SAMSUNG

SM-A307GN/DS

User Manual

Draft Manual: The Manual is preliminary and some features discussed may not be applicable or complete and are not final. (i.e. Model Names and Items such as battery, SIM Card, Softkey discussion .etc)

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www.samsung.com

Table of Contents

Read me first

Getting started

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

Basics

16 Using the touch screen
19 Home screen layout
23 Notifications panel
25 Opening apps
25 Installing or uninstalling apps
27 Entering text
29 Screen capture
29 My Files
30 Power saving feature

Network connectivity

31 Mobile data
31 Wi-Fi
32 Mobile hotspot and tethering

Motions & usability features

34 Motions and gestures

Personalising

36 Managing the Home and Apps screens
37 Setting wallpaper and ringtones
38 Changing the screen lock method
39 Private mode
40 Setting up accounts

Contacts

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

Messages & email

46 Messages
47 Email

Camera

49 Basic shooting
50 Shooting modes
52 Camera settings

Gallery

53 Viewing content on the device

Useful apps and features

54 S Finder
54 S Planner
56 Internet
57 Music
58 Video
59 Clock
60 Calculator
60 Memo
61 Google apps

Connecting with other devices

63 Bluetooth
65 Wi-Fi Direct
67 Quick Connect
68 SideSync 3.0
75 Screen Mirroring
77 Mobile printing

Device & data manager

78 Transferring data from your previous device
80 Using the device as a removable disk for data transfer
80 Updating the device
81 Backing up and restoring data
82 Performing a data reset

Settings

83 About Settings
83 Connections
86 Device
88 Personal
92 System

Appendix

95 Troubleshooting
100 Removing the battery (non-removable type)

Basics

Read me first

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

- Descriptions are based on the device's default settings.
- Some content may differ from your device depending on the region, service provider, model specifications, or device's software.
- Content (high quality content) that requires high CPU and RAM usage will affect the overall performance of the device. Apps related to the content may not work properly depending on the device's specifications and the environment that it is used in.
- Samsung is not liable for performance issues caused by apps supplied by providers other than Samsung.
- Samsung is not liable for performance issues or incompatibilities caused by edited registry settings or modified operating system software. Attempting to customise the operating system may cause the device or apps to work improperly.
- Software, sound sources, wallpapers, images, and other media provided with this device are licensed for limited use. Extracting and using these materials for commercial or other purposes is an infringement of copyright laws. Users are entirely responsible for illegal use of media.
- You may incur additional charges for data services, such as messaging, uploading and downloading, auto-syncing, or using location services depending on your data plan. For large data transfers, it is recommended to use the Wi-Fi feature.
- Default apps that come with the device are subject to updates and may no longer be supported without prior notice. If you have questions about an app provided with the device, contact a Samsung Service Centre. For user-installed apps, contact service providers.
- Modifying the device's operating system or installing softwares from unofficial sources may result in device malfunctions and data corruption or loss. These actions are violations of your Samsung licence agreement and will void your warranty.
- Depending on the region or 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, tap Settings → About Phone → Status
- Supprted features may differ or labelled differently depending on whether your device is a single or dual SIM Model.

Instructional icons

Warning: situations that could cause injury to yourself or others

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

Note: notes, usage tips, or additional information

Getting started

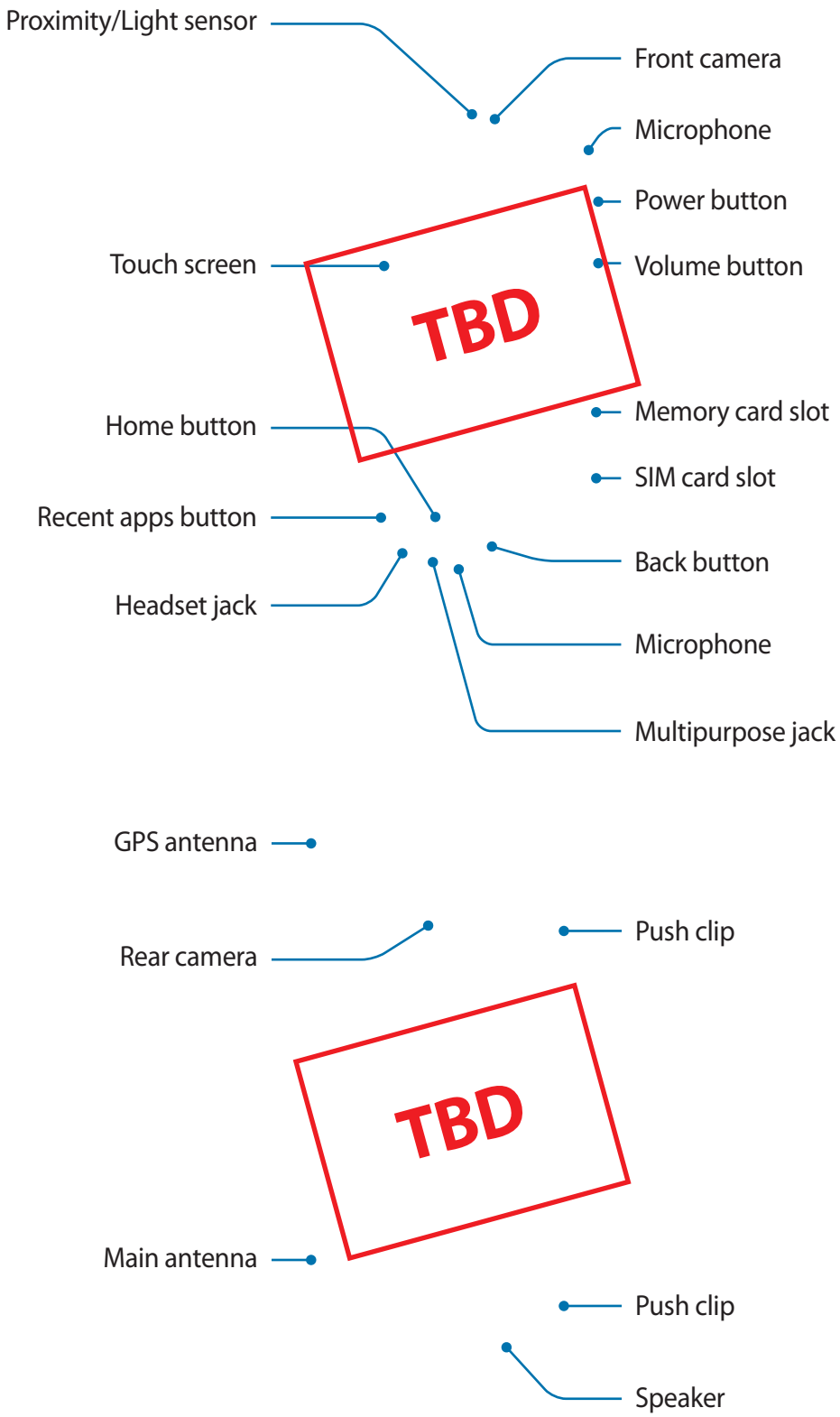
Package contents

Check the product box for the following items:

- Device
- Quick start guide

- The items supplied with the device and any available accessories may vary depending on the region or service provider.
- The supplied items are designed only for this device and may not be compatible with other devices.
- Appearances and specifications are subject to change without prior notice.
- You can purchase additional accessories from your local Samsung retailer. Make sure they are compatible with the device before purchase.
- Use only Samsung-approved accessories. Using unapproved accessories may cause the performance problems and malfunctions that are not covered by the warranty.
- Availability of all accessories is subject to change depending entirely on manufacturing companies. For more information about available accessories, refer to the Samsung website.

Device layout



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

Buttons

Button		Function
	Power	• Press and hold to turn the device on or off. • Press to turn on or lock the screen.
	Recent apps	• Tap to open the list of recent apps.
	Home	• Press to turn on the screen while the screen is locked. • Press to return to the Home screen. • Press and hold to launch **Google**.
	Back	• Tap to return to the previous screen.
	Volume	• Press to adjust the device volume.

Using the SIM or USIM card and battery

Installing the SIM or USIM card

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

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

1 Open the cover of the SIM card slot.

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

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

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

4 Close the cover of the SIM card slot.

Removing the SIM or USIM card

1 Open the cover of the SIM card slot.

2 Press the SIM or USIM card with your finger, and then pull it out.

3 Close the cover of the SIM card slot.

Charging the battery

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

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

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

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

Connecting the charger improperly may cause serious damage to the device. Any damage caused by misuse is not covered by the warranty.

- The device can be used while it is charging, but it may take longer to fully charge the battery.
- If the device receives an unstable power supply while charging, the touch screen may not function. If this happens, unplug the charger from the device.
- While charging, the device may heat up. This is normal and should not affect the device's lifespan or performance. If the battery gets hotter than usual, the charger may stop charging.
- If the device is not charging properly, take the device and the charger to a Samsung Service Centre.

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

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

Reducing the battery consumption

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

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

Using a memory card

Installing a memory card

Your device accepts memory cards with maximum capacities of 128 GB. Depending on the memory card manufacturer and type, some memory cards may not be compatible with your device.

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

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

1 Open the cover of the memory card slot.

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

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

4 Close the cover of the memory card slot.

Removing the memory card

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

1 Open the cover of the memory card slot.

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

3 Close the cover of the memory card slot.

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

Formatting the memory card

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

On the Home screen, tap **Apps** → **Settings** → **Storage** → **Format SD card** → **FORMAT SD CARD** → **ERASE EVERYTHING**.

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

Turning the device on and off

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

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

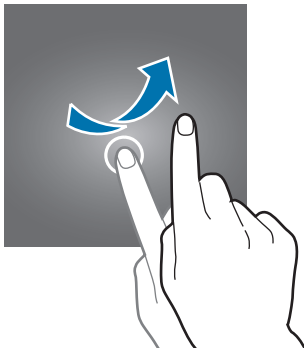
To turn off the device, press and hold the Power button, and then tap **Power off**.

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

Locking and unlocking the screen

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

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



You can change the unlock code to unlock the screen. Refer to Changing the screen lock method for more information.

