SAMSUNG

USER MANUAL

SM-A022M SM-A022M/DS SM-M022M/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.
- The device may require a connection to a Wi-Fi or mobile network when using some apps or features.
- 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, tap Display, and then tap the Adaptive brightness switch to activate it.
- 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** \rightarrow **Status**. If your device does not have an FCC ID, it means that the device has not been authorised for sale in the U.S. or its territories and may only be brought to the U.S. for the owner's personal use.

- The use of mobile devices on aeroplanes or ships may be subject to federal and local guidelines and restrictions. Check with the appropriate authorities and always follow crew instructions regarding when and how you may use your device.
- 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

- Marning: 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 charging speed may decrease or 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.
- Multiple 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

Basics

- 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.

Precautions for device overheating

If you begin to feel uncomfortable due to the device overheating, stop using the device. 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 overheats and reaches a certain temperature, a warning message will appear to prevent device failure, skin irritations and damages, and battery leakage. 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 all calling and other features will be limited, except for emergency calls, until the device cools down.
- If the second message appears due to a further increase of the device's temperature, the device will turn off. Do not use the device until the device's temperature drops below the specified level. If the second warning message appears during an emergency call, the call will not be disconnected by a forced shut 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.
- Do not use a cable whose covering is peeled off or damaged, and do not use any charger or battery that is damaged or malfunctioning.

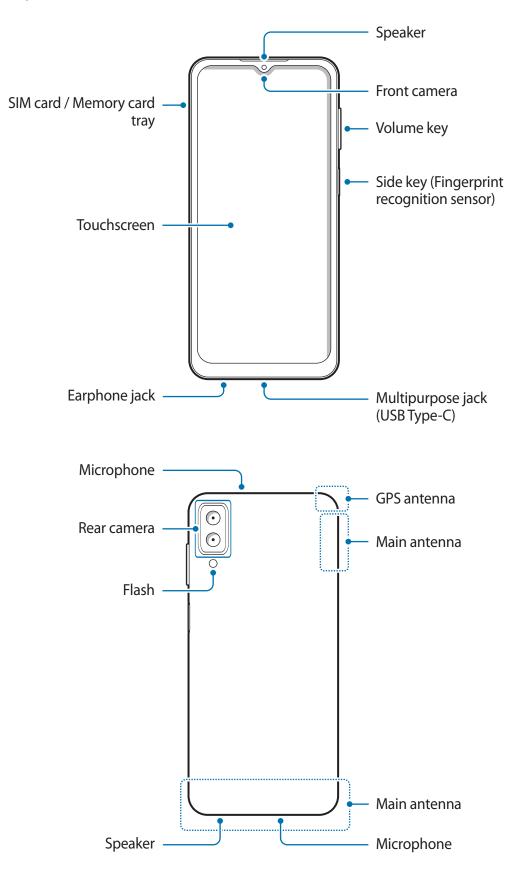
Device layout and functions

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



Basics

- 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.
 - If dust or foreign materials enter the microphone, speaker, or receiver, the device's sound may become quiet or certain features may not work. If you attempt to remove the dust or foreign materials with a sharp object, the device may be damaged and its appearance may be affected.
- 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 allow water to contact the touchscreen. The touchscreen may malfunction in humid conditions or when exposed to water.

Hard keys

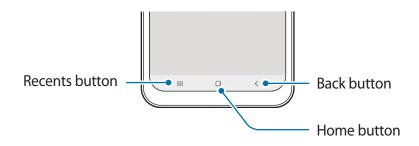
Кеу	Function	
	 Press and hold to turn the device on or off. 	
Side key	Press to turn on or lock the screen.	
	 Press twice to launch the app or feature you set. 	
Side key +	Press simultaneously to capture a screenshot.	
Volume Down key	 Press and hold simultaneously to turn off the device. 	

Setting the Side key

Select an app or feature to launch by pressing the Side key twice.

Launch the Settings app, tap Advanced features \rightarrow Side key, and then select an option you want.

Soft buttons



When you turn on the screen, the soft buttons will appear at the bottom of the screen. Refer to Navigation bar (soft buttons) for more information.

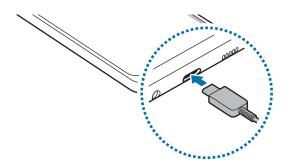
Charging the battery

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

- Use only Samsung-approved battery, charger, and cable specifically designed for your device. Incompatible battery, charger, and cable can cause serious injuries or damage to your 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.

Wired charging

Connect the USB cable to the USB power adaptor and plug the cable into the device's multipurpose jack to charge the battery. After fully charging, disconnect the charger from the device.



Quick charging

Launch the **Settings** app, tap **Device care** \rightarrow **Battery** \rightarrow **Charging**, and then activate the feature you want.

- **Fast charging**: To use the fast charging feature, use a battery charger that supports Adaptive fast charging.
- While charging, you cannot activate or deactivate this feature.
 - You can charge the battery more quickly while the device or its screen is turned off.

Reducing the battery consumption

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

- Optimise the device using the device care feature.
- When you are not using the device, turn off the screen by pressing the Side 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

- 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 this occurs during wireless charging, disconnect the device from the charger to let it cool down, then charge the device again later.
- 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.

SIM or USIM card (nano-SIM card)

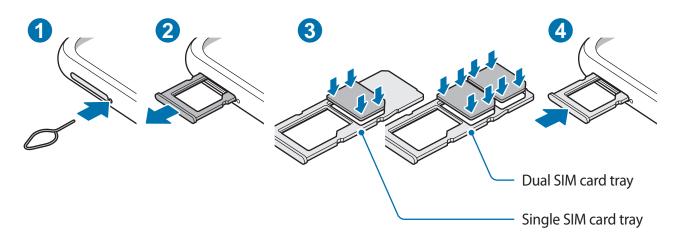
Insert the SIM or USIM card provided by the mobile telephone service provider.

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.



Some services that require a network connection may not be available depending on the service provider.

Installing 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 Place the SIM or USIM card on the tray with the gold-coloured contacts facing downwards and gently press the SIM or USIM card into the tray to secure it.
- 4 Insert the tray back into the tray slot.
- () Use only a nano-SIM card.
 - Use caution not to lose or let others use the SIM or USIM card. Samsung is not responsible for any damages or inconveniences caused by lost or stolen cards.
 - Ensure that the ejection pin is perpendicular to the hole. Otherwise, the device may be damaged.
 - If the card is not fixed firmly into the tray, the SIM card may leave or fall out of the tray.
 - 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.

SIM card manager (dual SIM models)

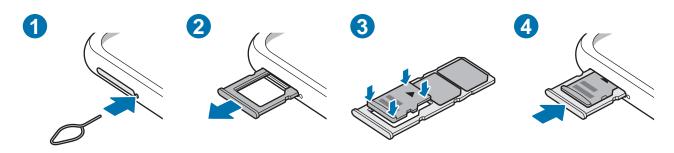
Launch the **Settings** app and tap **Connections** \rightarrow **SIM card manager**.

- SIM cards: Activate the SIM card to use and customise the SIM card settings.
- Preferred SIM card: Select to use specific SIM cards for some features, such as voice calls, when two cards are activated.
- More SIM card settings: Customise the call settings.

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.



- 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 Place a memory card on the tray with the gold-coloured contacts facing downwards and gently press the memory card into the tray to secure it.
- 4 Insert the tray back into the tray slot.
- 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.
 - Ensure that the ejection pin is perpendicular to the hole. Otherwise, the device may be damaged.
 - When you remove the tray from the device, the mobile data connection will be disabled.
 - If the card is not fixed firmly into the tray, the memory card may leave or fall out of the tray.
 - 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.

- 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.

Removing the memory card

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

Launch the Settings app and tap Device care \rightarrow Storage \rightarrow Advanced \rightarrow SD card \rightarrow Unmount.

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 care \rightarrow Storage \rightarrow Advanced \rightarrow SD card \rightarrow 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



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



Turning the device on

Press and hold the Side key for a few seconds to turn on the device.

Turning the device off

- 1 To turn off the device, press and hold the Side key. Alternatively, open the notification panel and tap ().
- 2 Tap **Power off**. To restart the device, tap **Restart**.

Forcing restart

If your device is frozen and unresponsive, press and hold the Side 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.

To activate emergency mode, press and hold the Side key, and then tap **Emergency mode**. Alternatively, open the notification panel and tap $\bigcirc \rightarrow$ **Emergency mode**.

To deactivate emergency mode, tap $\stackrel{\bullet}{\bullet} \rightarrow$ **Turn off 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.

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.

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.

Samsung account

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.

To check the list of services that can be used with your Samsung account, visit account.samsung.com.

1 Launch the Settings app and tap Accounts and backup \rightarrow Accounts \rightarrow Add account \rightarrow Samsung account.

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

- 2 If you already have a Samsung account, sign in to your Samsung account.
 - If you want to sign in using your Google account, tap **Continue with Google**.
 - If you do not have a Samsung account, tap Create account.

Finding your ID and resetting your password

If you forget your Samsung account ID or password, tap **Find ID** or **Reset password** on the Samsung account sign-in screen. You can find your ID or reset your password after you enter the required information.

Signing out of your Samsung account

When you sign out of your Samsung account, your data, such as contacts or events, will also be removed from your device.

