the screen using the preset screen lock method.  
If you have not set a screen lock method, create one.

- 3 Swipe your finger downwards over the fingerprint recognition sensor.



Repeat this action until the fingerprint is registered. When you are finished registering your fingerprints, tap **DONE**.

When a fingerprint lock screen appears, tap **TURN ON** to use your fingerprint to unlock the screen.

## Deleting registered fingerprints

You can delete registered fingerprints.

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprint Scanner**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap **EDIT**.
- 4 Tick fingerprints to delete and tap **REMOVE**.

## Using fingerprints to sign in to accounts

You can use your fingerprints to sign in to webpages that support password saving.



This feature is only available for webpages that you access via the **Internet** app.

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprint Scanner**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap the **Web sign-in** switch to activate it.
- 4 Open a webpage that you want to sign in to with a fingerprint.
- 5 Enter your user name and password, and then tap the webpage's sign in button.
- 6 Tick **Sign in using your fingerprints** and tap **REMEMBER**.

You can use your fingerprint to verify your account and password to sign in to the webpage.

## Verifying the Samsung account password

Use fingerprints to verify your Samsung account password. You can use a fingerprint instead of entering your password, for example, when you purchase content from **Galaxy Apps**.

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprint Scanner**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap the **Samsung account** switch to activate it.
- 4 Sign in to your Samsung account.

## Unlocking the screen with your fingerprints

You can unlock the screen with your fingerprint instead of using a pattern, PIN, or password.

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprint Scanner**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap the **Fingerprint unlock** switch to activate it.
- 4 On the locked screen, place your finger on the fingerprint recognition sensor and scan your fingerprint.

## Cloud and accounts

### Options

Sync, back up, or restore your device's data using Samsung Cloud. You can also register and manage accounts, such as your Samsung account or Google account, or transfer data to or from other devices via Smart Switch.

On the Settings screen, tap **Cloud and accounts**.

- **Samsung Cloud:** Manage the content that you want to store securely in Samsung Cloud. Check the usage status of your Samsung Cloud storage, and sync, back up, and restore your data. Refer to [Samsung Cloud](#) for more information.
- **Accounts:** Add your Samsung and Google accounts, or other accounts, to sync with.
- **Backup and restore:** Keep your personal information, app data, and settings safe on your device. You can back up your sensitive information and access it later. You must sign in to your Google or Samsung account to back up or restore data. Refer to [Backup and restore](#) for more information.
- **Smart Switch:** Launch Smart Switch and transfer data from your previous device. Refer to [Smart Switch](#) for more information.



Regularly back up your data to a safe location, such as Samsung Cloud or a computer, so that you can restore it if the data is corrupted or lost due to an unintended factory data reset.

## Backup and restore

Keep your personal information, app data, and settings safe on your device. You can back up your sensitive information and access it later. You must sign in to your Google or Samsung account to back up or restore data.

### Using a Samsung account

On the Settings screen, tap **Cloud and accounts** → **Backup and restore** → **Back up data** for the Samsung account, tick items you want to back up, and then tap **BACK UP**.

Data will be backed up to Samsung Cloud. Refer to [Samsung Cloud](#) for more information.

To restore backup data from Samsung Cloud using a Samsung account, tap **Restore data**. Select a device and the data types you want to restore and tap **RESTORE**. The selected data will be restored to your device.

### Using a Google account

On the Settings screen, tap **Cloud and accounts** → **Backup and restore** and tap the **Back up my data** switch for the Google account to activate it. Tap **Backup account** and select an account as the backup account.

To restore data using a Google account, tap the **Automatic restore** switch to activate it. When you reinstall apps, backed up settings and data will be restored.

## Google

Configure settings for some features provided by Google.

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

## Accessibility

Configure various settings to improve accessibility to the device.

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

- **Vision:** Customise the settings to improve accessibility for visually impaired users.
- **Hearing:** Customise the settings to improve accessibility for users with hearing impairment.
- **Dexterity and interaction:** Customise the settings to improve accessibility for users who have reduced dexterity.
- **Text-to-speech:** Change the settings for text-to-speech features used when TalkBack is activated, such as languages, speed, and more.
- **Direction lock:** Change the directional combination settings for unlocking the screen.
- **Direct access:** Set the device to launch selected accessibility menus when you press the Power key and the Volume Up key simultaneously.
- **Accessibility shortcut:** Set the device to activate TalkBack, Switch Access, or Select-to-Speak when you press and hold the Volume Up key and the Volume Down key simultaneously for more than 3 seconds.
- **Notification reminder:** Set the device to alert you to notifications that you have not checked at the interval.
- **Answering and ending calls:** Change the method of answering or ending calls.
- **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.

# General management

Customise your device's system settings or reset the device.

On the Settings screen, tap **General management**.