Basics

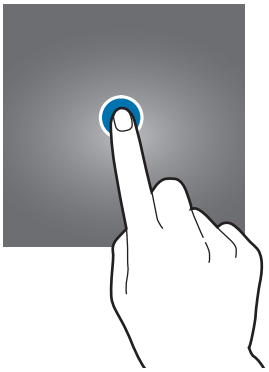
Using the touch screen

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

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

Tapping

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

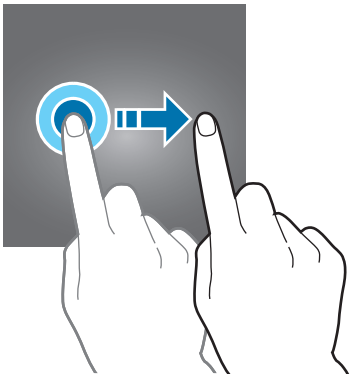


Tapping and holding

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

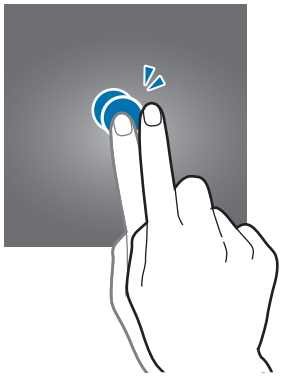
Dragging

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



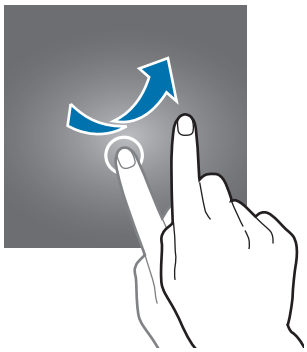
Double-tapping

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



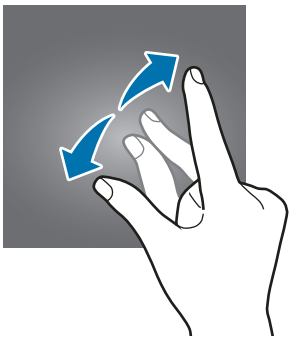
Flicking

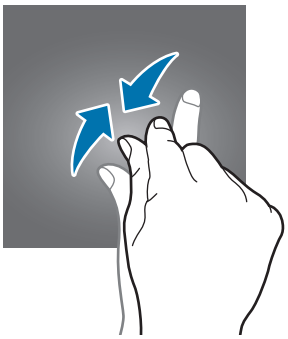
Flick left or right on the Home screen or the Apps screen to see another panel. Flick up or down to scroll through a webpage or a list of items, such as contacts.



Spreading and pinching

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





Home screen layout

Home screen

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

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

Home screen options

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

Flipboard Briefing

Use this feature to view the latest articles in various categories. You can get up to date on news that interests you using this feature.

1 On the Home screen, tap ☰ or swipe to the right to open **Flipboard Briefing**.

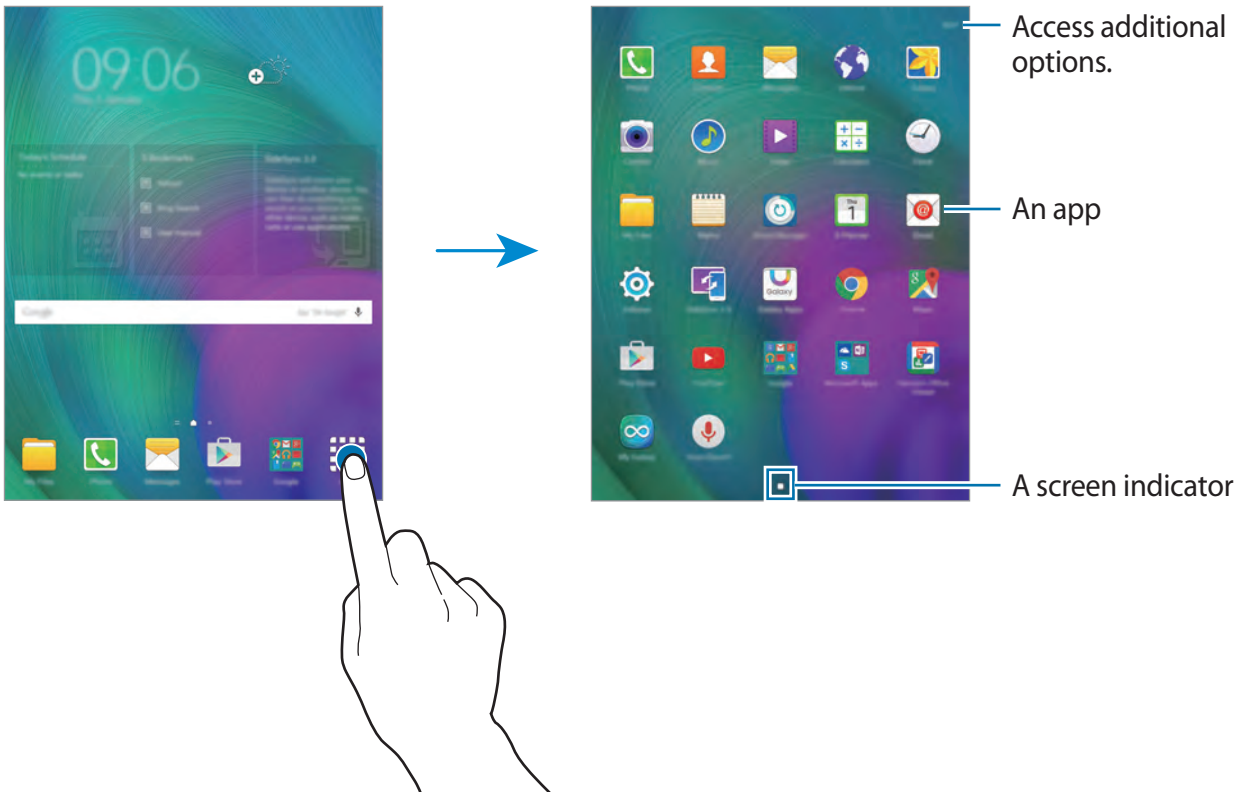
2 Tap **START READING** when launching this feature for the first time.

3 Swipe upwards to browse articles in each news category.

Apps screen

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

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



Indicator icons

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

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

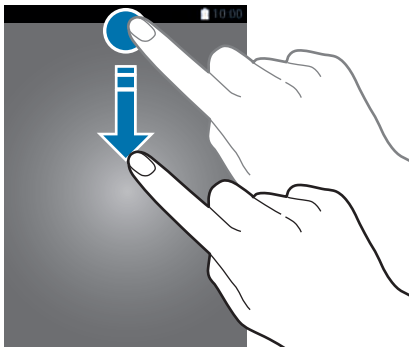
Icon	Meaning
	No signal
	Signal strength
	Roaming (outside of normal service area)
	GPRS network connected
	EDGE network connected
	UMTS network connected
	HSDPA network connected
	HSPA+ network connected
	LTE network connected
	Wi-Fi connected
	Bluetooth feature activated
	GPS activated
	Synced with the web
	New text or multimedia message
	Alarm activated
	Mute mode activated
	Vibration mode activated
	Flight mode activated
	Error occurred or caution required
	Battery power level

Notifications panel

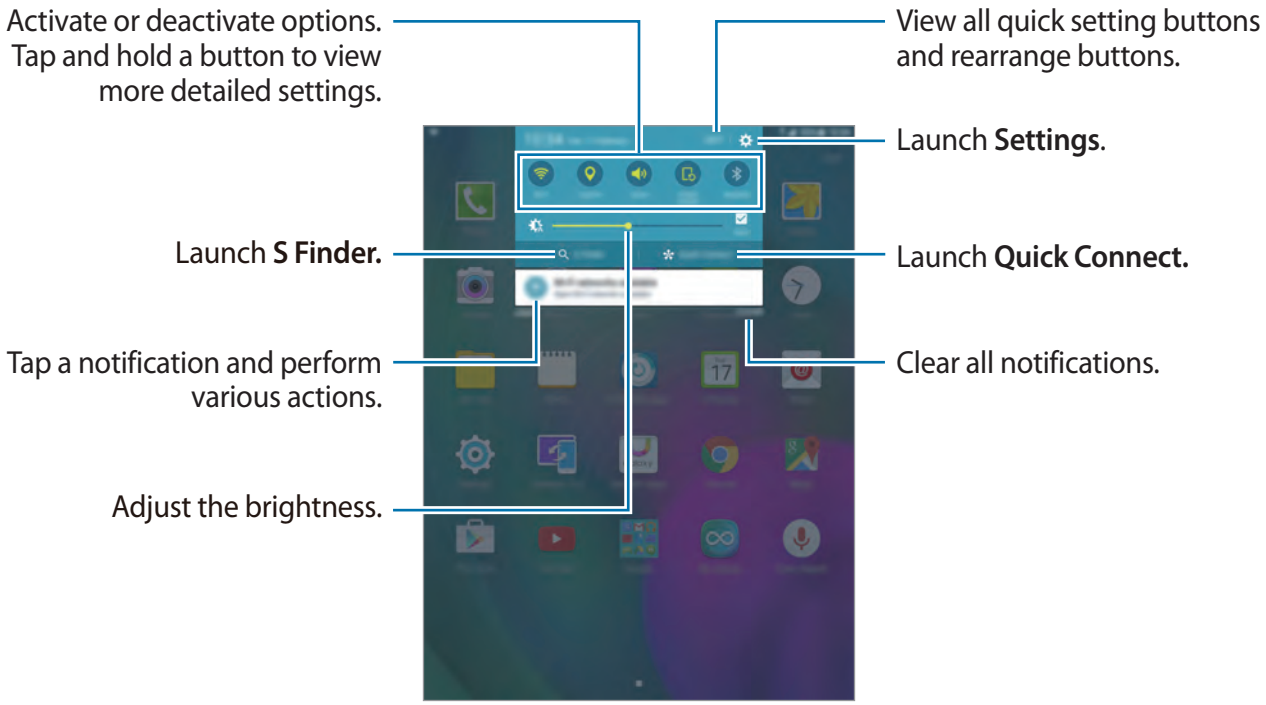
Using the notifications panel

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

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



You can use the following functions on the notifications panel.



Rearranging quick setting buttons

To rearrange quick setting buttons on the notifications panel, tap **EDIT**, tap and hold an item, drag the item to another location, and then tap **DONE**.

Using the quick setting buttons

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

- **Wi-Fi**: Refer to Wi-Fi for more information.
- **Location**: Activate or deactivate the GPS feature.
- **Sound** / **Vibrate** / **Mute**: Select a sound mode.
- **Screen rotation**: Allow or prevent the interface from rotating when you rotate the device.

Some apps do not allow screen rotation.

- **Bluetooth**: Refer to Bluetooth for more information.
- **Mobile data**: Refer to Data usage or Mobile networks for more information.
- **Power saving**: Refer to Power saving feature for more information.
- **Flight mode**: Refer to Flight mode for more information.
- **Do not disturb**: Activate or deactivate blocking mode. In blocking mode, the device will block notifications. To select which notifications will be blocked, tap **Settings** → **Sounds and notifications** → **Do not disturb**.
- **U. power saving**: Refer to Ultra power saving mode for more information.
- **Mobile hotspot**: Refer to Mobile hotspot and tethering for more information.
- **Smart stay**: When you activate this feature, the screen stays on as long as you look at it.
- **Private mode**: Refer to Private mode for more information.
- **Screen Mirroring**: Refer to Screen Mirroring for more information.
- **Sync**: When you activate this feature, the device automatically syncs apps, such as calendar or email.