- 1 Launch the **Settings** app and tap **Accounts and backup** \rightarrow **Accounts**.
- 2 Tap Samsung account \rightarrow Personal info \rightarrow \rightarrow Sign out.
- 3 Tap **Sign out**, enter your Samsung account password, and then tap **OK**.

Transferring data from your previous device (Smart Switch)

You can use Smart Switch to transfer data from your previous device to your new device.

Launch the **Settings** app and tap **Accounts and backup** \rightarrow **Smart Switch**.

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

Transferring data wirelessly

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 Store or Play Store.

2 On your device, launch the **Settings** app and tap **Accounts and backup** \rightarrow **Smart Switch**.

- 3 Place the devices near each other.
- 4 On the previous device, tap **Send data** \rightarrow **Wireless**.
- 5 On the previous device, tap Allow.
- 6 On your device, select an item to bring and tap **Transfer**.

Backing up and restoring data using external storage

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

- 1 Back up 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 Accounts and backup \rightarrow Smart Switch $\rightarrow \square \rightarrow$ 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. Back up data from your previous device to a computer and import the data to your device.

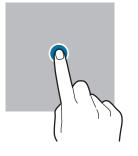
- 1 On the computer, visit www.samsung.com/smartswitch to download Smart Switch.
- 2 On the computer, launch Smart Switch.
- If your previous device is not a Samsung device, back up data to a computer using a program provided by the device's manufacturer. Then, skip to the fifth step.
- 3 Connect your 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.

Understanding the screen

Controlling the touchscreen

Tapping

Tap the screen.

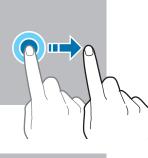


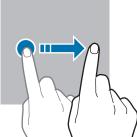
Dragging

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

Swiping

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





Tapping and holding

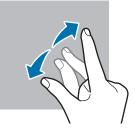
Tap and hold the screen for approximately 2 seconds.

Double-tapping Double-tap the screen.







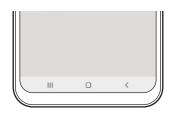




- Do not allow the touchscreen to come into contact with other electrical devices.
 Electrostatic discharges can cause the touchscreen to malfunction.
 - To avoid damaging the touchscreen, do not tap it with anything sharp or apply excessive pressure to it with your fingertips.
 - It is recommended not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

Navigation bar (soft buttons)

When you turn on the screen, the soft buttons will appear on the navigation bar 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.

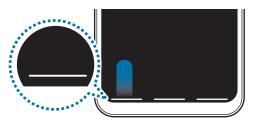


Button		Function
	Recents	Tap to open the list of recent apps.
0	Home	Tap to return to the Home screen.
		• Tap and hold to launch the Google Assistant app.
<	Back	Tap to return to the previous screen.

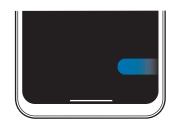
Hiding the navigation bar

View files or use apps on a wider screen by hiding the navigation bar.

Launch the Settings app, tap Display → Navigation bar, and then tap Swipe gestures under Navigation type. The navigation bar will be hidden and the gesture hints will appear. Tap More options and select an option you want.



Swipe from bottom



Swipe from sides and bottom

If you want to hide the gesture hints at the bottom of the screen, tap the **Gesture hints** switch to deactivate it.

Home screen and Apps screen

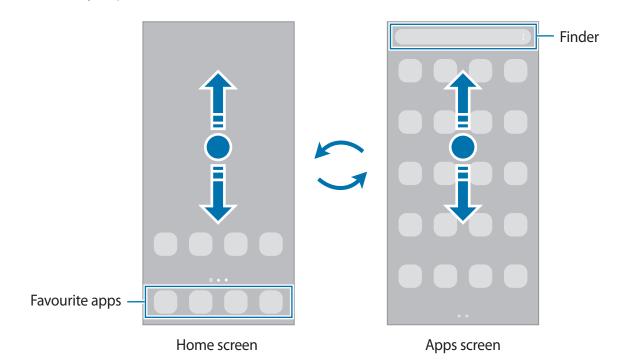
The Home screen is the starting point for accessing all of the device's features. It displays widgets, shortcuts to apps, and more.

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

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.



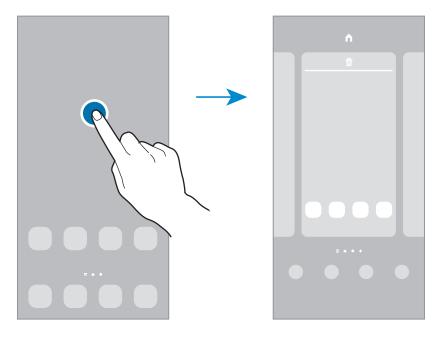
If you add the Apps button on the Home screen, you can open the Apps screen by tapping the button. On the Home screen, tap and hold an empty area, tap **Home screen settings**, and then tap the **Apps button** switch to activate it. The Apps button will be added at the bottom of the Home screen.



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 \oplus .
- 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: Configure settings for the Home screen, such as the screen layout.

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 \rightarrow Home screen layout \rightarrow Home screen only \rightarrow Apply.

You can now access all your apps by swiping to the left on the Home screen.

Launching Finder

Search for content on the device quickly.

- 1 On the Apps screen, tap **Search**. Alternatively, open the notification panel, swipe downwards, and then tap **Q**.
- 2 Enter a keyword.

Apps and content on your device will be searched.

If you tap **Q** on the keyboard, you can search for more content.

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 tap **Add to Home**. A shortcut to the app will be added on the Home screen.

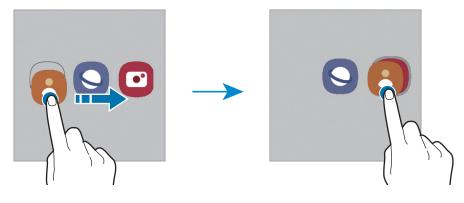
You can also move frequently used apps to the shortcuts area at the bottom of the Home screen.

Creating folders

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

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

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



Adding more apps

Tap + on the folder. Tick the apps to add and tap **Done**. 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.

Lock screen

Pressing the Side 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 Side key to turn on the screen. Alternatively, double-tap the screen.

Changing the screen lock method

To change the screen lock method, launch the **Settings** app, tap **Lock screen** \rightarrow **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.

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.

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.

lcon	Meaning
0	No signal
.itl	Signal strength
Rill	Roaming (outside of normal service area)
G tt	GPRS network connected

lcon	Meaning
E +†	EDGE network connected
3G ↓↑	UMTS network connected
H ↓†	HSDPA network connected
H+ +†	HSPA+ network connected
4G / LTE +† / +†	LTE network connected
(î; ,	Wi-Fi connected
*	Bluetooth feature activated
Q	Location services being used
K .	Call in progress
č	Missed call
F	New text or multimedia message
Q	Alarm activated
X / X	Mute mode / Vibration mode
*	Flight mode activated
A	Error occurred or caution required
2 /	Battery charging / Battery power level

- 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.
 - The indicator icons may appear differently depending on the service provider or model.

Screen capture

Capture a screenshot while using the device. Press the Side key and the Volume Down key simultaneously. You can view the captured screenshots in **Gallery**.

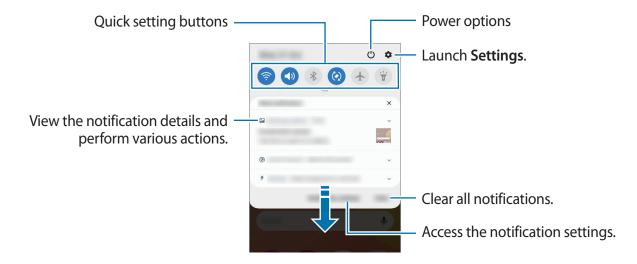
 \swarrow It is not possible to capture a screenshot while using some apps and features.

Notification panel

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

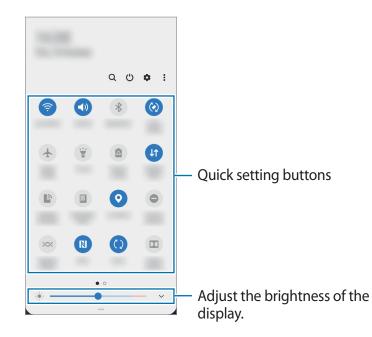
To open the notification panel, drag the status bar downwards. To close the notification panel, swipe upwards on the screen.

You can 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.



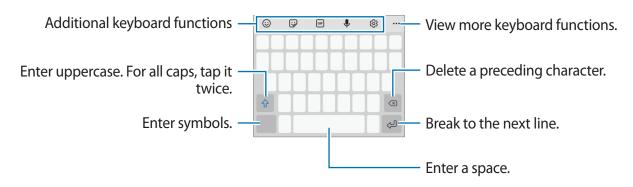
To change feature settings, tap the text under each button. To view more detailed settings, tap and hold a button.

To rearrange buttons, tap $\bullet \to Button \text{ order}$, tap and hold a button, and then drag it to another location.

Entering text

Keyboard layout

A keyboard appears automatically when you enter text.



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 $\mathfrak{G} \to \mathbf{Languages}$ and types $\to \mathbf{Manage}$ input languages and 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

On the navigation bar, tap :::::: to change the keyboard.

To change the keyboard type, tap $\mathfrak{B} \rightarrow Languages$ 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 → On-screen keyboard, and then tap the Show Keyboard button switch to activate it.
 - On a **3 x 4 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

- 😳 : Enter emoticons.
- 😺 : Enter stickers.
- GF: Attach animated GIFs.
- 🜷 : Enter text by voice.
- 段: Change the keyboard settings.