- **Language and input:** Select device languages and change settings, such as keyboards and voice input types. Some options may not be available depending on the selected language. Refer to [Adding device languages](#) for more information.
- **Date and time:** Access and alter the settings to control how the device displays the time and date.




If the battery remains fully discharged, the time and date is reset.

- **Contact us:** Ask questions or view frequently asked questions. Refer to [Samsung Members](#) for more information.
- **Report diagnostic information:** Set the device to automatically send the device's diagnostic and usage information to Samsung.
- **Marketing information:** Set whether to receive Samsung marketing information, such as special offers, membership benefits, and newsletters.
- **Reset:** Reset your device's settings or perform a factory data reset. You can reset all your settings and network settings. You can also set the device to restart at a preset time for device optimisation.

## Adding device languages

You can add languages to use on your device.

- 1 On the Settings screen, tap **General management** → **Language and input** → **Language** → **Add language**.


To view all the languages that can be added, tap  → **All languages**.

- 2 Select a language to add.



3 To set the selected language as the default language, tap **SET AS DEFAULT**. To keep the current language setting, tap **KEEP CURRENT**.

The selected language will be added to your languages list. If you changed the default language, the selected language will be added to the top of the list.

To change the default language from your languages list, drag  next to a language and move it to the top of the list. Then, tap **DONE**. If an app does not support the default language, the next supported language in the list will be used.

## Software update

Update your device's software via the firmware over-the-air (FOTA) service. You can also schedule software updates.

On the Settings screen, tap **Software update**.



If emergency software updates are released for your device's security and to block new types of security threats, they will be installed automatically without your agreement.

- **Download updates manually:** Check for and install updates manually.
- **Download updates automatically:** Set the device to download updates automatically when connected to a Wi-Fi network.
- **Scheduled software updates:** Set the device to install updates at a specified time.
- **Last update information:** View information about the last software update.

### Security updates information

Security updates are provided to strengthen the security of your device and protect your personal information. For security updates for your model, visit [security.samsungmobile.com](https://security.samsungmobile.com).



The website supports only some languages.

## User manual

View help information to learn how to use the device and apps or configure important settings.

On the Settings screen, tap **User manual**.

## About phone

Access your device's information.

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

To change your device's name, tap **EDIT**.

- **Status:** View various device information, such as the SIM card status, Wi-Fi MAC address, and serial number.
- **Legal information:** View legal information related to the device, such as safety information and the open source licence.
- **Regulatory information:** Check the regulatory information.
- **Software information:** View the device's software information, such as its operating system version and firmware version.
- **Battery information:** View the device's battery status and information.

# Appendix

## 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 touchscreen responds slowly or improperly

- If you attach a screen protector or optional accessories to the touchscreen, the touchscreen may not function properly.
- If you are wearing gloves, if your hands are not clean while touching the touchscreen, or if you tap the screen with sharp objects or your fingertips, the touchscreen may malfunction.
- The touchscreen 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 updated to the latest version.
- If the touchscreen is scratched or damaged, visit a Samsung Service Centre.

## Your device freezes or encounters a fatal error

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

### Restarting the device

If your device freezes or hangs, you may need to close apps or turn off the device and turn it on again.

### Forcing restart

If your device is frozen and unresponsive, press and hold the Power key and the Volume Down key simultaneously for more than 7 seconds to restart it.

### Resetting the device

If the methods above do not solve your problem, perform a factory data reset.

Launch the **Settings** app and tap **General management** → **Reset** → **Factory data reset** → **RESET** → **DELETE ALL**. Before performing the factory data reset, remember to make backup copies of all important data stored in the device.

## **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 an earphone, ensure that it is properly connected.

## **Sound echoes during a call**

Adjust the volume by pressing the Volume key 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. Charge the battery.

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

- Ensure that the charger is connected properly.
- Visit a Samsung Service Centre and have the battery replaced.

## **The battery depletes faster than when first purchased**

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

## **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.
- 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](http://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.

## Bluetooth is not working well

If another Bluetooth device is not located or there are connection problems or performance malfunctions, try the following:

- Ensure that the device you wish to connect with is ready to be scanned or connected to.
- Ensure that your device and the other Bluetooth device are within the maximum Bluetooth range (10 m).
- On your device, launch the **Settings** app, tap **Connections**, and then tap the **Bluetooth** switch to re-activate it.
- On your device, launch the **Settings** app, tap **General management** → **Reset** → **Reset network settings** → **RESET SETTINGS** to reset network settings. You may lose registered information when performing the reset.

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.

## **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.

## **There is not enough space in the device's storage**

Delete unnecessary data, such as cache, using the device maintenance feature or manually delete unused apps or files to free up storage space.