Opening apps

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

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

Closing an app

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

Installing or uninstalling apps

Samsung GALAXY Apps

Use this app to purchase and download apps.

Tap **Galaxy Apps** on the Apps screen.

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

Installing apps

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

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

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

Play Store

Use this app to purchase and download apps.

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

Installing apps

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

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

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

Managing apps

Uninstalling or disabling apps

To disable default apps, open the Apps screen and tap **EDIT**. ⊖ appears on the apps that you can disable. Select an app and tap **DISABLE** → **DONE**.

To uninstall downloaded apps, open the Apps screen and tap **EDIT** → ⊖ → **UNINSTALL** → **DONE**. Alternatively, on the Apps screen, tap **Settings** → **Applications** → **Application manager**, select an app, and then tap **UNINSTALL**.

Enabling apps

On the Apps screen, tap **Settings** → **Applications** → **Application manager**, scroll to **DISABLED**, select an app, and then tap **ENABLE**.

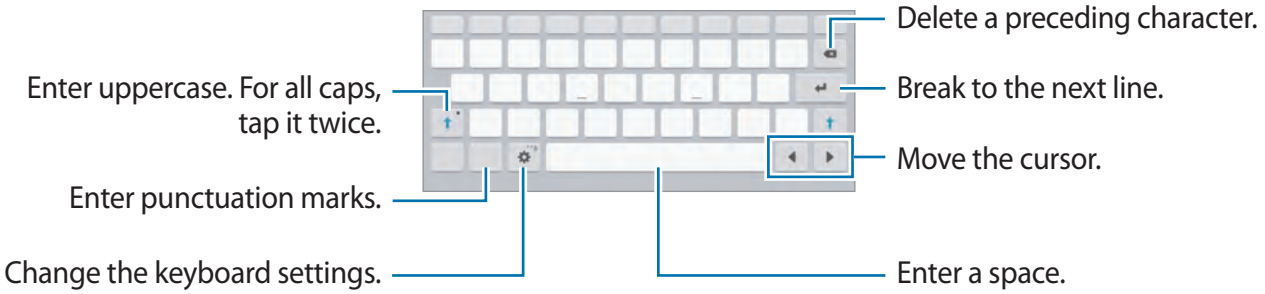
- Disabling apps: Disable selected default apps that cannot be uninstalled from the device. You cannot use disabled apps.
- Uninstalling apps: Uninstall downloaded apps.

Entering text

Keyboard layout

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

Text entry is not supported in some languages. To enter text, you must change the input language to one of the supported languages.



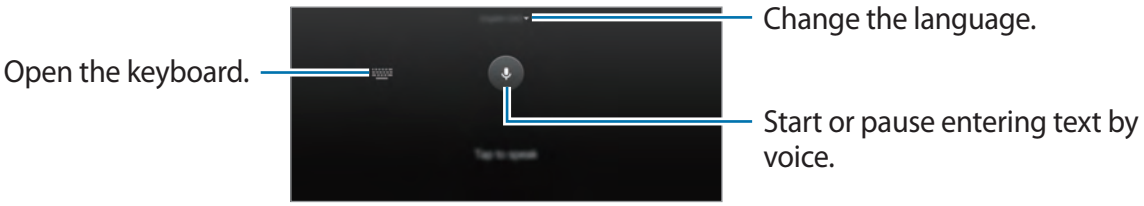
Changing the input language

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

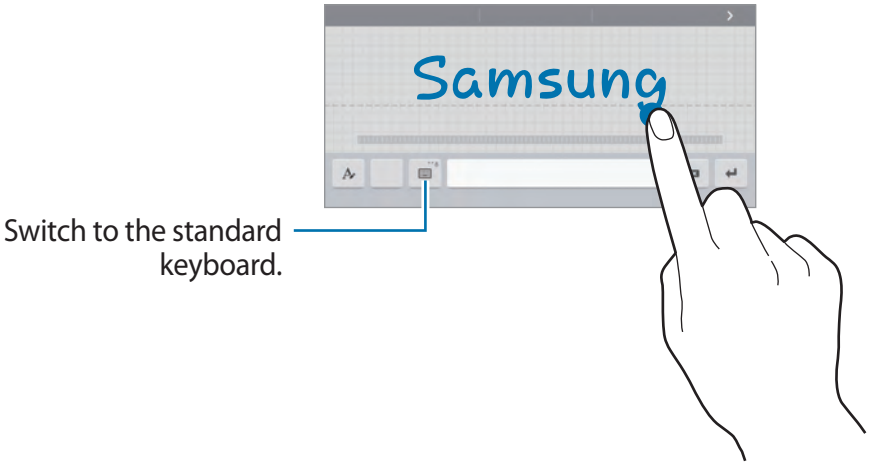
Using additional keyboard functions

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

- 🎤 : Enter text by voice.



- : Switch to handwriting mode.



- : Add an item from the clipboard.
- : Enter emoticons.
- : Switch to the floating or split keyboard.
- : Change the keyboard settings.

Copying and pasting

1 Tap and hold over text.

2 Drag or to select the desired text, or tap **Select all** to select all text.

3 Tap **Copy** or **Cut**. The selected text is copied to the clipboard.

4 Place the cursor where the text is to be inserted and tap → **Paste**. To paste text that you have previously copied, tap → **Clipboard** and select the text.

Screen capture

Capture a screenshot while using the device.

Press and hold the Home button and the Power button simultaneously. You can view captured images in **Gallery**. After capturing a screenshot, you can edit the image and share it with others.

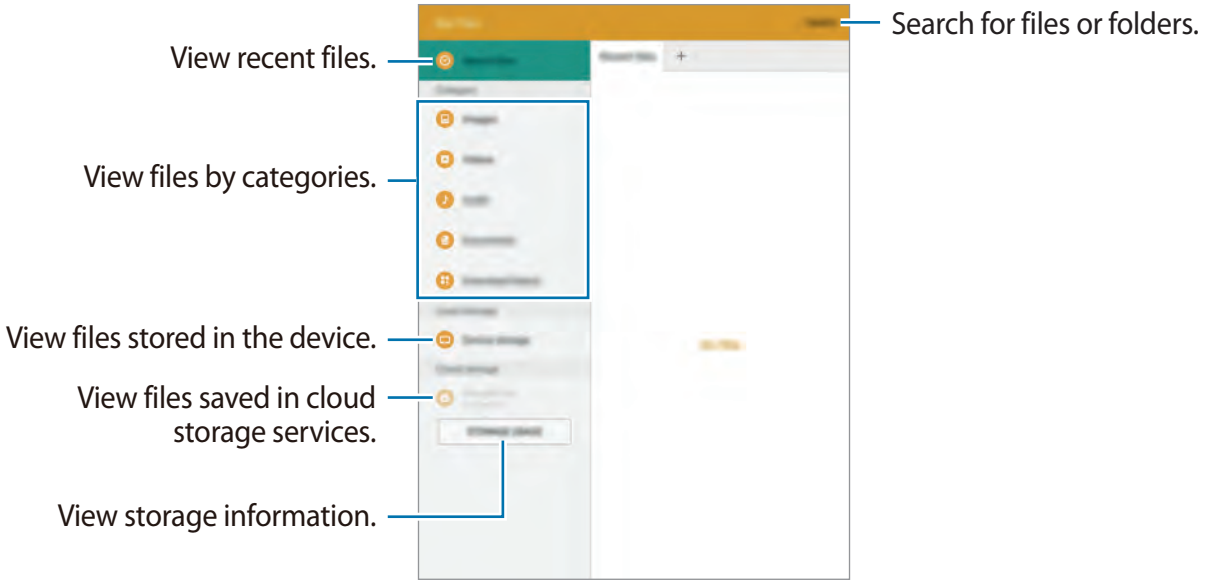
You can also capture screenshots using other methods. Refer to Palm swipe to capture for more information.

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

My Files

Use this app to access various files stored in the device or in other locations, such as cloud storage services.

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



Power saving feature

Power saving mode

Save the battery power by limiting the device's functions.

On the Apps screen, tap **Settings** → **Battery** → **Power saving mode**, and then tap the switch to activate it.

Select from the following options:

- **Start power saving**: Select a power level at which the device automatically switches to power-saving mode.

Ultra power saving mode

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

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

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

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

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

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

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

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

Network connectivity

Mobile data

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

On the Apps screen, tap **Settings** → **Data usage**, and then tap the **Mobile data** switch to activate it.

Wi-Fi

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

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

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

2 Select a network from the Wi-Fi networks list. Networks that require a password appear with a lock icon.

3 Tap **CONNECT**.

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

Mobile hotspot and tethering

About tethering and mobile hotspots

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

You may incur additional charges when using this feature.

Using the mobile hotspot

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

1 On the Apps screen, tap **Settings** → **Mobile hotspot and tethering** → **Mobile hotspot**.

2 Tap the switch to activate it.

- appears on the status bar. Other devices can find your device in the Wi-Fi networks list.
- To set a password for the mobile hotspot, tap **CONFIGURE MOBILE HOTSPOT** and select the level of security. Then, enter a password and tap **SAVE**.

3 On the other device's screen, search for and select your device from the Wi-Fi networks list.

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

Using USB tethering

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

1 On the Apps screen, tap **Settings** → **Mobile hotspot and tethering**.

2 Connect your device to the computer via the USB cable.

3 Tap the **USB tethering** switch to activate it.

appears on the status bar when the two devices are connected.

4 On the computer, use your device's mobile data connection.

Using Bluetooth tethering

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

1 Pair your device with the other device via Bluetooth. Refer to Pairing with other Bluetooth devices for more information.

2 On the Apps screen of your device, tap **Settings** → **Mobile hotspot and tethering**.

3 Tap the **Bluetooth tethering** switch to activate it.

4 On the connected device, open the Bluetooth settings screen, tap ⚙ → **Internet access**.

appears on the status bar when the two devices are connected.

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

The connection methods may vary depending on the connected devices.

Motions & usability features

Motions and gestures

Excessive shaking or impact on the device may result in unintended inputs. Control motions properly.

Smart alert

On the Apps screen, tap **Settings** → **Motions and gestures**, and then tap the **Smart alert** switch to activate it.

If you have missed calls or new messages, the device will vibrate when you pick it up.

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

Mute

On the Apps screen, tap **Settings** → **Motions and gestures**, and then tap the **Mute** switch to activate it.

Cover the screen with your palm or turn the device over to mute incoming calls or alarms.

TBD

Palm swipe to capture

On the Apps screen, tap **Settings** → **Motions and gestures**, and then tap the **Palm swipe to capture** switch to activate it.