Tap ••• to use more keyboard functions.

- Q : Search for content and enter it.
- 🕼 : Translate text and enter it.
- <: Open the text editing panel.
- 🗐 : Change the keyboard mode.
- 🔂 : Change the keyboard size.
- Some features may not be available depending on the service provider or model.

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.

Apps and features

Installing or uninstalling apps

Galaxy Store

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

Launch the Galaxy Store app. Browse apps by category or tap Q to search for a keyword.

- This app may not be available depending on the service provider or model.
 - To change the auto update settings, tap → ★ → Auto update apps, and then select an option.

Play Store

Purchase and download apps.

Launch the Play Store app. Browse apps by category or search for apps by keyword.

 \swarrow To change the auto update settings, tap $\blacksquare \rightarrow$ Settings \rightarrow Auto-update apps, and then select an option.

Managing apps

Uninstalling or disabling apps

Tap and hold an app and select an option.

- Uninstall: Uninstall downloaded apps.
- **Disable**: Disable selected default apps that cannot be uninstalled from the device.
- Some apps may not support this feature.

Enabling apps

Launch the **Settings** app, tap **Apps** $\rightarrow \mathbf{\nabla} \rightarrow \mathbf{Disabled}$, 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.

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** \rightarrow $\stackrel{\bullet}{\bullet}$ \rightarrow **Permission manager**. Select an item and select an app.

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

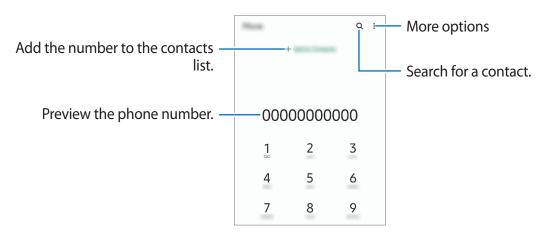
Phone

Introduction

Make or answer voice and video calls.

Making calls

- 1 Launch the **Phone** app and tap **Keypad**.
- 2 Enter a phone number.
- 3 Tap 🔇 to make a voice call, or tap 📑 or 🗔 to make a video call.



Making calls from call logs or contacts list

Launch the **Phone** app, 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** \rightarrow **Motions and gestures**, and then tap the **Swipe to call or send messages** switch to activate it.

Using speed dial

To set a number to speed dial, launch the **Phone** app, tap **Keypad** or **Contacts** \rightarrow \Rightarrow **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 an international call

- 1 Launch the **Phone** app and tap **Keypad**.
- 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 and select a message to send.

To create various rejection messages, launch the **Phone** app, tap $\bullet \to$ **Settings** \to **Quick decline messages**, enter a message, and then tap +.

Blocking phone numbers

Block calls from specific numbers added to your block list.

- 1 Launch the **Phone** app and tap $\bullet \rightarrow$ **Settings** \rightarrow **Block numbers**.
- 2 Tap Recents or Contacts, select contacts or phone numbers, and then tap Done.
 To manually enter a number, tap Add 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/hidden numbers** switch to activate the feature.

Options during calls

- 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.
- Hold call: Hold a call.
- Bluetooth: Switch to a Bluetooth headset if it is connected to the device.
- **Speaker**: Activate or deactivate the speakerphone. When using the speakerphone, 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.
- Camera: During a video call, turn off the camera so that the other party cannot see you.
- Switch: During a video call, switch between the front and rear cameras.
- Some features may not be available depending on the service provider or model.

Contacts

Introduction

Create new contacts or manage contacts on the device.

Adding contacts

Creating a new contact

- 1 Launch the **Contacts** app and tap 🕀.
- 2 Select a storage location.
- 3 Enter contact information and tap **Save**.

Importing contacts

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

- 1 Launch the **Contacts** app and tap $\underline{=} \rightarrow$ **Manage contacts** \rightarrow **Import or export contacts** \rightarrow **Import**.
- 2 Follow the on-screen instructions to import contacts.

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 **Accounts and backup** → **Accounts** and select the account to sync with.
- 2 Tap Sync account and tap the 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. Tap **Q** at the top of the contacts list and enter search criteria. Tap the contact. Then take one of the following actions:

- 🏠 : Add to favourite contacts.
- 📞 : Make a voice call.
- 📑 / 🖸 : Make a video call.
- 📮 : Compose a message.
- 🔛 : Compose an email.

Deleting contacts

- 1 Launch the **Contacts** app and tap $\bullet \rightarrow$ **Delete**.
- 2 Select contacts and tap **Delete**.

To delete contacts one by one, tap a contact from the contacts list and tap $\bullet \rightarrow$ **Delete**.

Sharing contacts

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

- 1 Launch the **Contacts** app and tap $\bullet \rightarrow$ **Share**.
- 2 Select contacts and tap **Share**.
- 3 Select a sharing method.

Creating groups

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

- 1 Launch the **Contacts** app and tap $\equiv \rightarrow$ **Groups** \rightarrow **Create group**.
- 2 Follow the on-screen instructions to create a group.

Merging duplicate contacts

If your contacts list includes duplicate contacts, merge them into one to streamline your contacts list.

- 1 Launch the **Contacts** app and tap $\underline{=} \rightarrow$ **Manage contacts** \rightarrow **Merge contacts**.
- 2 Tick contacts and tap Merge.

Messages

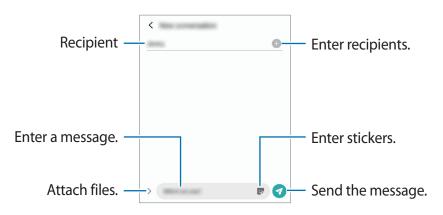
Introduction

Send and view messages by conversation.

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

Sending messages

- 1 Launch the **Messages** app and tap 💬.
- Add recipients and enter a message.
 To record and send a voice message, tap and hold held hele, say your message, and then release your finger. The recording icon appears only while the message input field is empty.
- 3 Tap 🕢 to send the message.



Viewing messages

- 1 Launch the **Messages** app and tap **Conversations**.
- 2 On the messages list, select a contact or a phone number.
 - To reply to the message, tap the message input field, enter a message, and then tap \bigcirc .
 - To adjust the font size, spread two fingers apart or pinch on the screen.

Sorting messages

You can sort messages by category and manage them easily.

Launch the Messages app and tap Conversations \rightarrow New category \rightarrow Add category. If the category option does not appear, tap $\stackrel{\bullet}{\rightarrow} \rightarrow$ Settings and tap the Conversations categories switch to activate it. Apps and features

Deleting messages

Tap and hold a message to delete, then tap **Delete**.

Changing message settings

Launch the **Messages** app, tap $\bullet \to$ **Settings**. You can block unwanted messages, change notification settings, and more.

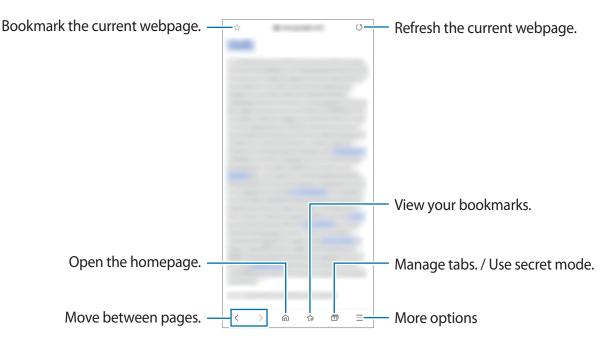
Internet

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

- 1 Launch the **Internet** app.
- 2 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

If you set a password for secret mode, you can prevent others from viewing your search history, browsing history, bookmarks, and saved pages.

- 2 Tap the Lock Secret mode switch to activate it, tap Start, and then set a password for secret mode.

In secret mode, the device will change the colour of the toolbars. To deactivate secret mode, tap $\Box \rightarrow$ **Turn off Secret mode**.

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

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.

Taking photos

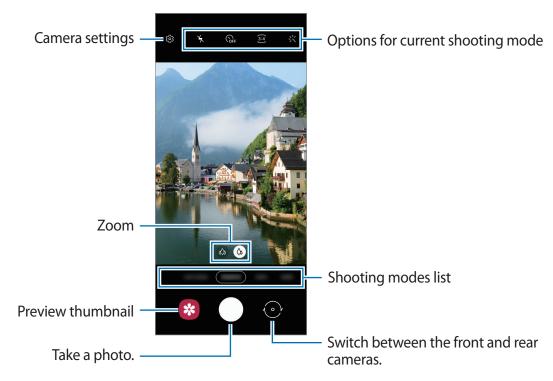
1 Launch the **Camera** app.

You can also launch the app by pressing the Side key twice quickly or dragging 💽 outside the circle on the locked screen.

- 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.
 - The camera automatically shuts off when unused.
 - Some methods may not be available depending on the service provider or model.
- 2 Tap the image on the preview screen where the camera should focus.
 To adjust the brightness of photos, tap the screen. When the adjustment bar appears, drag the adjustment bar towards + or -.

3 Tap O to take a photo.

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.