## The Apps button does not appear on the Home screen

Without using the Apps button, you can open the Apps screen by swiping upwards or downwards on the Home screen. To display the Apps button at the bottom of the Home screen, launch the **Settings** app and tap **Display** → **Home screen** → **Apps button** → **Show Apps button** → **APPLY**.

## The Home button does not appear

The navigation bar containing the Home button may disappear while using certain apps or features. To view the navigation bar, drag upwards from the bottom of the screen.

## The screen brightness adjustment bar does not appear on the notification panel

Open the notification panel by dragging the status bar downwards, and then drag the notification panel downwards. Tap  next to the brightness adjustment bar and tap the **Show control on top** switch to activate it.

## Samsung Cloud does not work

- Ensure that you are connected to a network properly.
- During a Samsung Cloud's service check, you cannot use Samsung Cloud. Try again later.

## Removing the battery

- **To remove the battery, contact an authorised service centre. To obtain battery removal instructions, please visit [www.samsung.com/global/ecodesign\\_energy](http://www.samsung.com/global/ecodesign_energy).**
- For your safety, you **must not attempt to remove** the battery. If the battery is not properly removed, it may lead to damage to the battery and device, cause personal injury, and/or result in the device being unsafe.
- Samsung does not accept liability for any damage or loss (whether in contract or tort, including negligence) which may arise from failure to precisely follow these warnings and instructions, other than death or personal injury caused by Samsung's negligence.

# ***Health and safety information***

## **Exposure to Radio Frequency (RF) Signals**

### **Certification Information (SAR)**

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. government. These FCC exposure limits are derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy.

The exposure limit set by the FCC for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR is a measure of the rate of absorption of RF energy by the human body expressed in units of watts per kilogram (W/kg). The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg). The FCC exposure limit incorporates a substantial margin of safety to give additional protection to the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each model phone are performed in positions and locations (e.g. at the ear and worn on the body) as required by the FCC.

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with a Samsung accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum of 1.5 cm from the body.

Non-compliance with the above restrictions may result in violation of FCC RF exposure guidelines.

SAR information on this and other model phones can be viewed on-line at <http://www.fcc.gov/oet/ea/fccid/>. Please use the phone FCC ID number for search, A3LSMM305F. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at <http://www.fcc.gov/encyclopedia/specific-absorption-rate-sar-cellular-telephones>

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## **FCC Notice and Cautions**

### **FCC Notice**



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

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

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

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

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

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

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

### **Cautions**

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

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

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

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# FCC Hearing Aid Compatibility (HAC) Regulations for Wireless Devices

The U.S. Federal Communications Commission (FCC) has established requirements for digital wireless mobile devices to be compatible with hearing aids and other assistive hearing devices.

When individuals employing some assistive hearing devices (hearing aids and cochlear implants) use wireless mobile devices, they may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and mobile devices also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless mobile devices to assist hearing device users find mobile devices that may be compatible with their hearing devices. Not all mobile devices have been rated. Mobile devices that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated mobile device successfully. Trying out the mobile device with your hearing device is the best way to evaluate it for your personal needs.

**M-Ratings:** Wireless mobile devices rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than mobile devices that are not labeled. M4 is the better/higher of the two ratings. M-ratings refer to enabling acoustic coupling with hearing aids that do not operate in telecoil mode.

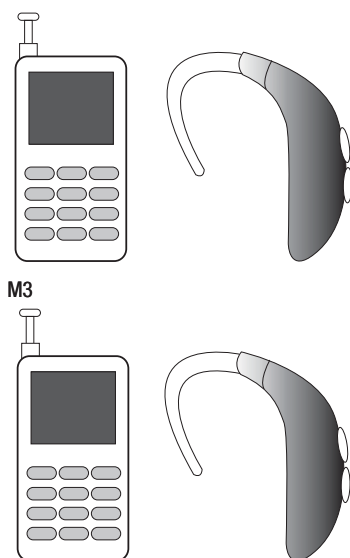
**T-Ratings:** Mobile devices rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than mobile devices that are not labeled. T4 is the better/higher of the two ratings. T-ratings refer to enabling inductive coupling with hearing aids operating in telecoil mode.

Hearing devices may also be rated. Your hearing aid manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise.

Under the current industry standard, American National Standards Institute (ANSI) C63.19, the hearing aid and wireless mobile device rating values are added together to indicate how usable they are together. For example, if a hearing aid meets the M2 level rating and the wireless mobile device meets the M3 level rating, the sum of the two values equals M5.

Under the standard, this should provide the hearing aid user with normal use while using the hearing aid with the particular wireless mobile device. A sum of 6 or more would indicate excellent performance.

However, these are not guarantees that all users will be satisfied. T ratings work similarly.



The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

## **HAC for Newer Technologies**

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses. However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids.

It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or phone retailer.

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