Place the side of your hand on the screen and sweep it across the screen from the right to the left or vice versa to capture a screenshot. You can view captured images in **Gallery**. After capturing a screenshot, you can edit the image and share it with others.

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

TBD

Personalising

Managing the Home and Apps screens

Managing the Home screen

Adding items

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

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

Moving and removing an item

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

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

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

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

Creating a folder

1 On the Home screen, tap and hold an app, and then drag it to the other app.

2 Enter a folder name.

Managing panels

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

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

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

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

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

Managing the Apps screen

Moving items

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

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

Setting wallpaper and ringtones

Setting wallpaper

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

1. On the Home screen, tap and hold an empty area, and then tap **Wallpapers**. Alternatively, on the Apps screen, tap **Settings** → **Wallpaper**.
2. Select a screen to change or apply wallpaper to.
3. Scroll left or right and select from images displayed at the bottom of the screen.

   To select photos taken by the device's camera or other images, tap **From Gallery**.
4. Tap **SET AS WALLPAPER** or **SET WALLPAPER**.

Changing ringtones

Change ringtones for incoming calls and notifications.

On the Apps screen, tap **Settings** → **Sounds and notifications**.

To set a ringtone for incoming calls, tap **Ringtones and sounds** → **Ringtone**, select a ringtone, and then tap **OK**. To use a song stored in the device or in your account as a ringtone, tap **ADD**.

To set a ringtone for notifications, tap **Ringtones and sounds** → **Default notification sound**, select a ringtone, and then tap **OK**.

Changing the screen lock method

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

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

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

Pattern

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

PIN

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

Password

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

Private mode

About private mode

Use this mode to prevent others from using or accessing specific content, such as images and documents, stored on the device. You can save content to a specific location and deactivate private mode to hide items securely.

Hiding content

1 On the Apps screen, tap **Settings** → **Privacy and safety** → **Private mode**, and then tap the switch to activate it.

When you activate private mode for the first time, set an unlock code and a backup PIN.

2 Enter the private mode unlock code.

When this mode is activated, appears at the top of the screen.

3 To select items to hide, tap and hold an item in the list, tick items to select, and then tap **MORE** → **Move to Private**, or tap **Move** → **Private** → **MOVE HERE**.

Items that are moved to private mode appear with on them.

4 When you have selected the items to hide, open the Apps screen, tap **Settings** → **Privacy and safety** → **Private mode**, and then tap the switch to deactivate it.

The selected items will disappear from the screen.

Ensure that all files are saved or moved properly before deactivating private mode.

Viewing hidden content

You can only view hidden items when private mode is activated.

1 On the Apps screen, tap **Settings** → **Privacy and safety** → **Private mode**, and then tap the switch to activate it.

2 Enter the private mode unlock code.

3 On the Apps screen, tap **My Files** → **Private**.

All items moved in private mode appear on the screen.

Setting up accounts

Adding accounts

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

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

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

Removing accounts

On the Apps screen, tap **Settings** → **Accounts**, select an account, and then tap **MORE** → **Remove account**.

Contacts

Adding contacts

Moving contacts from other devices

You can move contacts from other devices to your device. Refer to Transferring data from your previous device for more information.

Creating contacts manually

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

2 Tap and enter contact information.

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

3 Tap **SAVE**.

Importing and exporting contacts

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

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

Tap **MORE** → **Settings** → **Manage & back up contacts** → **Import/Export contacts**, and then select an import or export option.

Searching for contacts

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

Use one of the following search methods:

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

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

- : Add to favourite contacts.
- / : Make a voice or video call.
- : Compose a message.
- : Compose an email.

Adding shortcuts for contacts to the Home screen

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

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

2 Select a contact.

3 Tap **MORE** → **Add shortcut on home screen**.

Messages & email

Messages

Sending messages

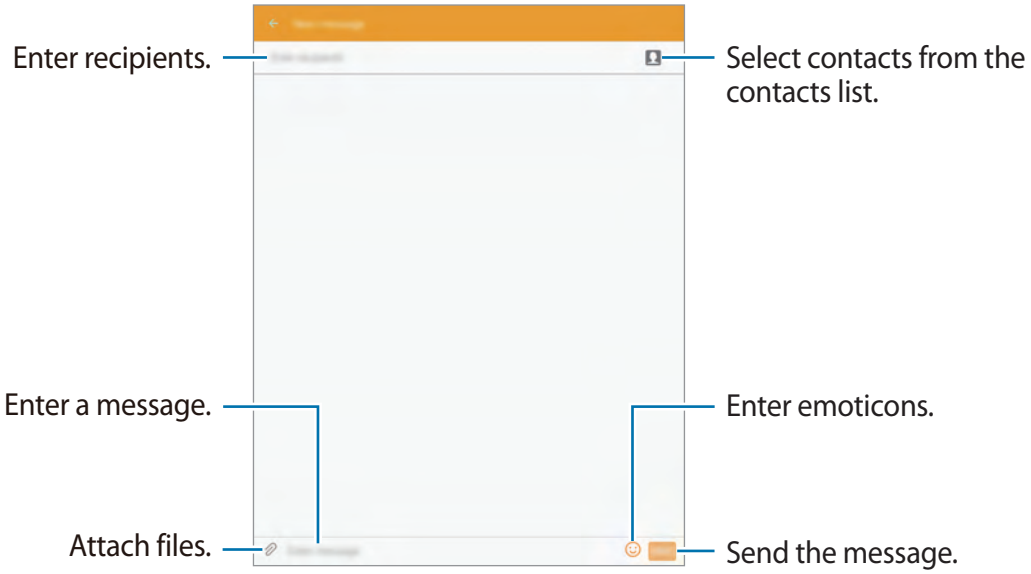
Send text messages (SMS) or multimedia messages (MMS).

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

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

2 Tap .

3 Add recipients and enter a message.



4 Tap **SEND** to send the message.

Viewing incoming messages

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

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

While viewing a message, tap **MORE** to view more options.

Email

Setting up email accounts

Tap **Email** on the Apps screen.

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

Enter the email address and password. Tap **NEXT** for a private email account or tap **MANUAL SETUP** for a company email account. After that, follow the on-screen instructions to complete the setup.

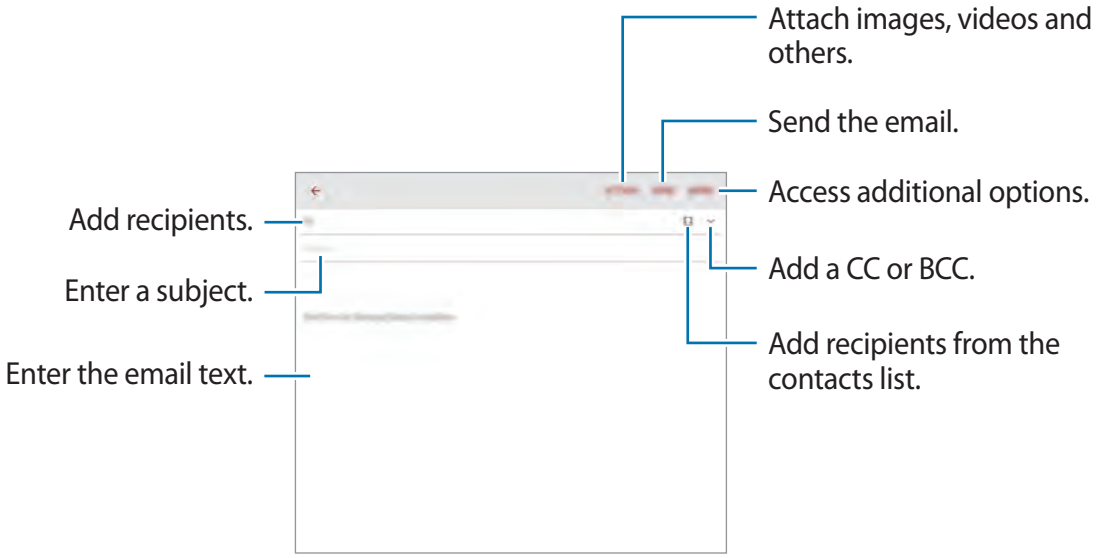
To set up another email account, tap **MORE** → **Settings** → **Add account**.

If you have more than one email account, you can set one as the default account. Tap **MORE** → **Settings** → **MORE** → **Set default accout**, select an account, and then tap **DONE**.

Sending emails

Tap **Email** on the Apps screen.

Tap at the bottom of the screen to compose an email.

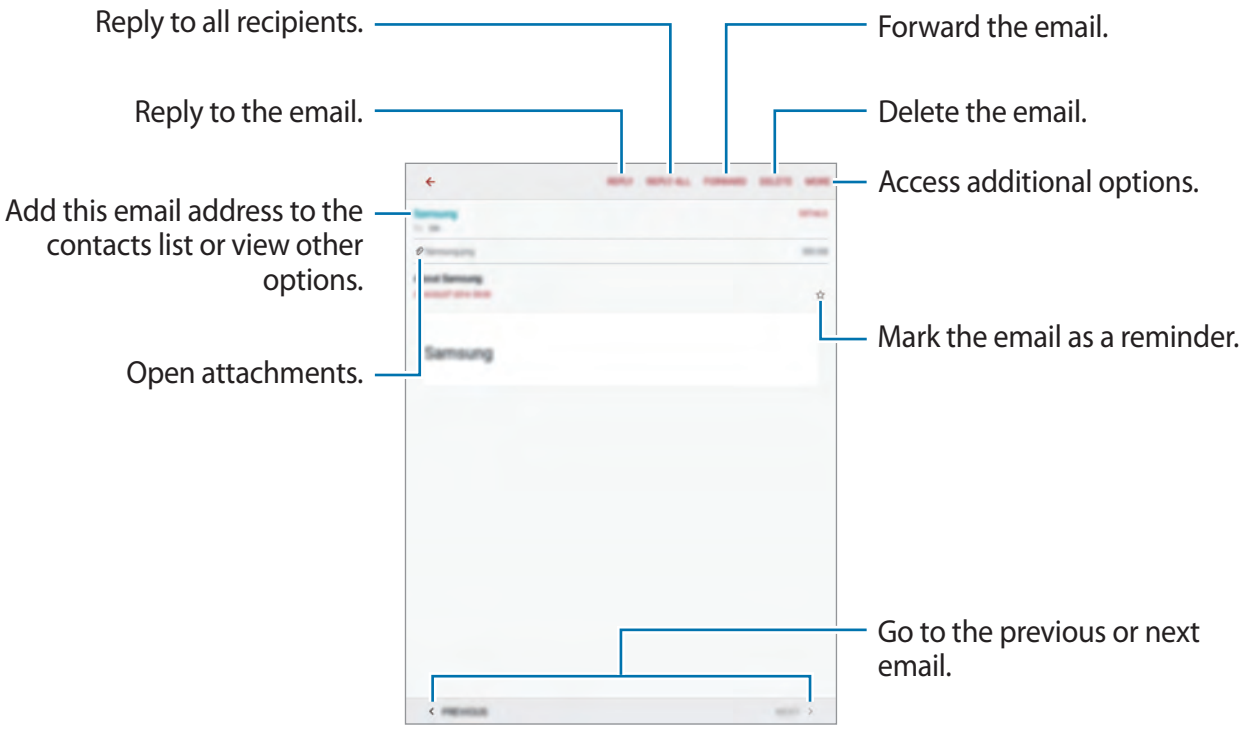


Reading emails

Tap **Email** on the Apps screen.