- The preview screen may vary depending on the shooting mode and which camera is being used.
 - When you take photos or videos with a high resolution or a high zoom ratio, the focus may not be clear if the subject is close. Take photos or videos from a good distance.
 - If photos you take appear blurry, clean the camera lens and try again.
 - 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 wideangle photos or videos and does not indicate device performance problems.
 - The maximum capacity for recording a video may vary depending on the resolution.
 - The camera may fog up or form condensation if the device is exposed to sudden changes in air temperature, due to the difference in temperature outside and inside the camera cover. Try to avoid such conditions when planning to use the camera. If fogging does occur, allow the camera to dry naturally at room temperature before taking photos or recording videos, otherwise results may look blurry.

Using zoom features

Select @ / @ or drag it to the left or right to zoom in or out. Alternatively, spread two fingers apart on the screen to zoom in, and pinch to zoom out.

- @ : The Ultra wide camera lets you take wide-angle photos or record wide-angle videos of things like landscapes.
- (a) : The wide-angle camera lets you take basic photos or record normal videos.
- Zoom features are available only when using the rear camera.

Using the camera button

- Tap and hold the camera button to record a video.
- To take burst shots, swipe the camera button to the edge of the screen and hold it.
- If you add another camera button, you can move it anywhere on the screen and take photos more conveniently. On the preview screen, tap (②) → Shooting methods and tap the Floating Shutter button switch to activate it.

Options for current shooting mode

On the preview screen, use the following options.

- 🖌 : Activate or deactivate the flash.
- GF : Select the length of the delay before the camera automatically takes a photo.
- 34 : Select an aspect ratio and resolution for photos.
- Select an aspect ratio for videos.
- 🔆 : Apply a filter effect or beauty effects.
- ②: Select a metering method. This determines how light values are calculated. ③
 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.
- O : In FOOD mode, focus on a subject inside the circular frame and blur the image outside the frame.
- 🛞 : In **FOOD** mode, adjust the colour tone.
- Me available options may vary depending on the model or shooting mode.

Photo mode

The camera adjusts the shooting options automatically depending on the surroundings to capture photos easily.

On the shooting modes list, tap **PHOTO** and tap \bigcirc to take a photo.

Taking high-resolution photos

Take high-resolution photos. You can crop the high-resolution photos by enlarging the area you want and saving it as a high-resolution file.

In the shooting options, tap $3:4 \rightarrow 43MP$ and take a photo.



The resolution may vary depending on the model.

Taking selfies

You can take self-portraits with the front camera.

- 1 On the preview screen, swipe upwards or downwards, or tap \odot to switch to the front camera for self-portraits.
- 2 Face the front camera lens.To take self-portraits with a wide-angle shot of the landscape or people, tap 8.
- 3 Tap O to take a photo.

Applying filter and beauty effects

You can select a filter effect and modify facial features, such as your skin tone or face shape, before taking a photo.

- 1 On the preview screen, tap 🔆.
- 2 Select effects and take a photo.

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.

Video mode

The camera adjusts the shooting options automatically depending on the surroundings to record videos easily.

- 1 On the shooting modes list, tap **VIDEO** and tap to record a video.
 - 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 **AF** to cancel the manually set focus.
- 2 Tap to stop recording the video.

Live focus mode

The camera allows you to take photos where the background is blurred and the subject stands out clearly.

- 1 On the shooting modes list, tap **LIVE FOCUS**.
- 2 Drag the background blur adjustment bar to adjust the blur level.
- 3 When **Ready** appears on the preview screen, tap \bigcirc to take a photo.



Background blur adjustment bar

 \mathbb{M}

- Use this feature in a place that has sufficient light.
 - The background blur may not be applied properly in the following conditions:
 - The device or the subject is moving.
 - The subject is thin or transparent.
 - The subject has a similar colour to the background.
 - The subject or background is plain.

Pro mode

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

On the shooting modes list, tap **MORE** \rightarrow **PRO**. Select options and customise the settings, and then tap \bigcirc to take a photo.

Available options

- 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.
- ② : Change the exposure value. This determines how much light the camera's sensor receives. For low-light situations, use a higher exposure.

Separating the focus area and the exposure area

You can separate the focus area and the exposure area.

Tap and hold the preview screen. The AF/AE frame will appear on the screen. Drag the frame to the area where you want to separate the focus area and the exposure area.



Panorama mode

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

- 1 On the shooting modes list, tap **MORE** \rightarrow **PANORAMA**.
- 2 Tap \bigcirc and move the device 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.

3 Tap 🗩 to stop taking photos.

Avoid taking photos of indistinct backgrounds, such as an empty sky or a plain wall.

Food mode

Take photos of food with more vibrant colours.

- 1 On the shooting modes list, tap **MORE** \rightarrow **FOOD**.
- 2 Tap the screen and drag the circular frame over the area to highlight.The area outside the circular frame will be blurred.To resize the circular frame, drag a corner of the frame.
- 3 Tap \bigoplus and drag the adjustment bar to adjust the colour tone.
- 4 Tap O to take a photo.

Macro mode

Take photos of subjects at close range. On the shooting modes list, tap $MORE \rightarrow MACRO$.

Deco Pic mode

Capture photos or videos with various stickers. On the shooting modes list, tap $MORE \rightarrow DECO PIC$.

Customising camera settings

On the preview screen, tap (3). Some options may not be available depending on the shooting mode.

Pictures

• Swipe Shutter button to edge to: Select an action to perform when you swipe the camera button to the edge of the screen and hold it.

Videos

- Rear video size: Select an aspect ratio and resolution for videos you want to take with the rear camera. Using a higher resolution will result in higher quality videos, but they will take up more memory.
- Front video size: Select an aspect ratio and resolution for videos you want to take with the front camera. Using a higher resolution will result in higher quality videos, but they will take up more memory.

Useful features

- Auto HDR: Take photos with rich colours and reproduce details even in bright and dark areas.
- **Pictures as previewed**: Set the device to save photos as they appear on the preview screen when taken with the front camera without flipping them.
- 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.
- **Shooting methods**: Select additional shooting methods for taking a photo or recording a video.
- Settings to keep: Keep the last settings you used, such as the shooting mode, when you launch the camera.
- Storage location: Select the memory location for storage. This feature will appear when you insert a memory card.

- Watermark: Add a watermark in the bottom left corner when taking pictures.
- **Reset settings**: Reset the camera settings.
- Contact us: Ask questions or view frequently asked questions.
- About Camera: View the Camera app version and legal information.
- Some features may not be available depending on the model.

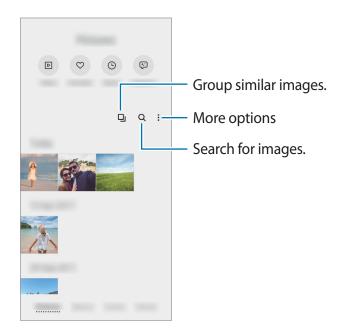
Gallery

Introduction

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

Using Gallery

Launch the Gallery app.

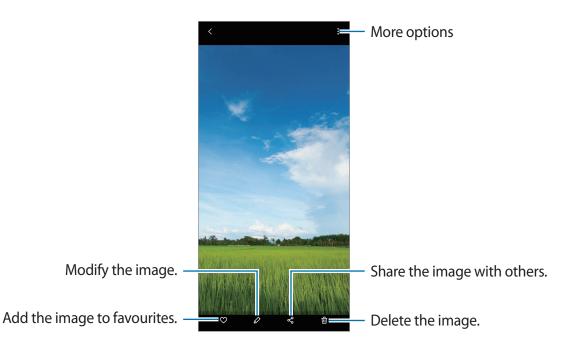


Grouping similar images

Launch the **Gallery** app and tap **D** to group similar images and display only the best shots as a preview of the images. When you tap the image preview, you can view all the images in the group.

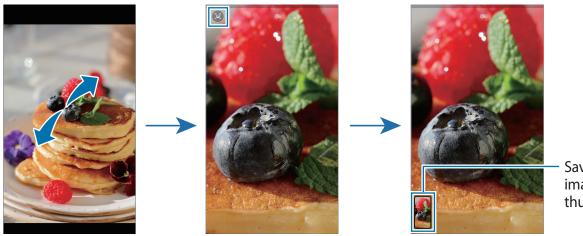
Viewing images

Launch the **Gallery** app and select an image. To view other files, swipe to the left or right on the screen.



Cropping enlarged images

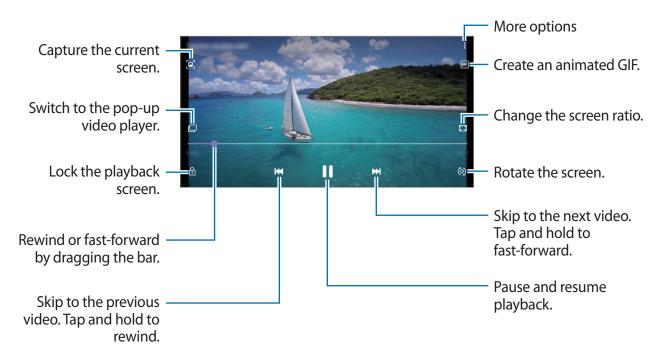
- 1 Launch the **Gallery** app and select an image.
- 2 Spread two fingers apart on the area you want to save and tap ⁽²⁾. The cropped area will be saved as a file.



Saved image thumbnail

Viewing videos

Launch the **Gallery** app and select a video to play. To view other files, swipe to the left or right on the screen.



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.

Albums

Create albums and sort your images and videos.

- 2 Select the album, tap Add items, and then copy or move the images or videos you want.