Select an email account to use, and new emails are retrieved.

Tap an email to read.



Camera

Basic shooting

Taking photos or recording videos

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

2 Tap the image on the preview screen where the camera should focus.

3 Tap to take a photo or tap to record a video.

- Spread two fingers apart on the screen to zoom in, and pinch to zoom out.
- To capture an image from the video while recording, tap **Capture**.
- To change the focus while recording a video, tap where you want to focus. To focus on the centre of the screen, tap AF.

Display current

TBD

- The camera automatically shuts off when unused.
- Make sure that the lens is clean. Otherwise, the device may not work properly in some modes that require high resolutions.
- The front camera lens is suitable for taking wide-angle photos. Minor distortion may occur in wide-angle photos and does not indicate device performance problems.

Launching Camera on the locked screen

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

On the locked screen, drag outside the large circle.

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

Camera etiquette

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

Shooting modes

Auto

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

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

Panorama

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

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

To get the best shot, follow these tips:

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

Beauty face

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

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

Selfie

Use this mode to take a self-portrait using the front camera.

On the Apps screen, tap **Camera** → → **MODE** → **Selfie**.

When the camera detects your face, tap to take a photo of yourself.

Interval shot

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

On the Apps screen, tap **Camera** → → **MODE** → **Interval shot**.

Sound & shot

Use this mode to take a photo with sound. The device identifies the photos with in **Gallery**.

On the Apps screen, tap **Camera** → **MODE** → **Sound & shot**.

Sports

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

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

Continuous shot

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

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

Tap and hold to take several photos continuously.

Camera settings

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

- **Picture size (front)** / **Picture size (rear)**: Select a resolution. Higher resolutions result in higher quality photos, however they will take up more memory.
- **Video size (front)** / **Video size (rear)**: Select a resolution. Higher resolutions result in higher quality videos, however they will take up more memory.
- **Gesture control**: Set the device to detect your palm, so you can use it to take self-portraits.
- **Save as horizontally flipped**: Invert the image to create a mirror-image of the original scene, when taking photos with the front camera.
- **Grid lines**: Display viewfinder guides to help composition when selecting subjects.
- **Location tags**: Set the device to attach the location tag to the photo.

- To improve GPS signals, avoid shooting in locations where the signal may be obstructed, such as between buildings or in low-lying areas, or in poor weather conditions.
- When you share a photo with the location tag attached, the location information may be exposed to others. To avoid this, when viewing the photo, tap **MORE** → **Details** → **EDIT**, and then tap ⊖ under **Location** to delete your location information.

- **Review pictures**: Set the device to show photos after capturing them.
- **Storage location**: Select the memory location for storage.
- **Volume keys function**: Set the device to use the Volume button to control the shutter or zoom function.
- **Reset settings**: Reset the camera settings.

The available options vary depending on the mode used.

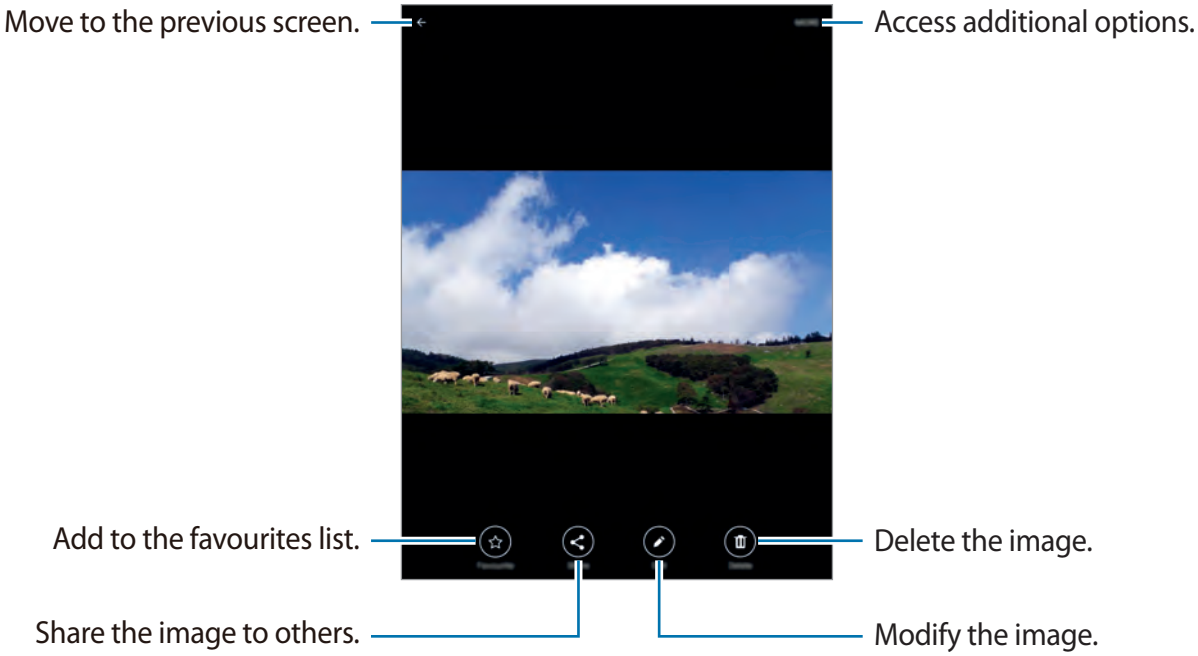
Gallery

Viewing content on the device

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

Video files show the icon on the preview thumbnail.

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



Useful apps and features

S Finder

Use this app to search for content on the device. You can apply various filters and view the search history.

Open the notifications panel and tap **S Finder**.

Searching for content

Tap the search field and enter a keyword, or tap 🎤 and say a keyword.

To get more refined results, tap filters under the search field.

To select search categories, tap **MORE** → **Select search locations**.

S Planner

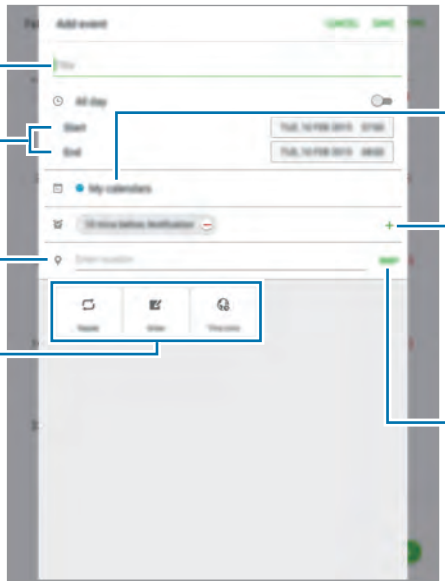
Creating events

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

2 Tap ⊕. Alternatively, select a date with no events in it and tap the date again.

If the date already has saved events in it, tap the date and tap ⊕.

3 Enter event details.



4 Tap **SAVE** to save the event.

Creating tasks

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

2 Tap **TASK**, enter details, and then tap **TODAY** or **TOMORROW** to set a due date.

To add more details, tap ⤢.

3 Tap **SAVE** to save the task.

Syncing events and tasks with your accounts

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

To add accounts to sync with, tap **MORE** → **Manage calendars** → **Add account**. Then, select an account to sync with and sign in.

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

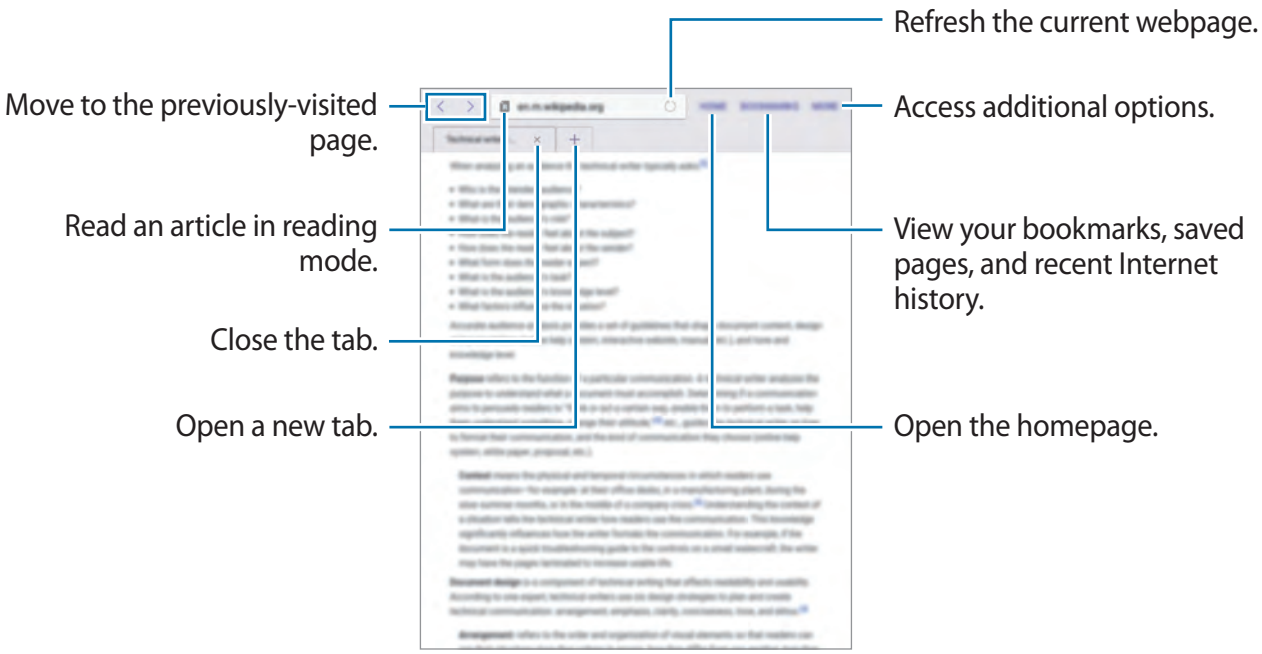
Internet

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

2 Tap the address field.

3 Enter the web address or a keyword, and then tap **Go**.

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

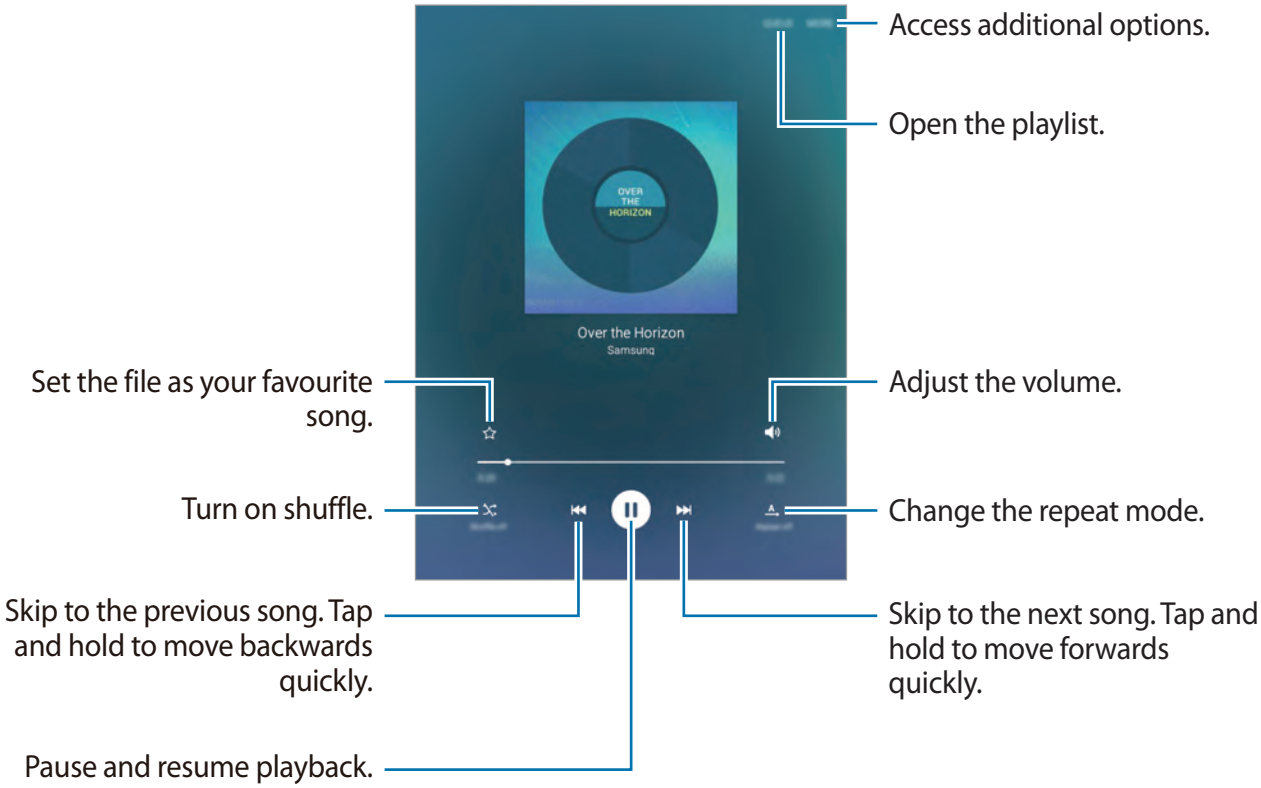


Music

Playing music

Tap **Music** on the Apps screen.

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



To listen to songs at equal volume levels, tap **MORE** → **Settings**, and then tap the **Smart volume** switch to activate it.

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

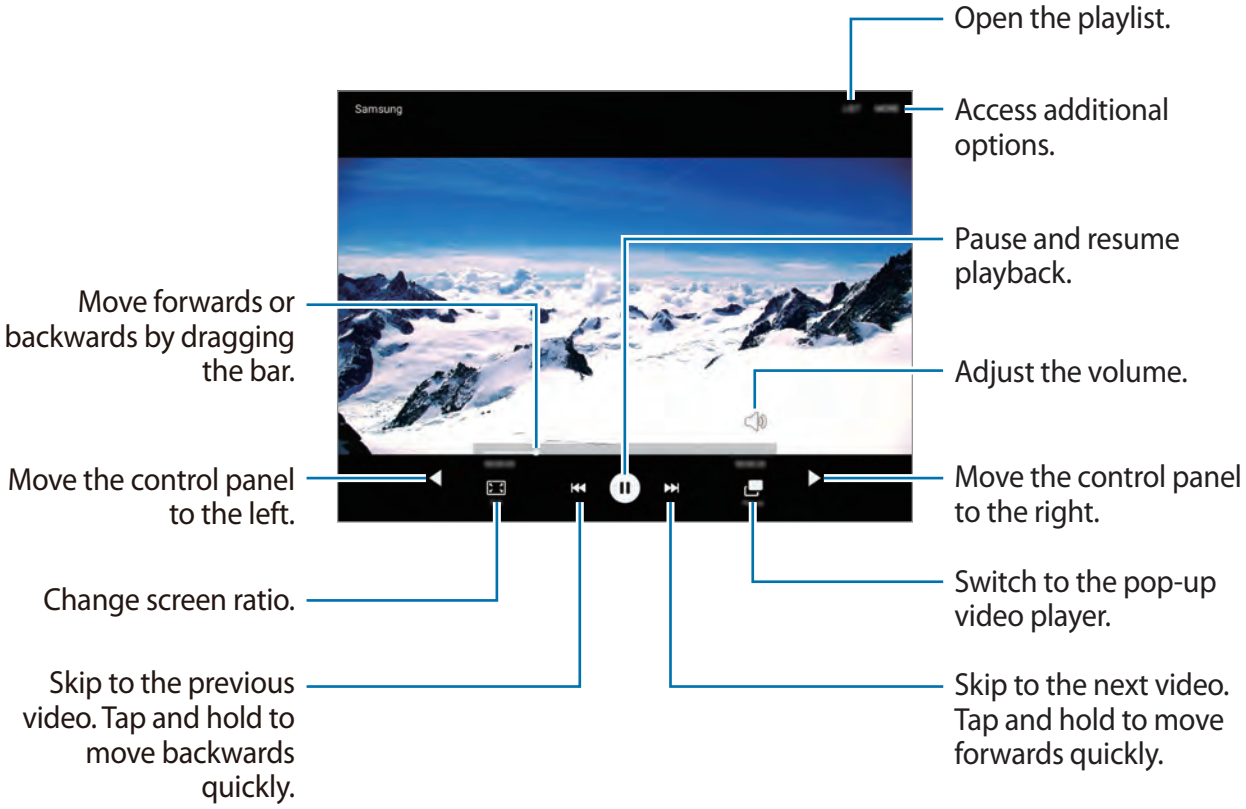
Smart volume may not be activated for some files.

Video

Playing videos

Tap **Video** on the Apps screen.

Select a video to play.



Clock

ALARM

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

Setting alarms

Set an alarm time and tap **OPTIONS** to set other various alarm options, and then tap **SAVE**. To activate or deactivate alarms, tap next to the alarm in the alarms list.

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

Stopping alarms

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

Deleting alarms

Select alarms, and then tap .

WORLD CLOCK

On the Apps screen, tap **Clock** → **WORLD CLOCK**.

Creating clocks

Select a city from the globe, and then tap .

Deleting clocks

Select clocks, and then tap .

STOPWATCH

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

Tap **START** to time an event. Tap **LAP** to record lap times.

Tap **STOP** to stop timing. To clear lap times, tap **RESET**.

TIMER

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

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

Tap **DISMISS** when the timer goes off.

Calculator

Use this app for simple or complex calculations.

Tap **Calculator** on the Apps screen.

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

Memo

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

Tap **Memo** on the Apps screen.

Composing memos

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

- **Category**: Create or set a category.
- **Image**: Insert images.
- **Voice**: Make a voice recording to insert.
- **Tasks**: Add tasks to do.

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

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

Searching for memos

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

Google apps

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

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

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

Chrome

Search for information and browse webpages.

Gmail

Send or receive emails via the Google Mail service.

Google+

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

Maps

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

Play Music

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

Play Movies & TV

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

Play Books

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

Play Newsstand

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

Play Games

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

Drive

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

YouTube

Watch or create videos and share them with others.

Photos

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

Hangouts

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

Google

Search quickly for items on the Internet or your device.

Voice Search

Search quickly for items by saying a keyword or phrase.

Google Settings

Configure settings for some features provided by Google.

Connecting with other devices

Bluetooth

About Bluetooth

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

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

  Samsung is not responsible for the repercussion of illegal use of the Bluetooth feature.

Pairing with other Bluetooth devices

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

The detected devices are listed.

2 Select a device to pair with.

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

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

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

Sending and receiving data

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

Sending an image

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

2 Select an image.

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

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

4 Accept the Bluetooth authorisation request on the other device.

Receiving an image

When another device sends you an image, accept the Bluetooth authorisation request. You can view received images in **Gallery**.

Unpairing Bluetooth devices

1 On the Apps screen, tap **Settings** → **Bluetooth**.

The device displays the paired devices in the list.

2 Tap ⚙ next to the device's name to unpair.

3 Tap **Unpair**.

Wi-Fi Direct

About Wi-Fi Direct

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

Connecting to other devices

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

2 Tap **Wi-Fi Direct**.

The detected devices are listed.

3 Select a device to connect to.

4 Accept the Wi-Fi Direct authorisation request on the other device to confirm.

Sending and receiving data

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

Sending an image

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

2 Select an image.

3 Tap **Share** → **Wi-Fi Direct**, select a device to transfer the image to, and then tap **SHARE**.

4 Accept the Wi-Fi Direct authorisation request on the other device.

Receiving an image

When another device sends you an image, accept the Wi-Fi Direct authorisation request. You can view received images in **Gallery**.

Ending the device connection

1 On the Apps screen, tap **Settings** → **Wi-Fi**.

2 Tap **Wi-Fi Direct**.

The device displays the connected devices in the list.

3 Tap a device name to disconnect the devices.

Quick Connect

About Quick connect

Use this feature to easily search and connect to nearby devices.

- When connecting to a device that does not support the Quick connect feature, ensure that Wi-Fi Direct or the Bluetooth feature is activated.
- Connection methods may vary depending on the type of connected devices or the shared content.
- Device name may vary depending on the Bluetooth devices to pair with. For example, the device name can be shown as BT MAC.

Connecting to other devices

1 Open the notifications panel and tap **Quick Connect**.

2 Select a visibility option, and then tap **ENABLE QUICK CONNECT**.

When the panel opens, the Wi-Fi and Bluetooth features are activated automatically and the device searches for nearby devices.

3 Select a device to connect to.

The next steps may vary depending on the connected device. Follow the on-screen instructions to complete the connection between the devices.

To allow nearby devices to search for your device and connect to it, tap **SETTINGS** → **Device visibility**, and then select an option.

Re-searching for devices

If the desired device does not appear in the list, search for the device.