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.

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

To add or delete images or videos, select a story and tap Story album \rightarrow \rightarrow Add or Edit.

Deleting images or videos

Launch the **Gallery** app, tap and hold an image, a video, or a story to delete, and then tap **Delete**.

Using the recycle bin feature

You can keep the deleted images and videos in the recycle bin. The files will be deleted after a certain period.

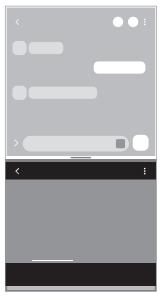
Launch the **Gallery** app, tap \rightarrow **Settings**, and then tap the **Recycle bin** switch to activate it.

To view files in the recycle bin, launch the **Gallery** app and tap \rightarrow **Recycle bin**.

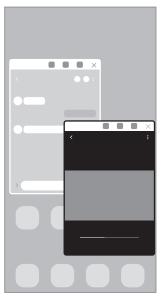
Multi window

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.







Pop-up view

Some apps may not support this feature.

Split screen view

- 1 Tap the Recents button to open the list of recently used apps.
- 2 Swipe to the left or right, tap an app's icon, and then tap **Open in split screen view**. The selected app will launch in the split screen view.
- On the other window, swipe left or right to select another app to launch.
 To launch apps not on the list of recently used apps, tap the Home button or Back button and select an app.

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.

Pop-up view

- 1 Tap the Recents button to open the list of recently used apps.
- 2 Swipe to the left or right, tap an app's icon, and then tap **Open in pop-up view**. The app screen will appear in the pop-up view.

If you tap the Home button while using a pop-up window, the window will be minimised and displayed as an app icon. To use the pop-up window again, tap the app icon.

Moving pop-up windows

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

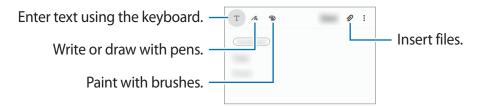
Samsung Notes

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, tap \oplus , and then create a note.

You can change the input method by tapping \checkmark or \bigcirc .



2 When you are finished composing the note, tap **Save**.

Deleting notes

Tap and hold a note to delete and tap **Delete**.

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 news and tips. **Samsung Members** can help you solve any problems you might encounter while using your device.

Calendar

Manage your schedule by entering upcoming events in your planner.

Creating events

- Launch the Calendar app and tap + or double-tap a date.
 If the date already has saved events or tasks in it, tap the date and tap +.
- 2 Enter event details and tap Save.

Syncing events with your accounts

- 1 Launch the **Settings** app, tap **Accounts and backup** → **Accounts**, and then select the account to sync with.
- 2 Tap Sync account and tap the 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 $\underline{=} \rightarrow \diamondsuit \rightarrow \text{Add new}$ **account**. Then, select an account to sync with and sign in. When an account is added, a blue circle is displayed next to the account name.

Reminder

Register to-do items as reminders and receive notifications according to the condition you set.

- To receive more accurate notifications, connect to a Wi-Fi or mobile network.
 - To use location reminders, the GPS feature must be activated. Location reminders may not be available depending on the model.

Starting Reminder

Launch the **Calendar** app and tap $\equiv \rightarrow$ **Reminder**. The Reminder screen will appear and the Reminder app icon (\bigcirc) will be added to the Apps screen.

Creating reminders

- 1 Launch the **Reminder** app.
- 2 Tap Write a reminder or +, enter the details, and then tap Save.

Completing reminders

On the reminders list, select a reminder and tap **Complete**.

Restoring reminders

Restore reminders that have been completed.

- 1 On the reminders list, tap $\bullet \rightarrow \textbf{Completed} \rightarrow \textbf{Edit}$.
- 2 Tick items to restore and tap **Restore**.Reminders will be added to the reminders list and you will be reminded again.

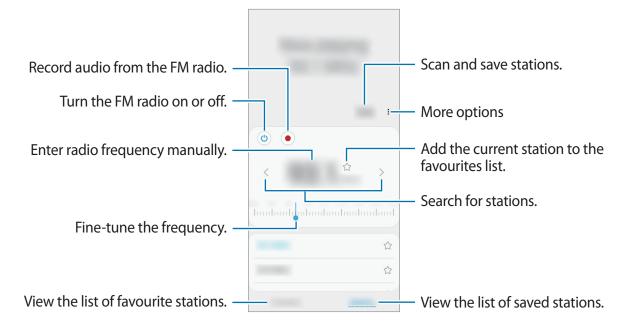
Deleting reminders

To delete a reminder, select a reminder and tap **Delete**. To delete multiple reminders, tap and hold a reminder, tick reminders to delete, and then tap **Delete**.

Radio

Launch the Radio app.

Before you use this app, you must connect an earphone, which serves as the radio antenna. The FM radio scans and saves available stations automatically when running for the first time.



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

Playing through the speaker

You can listen to the radio through the speaker instead of the connected earphone. Tap $\bullet \rightarrow \mathsf{Play}$ through speaker.

Voice Recorder

Record or play voice recordings.

- 1 Launch the **Voice Recorder** app.
- 2 Tap 🔵 to start recording. Speak into the microphone.
 - Tap III to pause recording.
 - While making a voice recording, tap **BOOKMARK** to insert a bookmark.
- 3 Tap **Tap** to finish recording.
- 4 Enter a file name and tap **Save**.

My Files

Access and manage various files stored in the device.

Launch the My Files app.

To check for unnecessary data and free up the device's storage, tap Analyse storage.

To search for files or folders, tap Q.

Clock

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

Launch the **Clock** app.

Calculator

Perform simple or complex calculations.

Launch the Calculator app.

- (L): View the calculation history. To clear the history, tap **Clear history**. To close the calculation history panel, tap .
- [TTT]: Use the unit conversion tool. You can convert various values, such as area, length, or temperature, into other units.
- 📰 : Display the scientific calculator.

Game Launcher

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

Launch the Game Launcher app and select the game you want.

- If Game Launcher does not appear, launch the Settings app, tap Advanced features, and then tap the Game Launcher switch to activate it.
 - Games downloaded from Play Store and Galaxy Store will be automatically shown on the Game Launcher screen. If you cannot see your games, drag the Library panel upwards and tap • → Add apps.

Removing a game from Game Launcher

Drag the Library panel upwards, tap and hold a game, and then tap **Remove from Game** Launcher.

Changing the performance mode

You can change the game performance mode.

Launch the Game Launcher app, tap $\blacksquare \rightarrow$ Game performance \rightarrow Game performance, and then select the mode you want.

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

Battery power efficiency may vary by game.

Game Booster

Game Booster lets you play games in a better environment. You can use Game Booster while playing games.

To open the Game Booster panel while playing games, tap 💿 on the navigation bar. If the navigation bar is hidden, drag upwards from the bottom of the screen to show it. If you have set the navigation bar to use **Swipe gestures**, open the notification panel and tap **Tap to open Game Booster**.

- 🏚 : Configure settings for Game Booster.
- Monitoring temperature / Monitoring memory: Set the device to automatically adjust settings to prevent device overheating and to stop apps running in the background to better manage memory.
- Block during game: Lock some features during games.
- Navigation button lock: Hide the buttons on the navigation bar. To display the buttons, tap a on the navigation bar.
- Screen touch lock: Lock the touchscreen while the game is being played. To unlock the touchscreen, drag the lock icon in any direction.
- Screenshot: Capture screenshots.
- **Record**: Record your game sessions. To stop recording, tap **(b**) on the navigation bar.
- You can set to open the Game Booster panel from the navigation bar while the navigation bar is set to Swipe gestures. On the Game Booster panel, tap Block during game and tap the Navigation gestures switch to activate it.
 - Available options may vary depending on the game.

Launching apps in pop-up windows while playing games

You can launch apps in pop-up windows while playing a game.

Tap 💿 and select an app from the apps list.

Sharing content

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

- 1 Launch the **Gallery** app and select an image.
- 2 Tap **<** and select a sharing method you want.
- You may incur additional charges when sharing files via the mobile network.

Quick Share

Sharing content with nearby devices

Share content with nearby devices via Wi-Fi Direct or Bluetooth.

- 1 Launch the Gallery app and select an image.
- 2 On the other device, open the notification panel, swipe downwards, and then tap (Quick Share) to activate it.
- 4 Accept the file transfer request on the other device.

Setting who can find your device

Set who is allowed to find and send content to your device.

- 1 Open the notification panel, swipe downwards, and then tap ③ (Quick Share) to activate it.
- 2 Tap and hold (a) (Quick Share).The Quick Share settings screen will appear.
- 3 Select an option.
 - Contacts only: Allow only your contacts to share with your device.
 - Everyone: Allow any nearby devices to share with your device.

Shared album

Create a shared album to share photos or videos with others, and download your files whenever you want.

- 1 Launch the **Gallery** app and select an image.
- 2 Tap $\ll \rightarrow$ Shared album.
- 3 Select an album to share.

If there is no album to share, tap **Create shared album** and follow the on-screen instructions to create an album.

- When you play a high-resolution video from a shared album, the video connection may drop depending on the network speed.
 - Content that is larger than 1 GB cannot be shared to a shared album.

Samsung Global Goals

The Global Goals, which were established by the United Nations General Assembly in 2015, consist of goals that aim to create a sustainable society. These goals have the power to end poverty, fight inequality, and stop climate change.

With Samsung Global Goals, learn more about the global goals and join the movement for a better future.

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.

- 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.
- **YT Music**: Enjoy various music and videos provided by YouTube Music. You can also view the music collections stored on your device and play them.
- 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.
- Some apps may not be available depending on the service provider or model.

Settings

Introduction

Customise device settings. Launch the **Settings** app. To search for settings by entering keywords, tap **Q**.

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.
- NFC and payment (NFC-enabled models): Set the device to allow you to read near field communication (NFC) tags that contain information about products. You can also use this feature to make payments and buy tickets for transportation or events after downloading the required apps. Refer to NFC and payment (NFC-enabled models) 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.
- Mobile networks: Configure your mobile network settings.

• **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 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.

You can also select apps to always use the mobile data even when your device is connected to a Wi-Fi network. Refer to Mobile data only apps for more information.

- SIM card manager (dual SIM models): Activate your SIM or USIM cards and customise the SIM card settings. Refer to SIM card manager (dual SIM models) for more information.
- Mobile Hotspot and Tethering: Use the device as a mobile hotspot to share the device's mobile data connection with other devices. For more information about the mobile hotspot, refer to Mobile Hotspot.

You may incur additional charges when using this feature.

• More connection settings: Customise settings to control other features. Refer to More connection settings for more information.

Wi-Fi

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

Connecting to a Wi-Fi network

- 1 On the Settings screen, tap **Connections** \rightarrow **Wi-Fi** and tap the switch to activate it.
- 2 Select a network from the Wi-Fi networks list. Networks with a lock icon require a password.
- 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 from connecting to the network automatically, tap next to the network and tap the Auto reconnect switch to deactivate it.
 - 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** \rightarrow **Wi-Fi** and tap the switch to activate it.

2 Tap $\bullet \rightarrow$ 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.

To end the device connection, select the device to disconnect from the list.

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 $\sim \rightarrow$ 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.

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

- On the Settings screen, tap Connections → Bluetooth and 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.

To unpair the devices, tap 💠 next to the device name to unpair and tap **Unpair**.

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 select a device to transfer the image to. If the device you want to pair with is not in the list, request that the device turns on its visibility option.
- 3 Accept the Bluetooth connection request on the other device.

Data saver

Reduce your data usage by preventing some apps running in the background from sending or receiving data.

On the Settings screen, tap **Connections** \rightarrow **Data usage** \rightarrow **Data saver** and tap the switch to activate it.

When the data saver feature is activated, the 🕰 icon will appear on the status bar.



To select apps to use data without restriction, tap **Allow app while Data saver on** and select apps.

Mobile data only apps

Select apps to always use the mobile data even when your device is connected to a Wi-Fi network.

For example, you can set the device to use only mobile data for apps that you want to keep secure or streaming apps that can be disconnected. Even if you do not deactivate the Wi-Fi feature, the apps will launch using the mobile data.

On the Settings screen, tap **Connections** \rightarrow **Data usage** \rightarrow **Mobile data only apps**, tap the switch to activate it, and then tap the switches next to the apps you want.



You may incur additional charges when using this feature.

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.

You can change the level of security and the password by tapping $\bullet \rightarrow$ Configure Mobile Hotspot.

- 3 On the other device's screen, search for and select your device from the Wi-Fi networks list. Alternatively, tap 器 on the mobile hotspot screen and scan the QR code with the other device.
- If the mobile hotspot is not found, on your device, tap [•]→ Configure Mobile
 Hotspot and deselect Hide my device.
 - If you activate the **Auto Hotspot** feature, you can share your device's mobile data connection with other devices signed in to your Samsung account.

More connection settings

Customise settings to control other connection features.

On the Settings screen, tap **Connections** \rightarrow **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 private networks (VPNs) on your device to connect to a school or company's private network.
- **Private DNS**: Set the device to use the security enhanced private DNS.
- 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** \rightarrow **More connection settings** \rightarrow **Printing** \rightarrow **Download plugin**.
- 2 Select a printer plug-in and install it.

- 3 Select the installed printer plug-in. The device will automatically search for printers that are connected to the same Wi-Fi network as your device.
- 4 Select a printer to add.

D To add printers manually, tap $\bullet \rightarrow \mathbf{Add}$ printer.

Printing content

While viewing content, such as images or documents, access the options list, tap **Print** $\rightarrow \blacksquare$ **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.
- **Temporary mute**: Set the device to use silent mode for a certain period.
- **Ringtone**: Change the call ringtone.
- Notification sound: Change the notification sound.
- Volume: Adjust the device's volume level.
- Vibration pattern: Select a vibration pattern.
- Vibration intensity: Adjust the force of the vibration notification.
- System sound/vibration control: Set the device to sound or vibrate for actions, such as controlling the touchscreen.
- Sound quality and effects: Set the device's sound quality and effects. Refer to Sound quality and effects for more information.
- Some features may not be available depending on the model.

Sound quality and effects

Set the device's sound quality and effects.

On the Settings screen, tap **Sounds and vibration** \rightarrow **Sound quality and effects**.

- **Dolby Atmos**: 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 flow all around you.
- Equaliser: Select an option for a specific music genre and enjoy optimised sound.
- Adapt sound: Set the best sound for you.
- Depending on the model, you must connect an earphone to use some features.

Notifications

Change the notification settings.

On the Settings screen, tap Notifications.

- Suggest actions and replies: Set the device to suggest actions and replies for notifications.
- Swipe left or right for snooze: Set the device to show the notification snooze icon when you swipe a notification to the left or right on the notification panel.
- App icon badges: Set the device to display a number or dot badge on apps that have notifications.
- Status bar: Set how to display notification icons and whether to show the remaining battery percentage on the status bar.
- Do not disturb: Set the device to mute all sounds except for allowed exceptions.
- Recently sent: View the apps that received recent notifications and change the notification settings. To customise notification settings for more apps, tap See all → ▼
 → All and select an app from the apps list.

Display

Change the display and the Home screen settings.

On the Settings screen, tap Display.

- Light / Dark: Activate or deactivate dark mode.
- **Dark mode settings**: Reduce eye strain by applying the dark theme when using the device at night or in a dark place. You can set a schedule for applying dark mode.

Multiple The dark theme may not be applied in some apps.

- Brightness: Adjust the brightness of the display.
- Adaptive brightness: Set the device to keep track of your brightness adjustments and apply them automatically in similar lighting conditions.
- Blue light filter: Reduce eye strain by limiting the amount of blue light emitted by the screen. You can set a schedule for applying the blue light filter.
- Font size and style: Change the font size and style.
- Screen zoom: Make the items on the screen larger or smaller.
- Full screen apps: Select apps to use with the full screen aspect ratio.
- Screen timeout: Set the length of time the device waits before turning off the display's backlight.
- Home screen: Configure settings for the Home screen, such as the screen layout.
- Navigation bar: Change the navigation bar settings. Refer to Navigation bar (soft buttons) for more information.
- Screensaver: Set the device to launch a screensaver when the device is charging.

Some features may not be available depending on the model.

Wallpaper

Change the wallpaper settings for the Home screen and the locked screen. On the Settings screen, tap **Wallpaper**.

Themes

Apply various themes to the device to change the visual elements of the Home screen, locked screen, and icons.

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

Lock screen

Options

Change the settings for the locked screen.

On the Settings screen, tap Lock screen.

- 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.
- Wallpaper services: Set the device to use wallpaper services such as Dynamic Lock screen.
- Clock style: Change the type and colour of the clock on 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 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 locked screen.
- Shortcuts: Select apps to display shortcuts to them on the locked screen.
- About Lock screen: View the Lock screen version and legal information.
- Me available options may vary depending on the screen lock method selected.

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.

On the Settings screen, tap Lock screen \rightarrow Smart Lock and follow the on-screen instructions to complete the setup.

- 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.

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.
- **Fingerprints**: Register your fingerprints to unlock the screen. Refer to Fingerprint recognition for more information.
- Biometrics preferences: Change the settings for biometric data.
- **Google Play Protect**: Set the device to check for harmful apps and behaviour and warn about potential harm and remove them.
- Security update: View the version of your device's software and check for updates.
- Google Play system update: View the Google Play system version and check for updates.
- Find My Mobile: Activate or deactivate the Find My Mobile feature. Access the Find My Mobile website (findmymobile.samsung.com) to track and control your lost or stolen device.
- Install unknown apps: Set the device to allow the installation of apps from unknown sources.

[K]

- Encrypt or decrypt 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.

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

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** \rightarrow **Face recognition**.
- 2 Read the on-screen instructions and tap **Continue**.
- 3 Set a screen lock method.
- 4 Select whether you are wearing glasses or not and tap **Continue**.
- 5 Position your face inside the frame on the screen. The camera will scan your face.
- 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.
 - To enhance the face recognition, tap **Add alternative look** and add an alternate appearance.

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** \rightarrow **Face recognition**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap the **Face unlock** switch to activate it.
- 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.

Deleting the registered face data

You can delete face data that you have registered.

- 1 On the Settings screen, tap **Biometrics and security** \rightarrow **Face recognition**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap **Remove face data** \rightarrow **Remove**.

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

Fingerprint recognition

In order for fingerprint recognition to function, your fingerprint information needs to be registered and stored in your device.