Tap **REFRESH** and select the device from the list of detected devices.

Deactivating the Quick connect feature

Tap ↩.

Sharing content

Share content with the connected devices.

1 Open the notifications panel and tap **Quick Connect**.

2 Select a device from the list of detected devices.

3 Tap **Share content** and select a media category.

4 Select the content to share and tap **DONE**.

Your device sends the content to the connected device.

SideSync 3.0

About SideSync 3.0

Use this app to control a smartphone's screen with a virtual smartphone screen on your tablet.

- On your tablet, view messages or use the smartphone's chat room.
- On your tablet, watch a video playing on the smartphone on a larger display.
- Easily transfer files between your tablet and smartphone by dragging and dropping the files.

Before using this app

- Your tablet and smartphone must support Wi-Fi Direct.
- SideSync 3.0 must be installed on both your tablet and smartphone.

  If it is not installed on any device, download and install it from **Galaxy Apps** or **Play Store**.
- SideSync 3.0 operates only on devices with Android version 4.4 or higher.

Connecting your tablet and a smartphone

1 On your tablet, tap **SideSync 3.0** on the Apps screen.

2 Launch **SideSync 3.0** on a smartphone.

3 The tablet searches for available smartphones automatically.
Select one of the detected smartphones.

TBD

4 Tap **OK** on the smartphone screen.

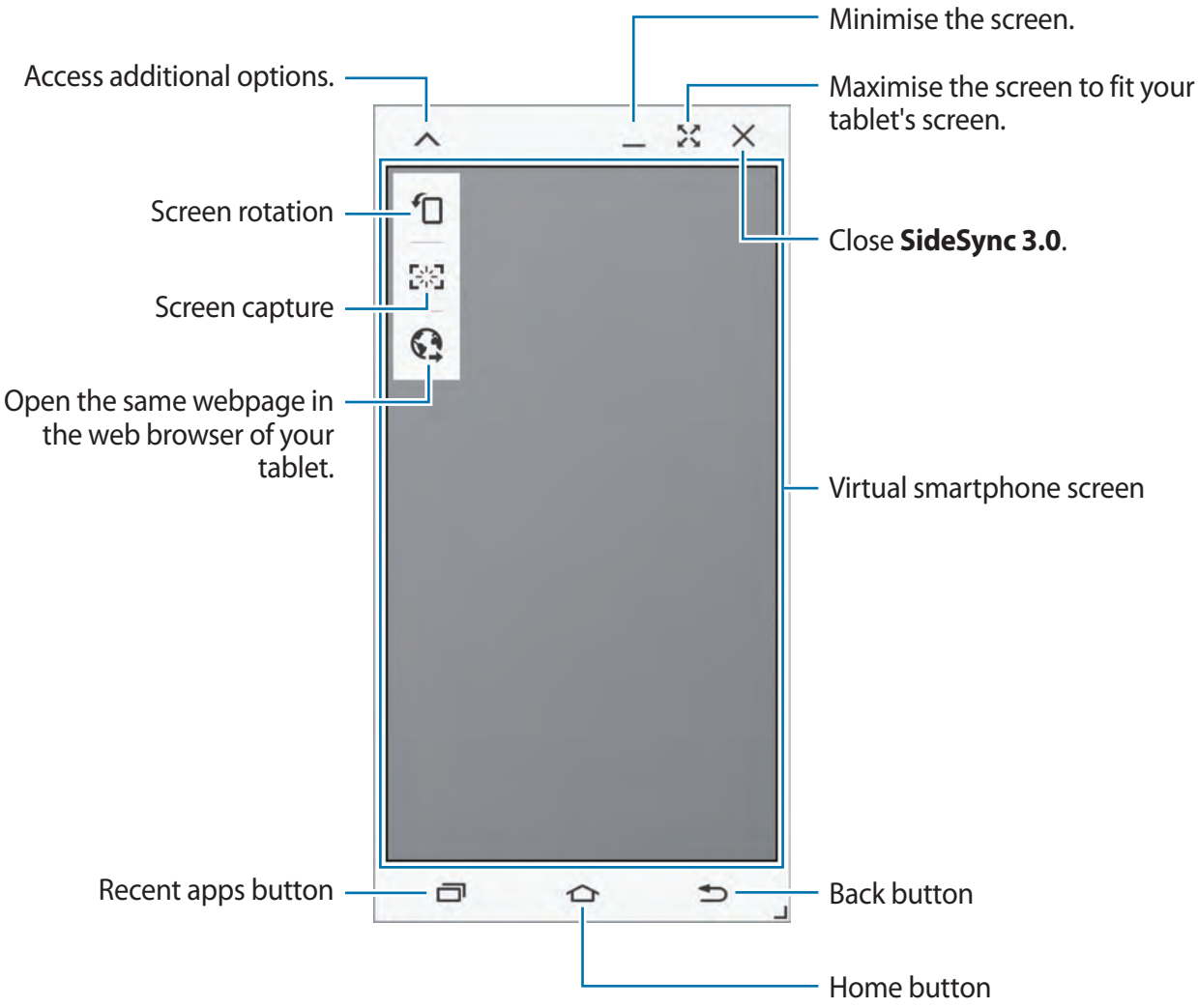
5 The smartphone's virtual screen is displayed on your tablet and the smartphone's screen is turned off.

TBD

Using the virtual smartphone screen

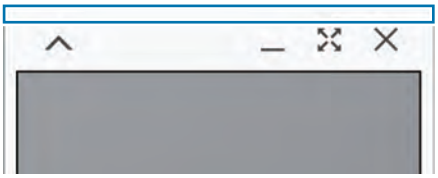
Browse the screen and use apps in the virtual smartphone screen. You can send or receive messages, or chat with others.

- Some features, such as **Screen Mirroring**, may not work in the virtual smartphone screen.
- The smartphone's virtual screen may differ depending on the smartphone.



Moving the virtual smartphone screen

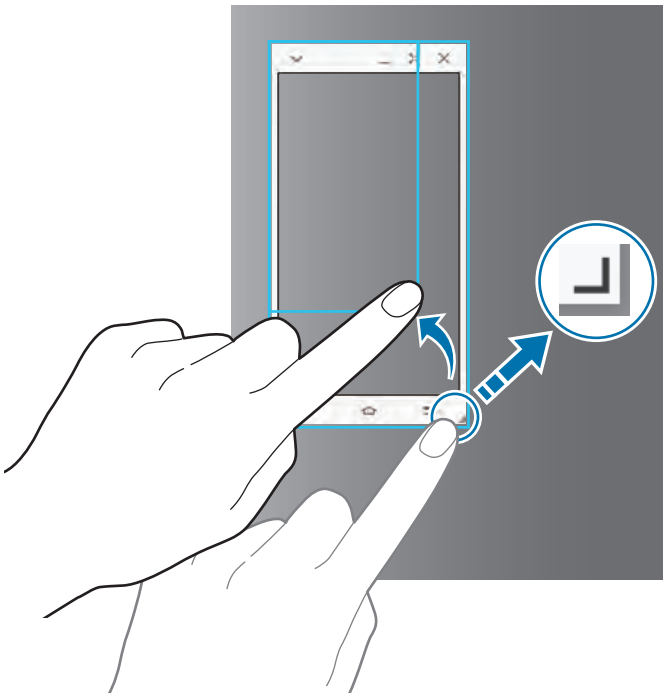
Tap and drag the top edge of the virtual smartphone screen to move it to another location.



Adjusting the size of the virtual smartphone screen

1 Tap and hold ⌟ at the bottom right of the virtual smartphone screen.

2 When the frame appears, drag the frame to adjust the size.



Entering text

When you enter text in the virtual smartphone screen, the tablet's keyboard appears. Enter text using the keyboard.

Switching between the smartphone screen and the virtual smartphone screen

It is not possible to use the smartphone screen and the virtual smartphone screen at the same time. When you are using the virtual smartphone screen on the tablet, the smartphone screen turns off.

Using the smartphone screen

Press the Home button on the smartphone to turn on the smartphone screen and turn off the virtual smartphone screen on the tablet.

Using the virtual smartphone screen

Tap **SWITCH TO TABLET** on the tablet's screen to turn on the virtual smartphone screen and turn off the smartphone screen.

Playing music or videos on the tablet

Play music or videos stored in the smartphone via the screen and speaker of the tablet.

1 Open a music or video file in the virtual smartphone screen on the tablet.

2 The selected file is played using the tablet's screen and speaker.

Adjust the volume on the virtual smartphone screen or the tablet during playback.

Copying files between devices

Copying files from the smartphone to the tablet

1 Tap and hold a file on the virtual smartphone screen.

2 Select the files to copy, tap and hold any selected file, and then drag it to the tablet's screen.

3 **My Files** is launched on the tablet's screen. Select a folder to save the file in and tap **DONE**.

Copying files from the tablet to the smartphone

1 Tap and hold a file on the tablet's screen.

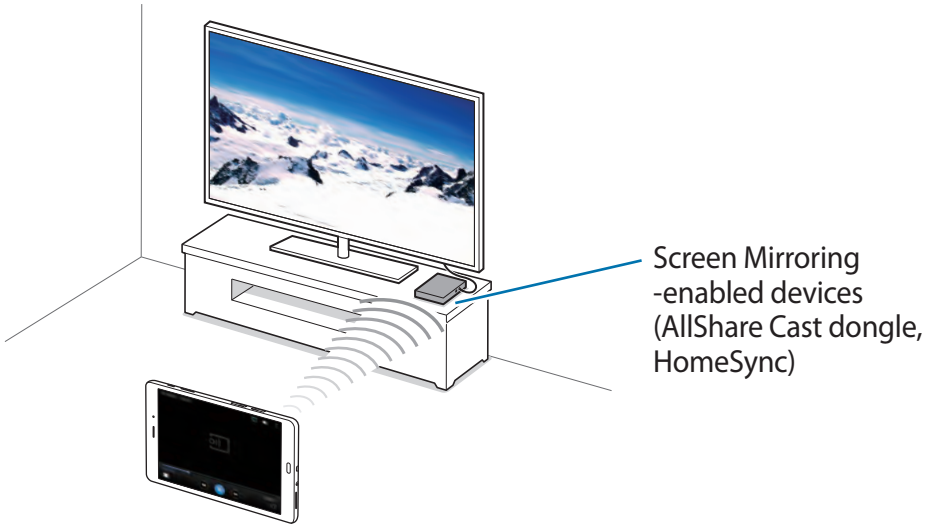
2 Select the files to copy, tap and hold any selected file, and then drag it to the virtual smartphone screen.

3 **My Files** is launched on the virtual smartphone screen. Select a folder to save the file in and tap **DONE**.

Screen Mirroring

About Screen Mirroring

Use this feature to connect your device to a large screen with an AllShare Cast dongle or HomeSync and then share your contents.