- This feature may not be available depending on the service provider or model.
 - 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:

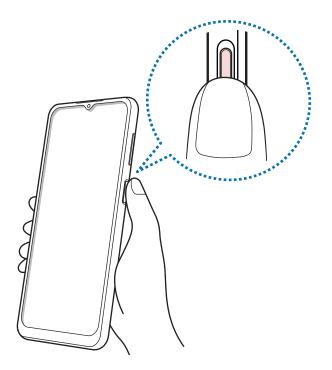
- The device may not recognise fingerprints that are affected by wrinkles or scars.
- The device may not recognise fingerprints from small or thin fingers.
- To improve recognition performance, register fingerprints of the hand used most often to perform tasks on the device.
- The Side key has a built-in fingerprint recognition sensor. 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.
- 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.
- 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** \rightarrow **Fingerprints**.
- 2 Read the on-screen instructions and tap **Continue**.
- 3 Set a screen lock method.
- 4 Place your finger on the Side key. After the device detects your finger, lift it up and place it on the Side key again.

Repeat this action until the fingerprint is registered.



5 When you are finished registering your fingerprints, tap **Done**. You can check whether your fingerprint is registered by tapping **Check added fingerprints**.

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** \rightarrow **Fingerprints**.
- 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.

Deleting registered fingerprints

You can delete registered fingerprints.

- 1 On the Settings screen, tap **Biometrics and security** \rightarrow **Fingerprints**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Select a fingerprint to delete and tap **Remove**.

Privacy

Change the settings for privacy.

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

- **Permission manager**: View the list of features and apps that have permission to use them. You can also edit the permission settings.
- Send diagnostic data: Set the device to automatically send the device's diagnostic and usage information to Samsung.
- **Receive marketing information**: Set whether to receive Samsung marketing information, such as special offers, membership benefits, and newsletters.
- Samsung account privacy: Manage personal data related to your Samsung account and change the settings for Customisation Service.
- Advanced: Configure advanced settings for privacy.
- Some features may not be available depending on the service provider or model.

Location

Change settings for location information permissions.

On the Settings screen, tap Location.

- App permissions: View the list of apps that have permission to access the device's location and edit the permission settings.
- Improve accuracy: Set the device to use the Wi-Fi or Bluetooth feature to increase the accuracy of your location information, even when the features are deactivated.
- Recent location requests: View which apps request your current location information.
- Location services: View the location services your device is using.

Accounts and backup

Options

Sync, back up, or restore your device's data using Samsung Cloud. You can also sign in to 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 Accounts and backup.

- 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.
- Samsung Cloud: Manage the content that you want to store securely in Samsung Cloud. Sync and back up your data and settings, and restore the previous device's data and settings even when you do not have it. Refer to Samsung Cloud for more information.
- Smart Switch: Launch Smart Switch and transfer data from your previous device. Refer to Transferring data from your previous device (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.

Samsung Cloud

Sync your device's data with Samsung Cloud and view the data you have synced in each app. You can also back up your device's data to Samsung Cloud and restore it later.

Syncing data

You can sync data saved in your device with Samsung Cloud and access it from other devices.

- 1 On the Settings screen, tap **Accounts and backup** \rightarrow **Samsung Cloud**.
- 2 Tap \rightarrow Settings \rightarrow Sync and auto backup settings \rightarrow Sync.
- 3 Tap the switches next to the items you want to sync with.
- When you connect your Samsung account and Microsoft account, you can sync images and videos with Microsoft OneDrive.

Backing up data

You can back up your device's data to Samsung Cloud.

- 1 On the Settings screen, tap Accounts and backup \rightarrow Samsung Cloud \rightarrow Back up data.
- 2 Tick items you want to back up and tap **Back up**.
- 3 Tap Done.
- ✓ Some data will not be backed up. To check which data will be backed up, on the Settings screen, tap Accounts and backup → Samsung Cloud → Back up data.
 - To view the backup data for other devices in your Samsung Cloud, on the Settings screen, tap Accounts and backup → Samsung Cloud → Restore data → ▼, and then select a device you want.

Restoring data

You can restore your backup data from Samsung Cloud to your device.

- 1 On the Settings screen, tap Accounts and backup \rightarrow Samsung Cloud.
- 2 Tap **Restore data** $\rightarrow \mathbf{v}$ and select a device you want.
- 3 Tick items you want to restore and tap **Restore**.

Google

Configure settings for some features provided by Google. On the Settings screen, tap **Google**.

Advanced features

Options

Activate advanced features and change the settings that control them.

On the Settings screen, tap Advanced features.

- Side key: Select an app or feature to launch using the Side key. Refer to Setting the Side key for more information.
- **Smart pop-up view**: Select apps to view their notifications via pop-up windows. When using this feature, you can quickly view the contents via pop-up windows by tapping the icon on the screen.
- Screenshots: Change the settings for screenshots.
- **Direct share**: Set the device to display the people you contacted on the sharing options panel to allow you to share content directly.
- **Reduce animations**: Set the device to reduce the screen effects of certain actions, such as opening or closing apps.
- Motions and gestures: Activate the motion feature and configure settings. Refer to Motions and gestures for more information.
- **One-handed mode**: Activate one-handed operation mode for your convenience when using the device with one hand.
- Game Launcher: Activate the Game Launcher. Refer to Game Launcher for more information.
- **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: Set the device to send help messages by pressing the Side key several times.



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

Motions and gestures

Activate the motion feature and configure settings.

On the Settings screen, tap Advanced features \rightarrow Motions and gestures.

- Lift to wake: Set the device to turn on the screen when you pick it up.
- **Double tap to wake**: Set the device to turn on the screen by double-tapping anywhere on the screen while the screen is turned off.
- 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 certain sounds by using motions or gestures.
- **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.
- 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.
- Excessive shaking or an impact to the device may cause an unintended input for some features using sensors.

Dual Messenger

M

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

- 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 6.



- 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** \rightarrow **Dual Messenger**.
- 2 Tap the switch of the app you want to uninstall and tap **Uninstall**. All data related to the second app will be deleted.
- If you uninstall the first app, the second app will also be deleted.

Digital Wellbeing and parental controls

View the history of your device usage and use features to prevent your device from interfering with your life. You can also set up parental controls for your children and manage their digital use.

On the Settings screen, tap **Digital Wellbeing and parental controls**.

- Screen time: Set goals for how much you use your device a day.
- **Unlocks**: Set goals for how many times you unlock your device a day.
- App timers: Limit the daily usage time for each app by setting a timer. When you reach the limit, the app will be deactivated and you cannot use it.
- Focus mode: Activate focus mode to avoid distractions from your device and stay focused on what you want. You can use the apps you allowed to be used in focus mode.
- Wind Down: Activate wind down mode to reduce eye strain before sleeping and prevent your sleep from being disturbed.
- Parental controls: Manage your children's digital use.

Device care

Introduction

The device care 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.

Optimising your device

On the Settings screen, tap **Device care** \rightarrow **Optimise now**.

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

- Closing apps running in the background.
- Managing abnormal battery usage.
- Scanning for crashed apps and malware.

Using the auto optimisation feature

You can set the device to perform auto optimisation when your device is not in use. Tap $\bullet \to$ **Advanced** \to **Auto optimisation** and tap the switch to activate it. If you want to set the time to perform auto optimisation, tap **Time**.

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 care** \rightarrow **Battery**.

- **Battery usage**: View your battery usage and put apps to sleep when they are not being used. Select apps from the apps list and tap the **Put app to sleep** switch to activate it.
- Power mode: Select a power mode, such as power saving mode.
- App power management: Limit battery usage for apps that you do not use often.

- **Charging**: Set the device to charge the battery more quickly. Refer to Quick charging for more information.
- 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.

Storage

Check the status of the used and available memory.

On the Settings screen, tap **Device care** \rightarrow **Storage**. To delete files or uninstall apps that you do not use any more, select a category. Then, tick items to select and tap **Delete** or **Uninstall**.

- 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.

Memory

On the Settings screen, tap **Device care** \rightarrow **Memory**.

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

Security

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

On the Settings screen, tap **Device care** \rightarrow **Security** \rightarrow **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.

On the Settings screen, tap **Device care** \rightarrow **Ultra data saving**, and then tap the switch to activate it.

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

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.

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.
- **Reset**: Reset your device's settings or perform a factory data reset.

Adding device languages

You can add languages to use on your device.

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

To view all the languages that can be added, tap $\bullet \rightarrow All languages$.

- 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, select the language you want and tap **Apply**. If an app does not support the default language, the next supported language in the list will be used.

Accessibility

Configure various settings to improve accessibility to the device.

On the Settings screen, tap Accessibility.

- Screen reader: Activate Voice Assistant, which provides voice feedback. To view help information to learn how to use this feature, tap **Tutorial**.
- Visibility enhancements: Customise the settings to improve accessibility for visually impaired users.
- Hearing enhancements: Customise the settings to improve accessibility for users with hearing impairment.
- Interaction and dexterity: Customise the settings to improve accessibility for users who have reduced dexterity.
- Advanced settings: Configure settings for Direct access and notification features.
- Installed services: View accessibility services installed on the device.
- About Accessibility: View the Accessibility information.
- Contact us: Ask questions or view frequently asked questions.

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.

- Download and install: Check for and install updates manually.
- Auto download over Wi-Fi: Set the device to download updates automatically when connected to a Wi-Fi network.
- Last update: View information about the last 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.

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.



The website supports only some languages.

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.
- **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.

You can also use Samsung Members to solve any problems you might encounter while using 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 Side 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** \rightarrow **Reset** \rightarrow **Factory data reset** \rightarrow **Reset** \rightarrow **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 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 the Samsung website.
- 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 → Reset 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.

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 \Rightarrow **Quick panel layout** and tap the **Show brightness on top** switch to activate it.

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.

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 care feature or manually delete unused apps or files to free up storage space.

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.

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.
- 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 Counsel 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 <u>http://www.fcc.gov/oet/ea/fccid/</u>. Please use the phone FCC ID number for search, A3LSMA022M. 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 <u>http://www.fcc.gov/encyclopedia/specific-absorption-rate-sar-cellular-telephones</u>

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.

Safety information

Please read this important safety information before you use the device. It contains general safety information for devices and may include content that does not apply to your device. Follow the warning and caution information to prevent injury to yourself or others and to prevent damage to your device.



The term 'device' refers to the product and its battery, charger, the items supplied with the product, and any Samsung-approved accessories used with the product.



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

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

Unsecured connections can cause electric shock or fire.

Do not touch the device, power cords, plugs, or the electric socket with wet hands or other wet body parts

Doing so may cause electric shock.

Do not pull the power cord excessively when disconnecting it

Doing so may cause electric shock or fire.

Do not bend or damage the power cord

Doing so may cause electric shock or fire.



Do not use the device with wet hands while the device is charging

Doing so may cause electric shock.

Do not directly connect together the charger's positive and negative terminals

Doing so may cause fire or serious injury.

Do not use your device outdoor during a thunderstorm

Doing so may result in electric shock or device malfunction.

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

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

Do not carry your device in your back pockets or on your waist

- The device may be damaged, explode, or result in a fire if too much pressure is applied to it.
- · You may be injured if you are bumped or fall.

Do not drop or cause excessive impact to the device

- This may damage your device or battery, cause the device to malfunction, or shorten its lifespan.
- This may also cause overheating, combustion, fire, or other hazards.



Handle and dispose of the device and charger with care

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

Protect the device, battery and charger from damage

- Avoid exposing your device and battery to very cold or very hot temperatures.
- Extreme temperatures can damage the device and reduce the charging capacity and life of your device and battery.
- Do not directly connect together the battery's positive and negative terminals and prevent them from coming into contact with metal objects. Doing so may cause the battery to malfunction.
- Do not use a cable whose covering is peeled off or damaged, and do not use any charger or battery that is damaged or malfunctioning.

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

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

Do not use or store your device in areas with high concentrations of dust or airborne materials

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

Enalish

Prevent the multipurpose jack and the small end of the charger from contact with conductive materials, such as liquids, dust, metal powders, and pencil leads. Do not touch the multipurpose jack with sharp tools or cause an impact to the multipurpose jack

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

When using the wireless charger, do not place foreign materials, such as metal objects, magnets, and magnetic stripe cards, between the device and the wireless charger

The device may not charge properly or may overheat.

Do not bite or suck the device or the battery

- · Doing so may damage the device or result in an explosion or fire.
- · Children or animals can choke on small parts.
- If children use the device, make sure that they use the device properly.

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

Doing so may cause suffocation or serious injuries.

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

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





Failure to comply with safety cautions and regulations can cause injury or property damage

Do not use your device near other electronic devices

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

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

- Avoid using your device within a 15 cm range of a pacemaker, if possible, as your device can interfere with the pacemaker.
- To minimise possible interference with a pacemaker, use your device only on the side of your body that is opposite the pacemaker.
- If you use medical equipment, contact the equipment manufacturer before using your device to determine whether or not the equipment will be affected by radio frequencies emitted by the device.
- On an aircraft, using electronic devices can interfere with the aircraft's electronic navigational instruments. 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.
- Electronic devices in your car may malfunction, due to radio interference from your device. Contact the manufacturer for more information.

English

Do not expose the device to heavy smoke or fumes

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

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

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

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

Radio frequencies may cause your device to malfunction.

Turn off the device in potentially explosive environments

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

If any part of the device is broken, smokes, or emits a burning odor, stop using the device immediately. Use the device again only after it has been repaired at a Samsung Service Centre

- · Broken glass or acrylic could cause injury to your hands and face.
- When the device smokes or emits a burning odor, it may result in battery explosion or fire.



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

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

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



Care and use your device properly

Keep your device dry

- Humidity and liquids may damage the parts or electronic circuits in your device.
- Do not turn on your device if it is wet. If your device is already on, turn it off and remove the battery immediately (if the device will not turn off or you cannot remove the battery, leave it as-is). Then, dry the device with a towel and take it to a service centre.
- This device has internal liquid indicators fitted. Water damage to your device may void the manufacturer's warranty.

Store your device only on flat surfaces

If your device falls, it may be damaged.

The device can be used in locations with an ambient temperature of 0 °C to 35 °C. You can store the device at an ambient temperature of -20 °C to 50 °C. Using or storing the device outside of the recommended temperature ranges may damage the device or reduce the battery's lifespan

- Do not store your device in very hot areas such as inside a car in the summertime. Doing so may cause the screen to malfunction, result in damage to the device, or cause the battery to explode.
- Do not expose your device to direct sunlight for extended periods of time (on the dashboard of a car, for example).
- For a device with a removable battery, the battery can be stored separately in locations with an ambient temperature of 0 °C to 45 °C.

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

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



Do not store your device near magnetic fields

- Your device may malfunction or the battery may discharge from exposure to magnetic fields.
- Magnetic stripe cards, including credit cards, phone cards, passbooks, and boarding passes, may be damaged by magnetic fields.

Avoid contact with device when it is overheating. Failure to do so may cause low temperature burns, redness and skin pigmentation

- Be careful of overheating of the device when using it for extended periods and avoid prolonged skin contact.
- Do not sit on your device or make direct contact with your skin for extended periods when charging or connected to a power source.
- Tolerance to high temperature varies individually. Please take extra caution regarding the use of children, elders and people with special conditions.

Do not use your device with the back cover removed

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

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

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



Use caution when exposed to flashing lights

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

Reduce the risk of repetitive motion injuries

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



Protect your hearing and ears when using a headset



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

Use caution when using the device while walking or moving

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

Do not paint or put stickers on your device

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



Install mobile devices and equipment with caution

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

Do not drop your device or cause impacts to your device

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

Ensure maximum battery and charger life

- Batteries may malfunction if they are not used for extended periods.
- Over time, unused device will discharge and must be recharged before use.
- · Disconnect the charger from power sources when not in use.
- · Use the battery only for their intended purposes.
- Follow all instructions in this manual to ensure the longest lifespan of your device and battery. Damages or poor performance caused by failure to follow warnings and instructions can void your manufacturer's warranty.
- Your device may wear out over time. Some parts and repairs are covered by the warranty within the validity period, but damages or deterioration caused by using unapproved accessories are not.

When using the device, mind the following

- · Hold the device upright, as you would with a traditional phone.
- · Speak directly into the microphone.



Do not disassemble, modify, or repair your device

- Any changes or modifications to your device can void your manufacturer's warranty. If your device needs servicing, take your device to a Samsung Service Centre.
- Do not disassemble or puncture the battery, as this can cause explosion or fire.
- · Do not disassemble or reuse the battery.
- Turn off the device before removing the battery. If you remove the battery with the device turned on, it may cause the device to malfunction.

When cleaning your device, mind the following

- · Wipe your device or charger with a towel or an eraser.
- · Clean the battery terminals with a cotton ball or a towel.
- Do not use chemicals or detergents. Doing so may discolour or corrode the outside the device or may result in electric shock or fire.
- Prevent the device from being exposed to dust, sweat, ink, oil, and chemical products such as cosmetics, antibacterial spray, hand cleaner, detergent, and insecticides. The device's exterior and interior parts may be damaged or it could result in poor performance. If your device is exposed to any of the previously mentioned substances, use a lint-free, soft cloth to clean it.

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

Your device may malfunction.

Avoid disturbing others when using the device in public

Allow only qualified personnel to service your device

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



Handle SIM cards, memory cards, or cables with care

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

Ensure access to emergency services

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

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

- While using your device, be sure to back up important data. Samsung is not responsible for the loss of any data.
- When disposing of your device, back up all data and then reset your device to prevent misuse of your personal information.
- Carefully read the permissions screen when downloading applications. Be particularly cautious with applications that have access to many functions or to a significant amount of your personal information.



- Check your accounts regularly for unapproved or suspicious use. If you find any sign of misuse of your personal information, contact your service provider to delete or change your account information.
- In the event your device is lost or stolen, change the passwords on your accounts to protect your personal information.
- Avoid using applications from unknown sources and lock your device with a pattern, password, or PIN.

Do not distribute copyright-protected material

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

Malware and viruses

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

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

English 16

Specific Absorption Rate (SAR) certification information

For more information, visit *www.samsung.com/sar* and search for your device with the model number.

Correct disposal of this product



(Waste Electrical & Electronic Equipment)

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

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

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

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

This product is RoHS compliant.



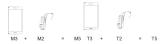
Correct disposal of batteries in this product



⁷ This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery

contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66.

FCC Hearing Aid Compatibility (HAC) regulations for wireless devices



The FCC established requirements for devices to be compatible with hearing aids and other hearing devices. For more information, visit https://www.fcc.gov/consumers/guides/ hearing-aid-compatibility- wireline-and-wireless-telephones



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