- This feature may not be available depending on the region or service provider.
- Some files may be buffered during playback, depending on the network connection.
- To save energy, deactivate this feature when not in use.
- If you specify a Wi-Fi frequency, AllShare Cast dongles or HomeSync may not be detected or connected.
- If you play videos or games on a TV, select an appropriate TV mode to get the best experience.

Viewing content on a TV

Before you connect your device to a TV, connect the screen mirroring-enabled device to the TV. To set up the connection, refer to the device's user manual. The following actions are an example of viewing content on a TV connected via an AllShare Cast dongle.

1 Connect the AllShare Cast dongle to the TV using an HDMI cable.

2 On the TV, select a connection mode, such as HDMI mode, to connect an external device.

3 Open the notifications panel and tap **EDIT** → **Screen Mirroring** → **ENABLE**.

The detected devices are listed.

4 Select a device to connect to.

Your device's screen appears on the TV screen.

If you connect the device for the first time, tap and hold the dongle's name in the list and enter the PIN shown on the TV screen.

5 Open or play a file, and then control the display with the keys on your device.

Mobile printing

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

Some printers may not be compatible with the device.

Adding printer plug-ins

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

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

Connecting to a printer

On the Apps screen, tap **Settings** → **More connection settings** → **Printing**, select a printer plug-in, and then tap the switch to activate it. The device searches for printers that are connected to the same Wi-Fi network as your device.

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

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

Printing content

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

Device & data manager

Transferring data from your previous device

You can transfer data from a previous device to your new device via Samsung Smart Switch. The following versions of Samsung Smart Switch are available.

- Mobile version (Smart Switch Mobile): Transfer data between mobile devices. You can download the app from **Galaxy Apps** or **Play Store**.
- Computer version: Transfer data between your device and a computer. You can download the app from www.samsung.com/smartswitch.

- Samsung Smart Switch is not 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 from a mobile device

Transfer data from your previous device to your new device.

The following actions are an example of transferring data from your previous Android device. To import data from a mobile device with a different operating system, refer to the on-screen instructions.

1 When you turn on your new device for the first time, tap **START** in the Smart Switch installation pop-up window to install the app.

If the Smart Switch installation pop-up window does not appear on the screen, you can download the app from **Galaxy Apps** or **Play Store**.

2 On your previous device, download and install Smart Switch from **Galaxy Apps** or **Play Store**.

3 Launch **Smart Switch Mobile** on both devices.

4 On your previous device, tap **ANDROID TO GALAXY** → **SEND CONTENT**.

The devices will automatically connect.

5 On your previous device, select data to send to your new device and tap **SEND**.

6 On your new device, tap **RECEIVE** on the connection request pop-up window to receive the data.

The data transfer will begin.

7 On both devices, tap **FINISH** when the data transfer is complete.

Transferring data from a computer

Back up data from your previous device to a computer and import the data to your new 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 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.

To select data to back up, click Settings → Back up, and then select data.

5 Connect your new device to the computer using the USB cable.

6 On the computer, follow the on-screen instructions to transfer data to your new device.

Using the device as a removable disk for data transfer

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

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

The devices may not connect properly if they are connected via a USB hub. Directly connect the device to the computer's USB port.

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

2 Open the notifications panel, and then tap **Connected as a media device** → **Media device (MTP)**.

Tap **Camera (PTP)** if your computer does not support Media Transfer Protocol (MTP) or not have any appropriate driver installed.

3 Transfer files between your device and the computer.

Updating the device

The device can be updated to the latest software.

Updating over the air

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

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

To automatically check for available updates, tap the **Auto update** switch to activate it. To download updates only when a Wi-Fi connection is activated, tap the **Wi-Fi only** switch to activate it.

Updating with Smart Switch

Connect the device to a computer and update the device to the latest software.

1 On the computer, visit www.samsung.com/smartswitch to download and install Smart Switch.

2 On the computer, launch Smart Switch.

3 Connect the device to the computer using a USB cable.

4 On the computer, click the update button in the connection window.

- Do not turn off the computer or disconnect the USB cable while the device is updating.
- While updating the device, do not connect other media devices to the computer. Doing so may interfere with the update process. Before updating, disconnect all other media devices from the computer.

Backing up and restoring data

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

Using a Samsung account

On the Apps screen, tap **Settings** → **Backup and reset** → **Back up my data**, select the items to back up, and then tap **BACK UP NOW**.

To set the device to automatically back up data, tap the **Auto back up** switch to activate it.

To restore data using a Samsung account, tap **Restore**. Current data will be deleted from the device to restore the selected items.

Using a Google account

On the Apps screen, tap **Settings** → **Backup and reset**, and then tap the **Back up my data** switch to activate it. Tap **Backup account** and select an account as the backup account.

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

Performing a data reset

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

On the Apps screen, tap **Settings** → **Backup and reset** → **Factory data reset** → **RESET DEVICE** → **ERASE EVERYTHING**. The device automatically restarts.

Settings

About Settings

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

Tap **Settings** on the Apps screen.

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

Connections

Wi-Fi

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

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

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

To use options, tap **MORE**.

Setting Wi-Fi sleep policy

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

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

Bluetooth

Activate the Bluetooth feature to exchange information over short distances.

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

Flight mode

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

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

Mobile hotspot and tethering

Use the device as a mobile hotspot to share the device's mobile data connection with other devices. Refer to Mobile hotspot and tethering for more information.

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

- **Mobile hotspot**: Use the mobile hotspot to share the device's mobile data connection with computers or other devices through the Wi-Fi network. You can use this feature when the network connection is not available.
- **Bluetooth tethering**: Use Bluetooth tethering to share the device's mobile data connection with computers or other devices via Bluetooth.
- **USB tethering**: Use USB tethering to share the device's mobile data connection with a computer via USB. When connected to a computer, the device is used as a wireless modem for the computer.

Data usage

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

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

- **Mobile data**: Set the device to use data connections on any mobile network.
- **Set mobile data limit**: Set a limit for mobile data usage.

To use more options, tap **MORE**.

- **Restrict background data**: Set the device to disable sync in the background while using a mobile network.
- **Show Wi-Fi usage**: Set the device to show your data usage via Wi-Fi.
- **Restrict networks**: Set the device to disable sync in the background while using Wi-Fi network.

Mobile networks

Customise the mobile network settings.

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

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

More connection settings

Customise settings to control networks.

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

Printing

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

VPN

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

Default messaging app

Select the default app to use for messaging.

Ethernet

The Ethernet option is available when an Ethernet adaptor is connected to the device. Use this option to activate the Ethernet feature and configure network settings.

Device

Sounds and notifications

Change settings for various sounds on the device.

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

- **Sound mode**: Set the device to use sound mode or silent mode.
- **Volume**: Adjust the volume level for call ringtones, music and videos, system sounds, and notifications.
- **Ringtones and sounds**: Change settings for ringtones and system sounds.
- **Vibrations**: Add or select a vibration pattern.
- **Sound quality and effects**: Select a sound effect to apply when you adjust to music.
- **Do not disturb**: Activate or deactivate blocking mode. Select which notifications will be blocked and how long to block them.
- **Notifications on lock screen**: Set the device to show notifications on the locked screen.
- **App notifications**: Change the notification settings for each app.

Display

Change the display settings.

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

- **Brightness**: Set the brightness of the display.
- **Font**: Change the font size and type.
- **Screen timeout**: Set the length of time the device waits before turning off the display's backlight.
- **Smart stay**: Set the device to prevent the display backlight from turning off while you are looking at the display.
- **Screen mode**: Change the screen mode.
- **Daydream**: Set the device to launch a screensaver when the device is charging or connected to a desktop dock.

Motions and gestures

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

On the Settings screen, tap **Motions and gestures**.

- **Smart alert**: Set the device to alert you if you have missed calls or new messages when you pick up the device.
- **Mute**: Set the device to mute incoming calls or alarms by using palm motions or placing the device face down.
- **Palm swipe to capture**: Set the device to capture a screenshot when you sweep your hand to the left or right across the screen.

Applications

Application manager

View and manage the apps on your device.

Default applications

Select a default setting for using apps.

Application settings

Customise the settings for each app.

Personal

Wallpaper

Change the wallpaper settings.

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

- **Home screen**: Select a background image for the Home screen.
- **Lock screen**: Select a background image for the locked screen.
- **Home and lock screens**: Select a background image for the Home screen and the locked screen.

Lock screen and security

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

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

- **Screen lock type**: Change the screen lock method.
- **Show information**: Change settings for the items displayed on the locked screen.
- **Unlock effect**: Select an effect that you see when you unlock the screen.
- **Device security**: Scan for and remove malware from the device. You can also activate the real-time scanning feature to block phishing attacks and malicious websites.
- **Find My Mobile**: Access the Find my mobile website (findmymobile.samsung.com). You can track and control your lost or stolen device from the Find my mobile website.
- **Unknown sources**: Set the device to allow the installation of apps from unknown sources.
- **Other security settings**: Configure additional security settings.

Privacy and safety

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

- **Location**: Change settings for location information permissions.
- **Private mode**: Set the device to prevent others from accessing your personal content by activating private mode.
- **Report diagnostic info**: Set the device to automatically send the device's diagnostic and usage information to Samsung.

Accessibility

Use this feature to improve accessibility to the device.

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

- **Vision**: Customise the settings to improve accessibility for visually impaired users.
  - **Galaxy TalkBack**: Activate TalkBack, which provides voice feedback.
  - **Galaxy TalkBack help**: View help information to learn how to use Galaxy TalkBack.
  - **Dark screen**: Set the device to turn the screen off at all times to keep the content on your screen private.
  - **Rapid key input**: Set the device to enter a character when you release your finger from the character on the keyboard. You can use this feature to enter characters instead of releasing your finger and double-tapping on the screen.
  - **Speak passwords**: Set the device to read the password aloud when you enter the password while TalkBack is activated.
  - **Font size**: Change the font size.
  - **Magnification gestures**: Set the device to magnify the screen and to zoom in on a specific area.
  - **Greyscale**: Display colours on the screen as grey tones.
  - **Negative colours**: Reverse the display colours to improve visibility.
  - **Colour adjustment**: Adjust the colour scheme for the screen when the device determines that you are colour blind or having difficulty reading content.

- **Accessibility shortcut**: Set the device to activate TalkBack when you press and hold the Power button, and then tap and hold the screen with two fingers.
- **Text-to-speech options**: Change the settings for text-to-speech features used when TalkBack is activated, such as languages, speed, and more.

- **Hearing**: Customise the settings to improve accessibility for users with hearing impairment.
  - **Turn off all sounds**: Set the device to mute all device sounds, such as media sounds, and the caller's voice during a call.
  - **Samsung subtitles (CC)**: Set the device to display closed captions on content supported by Samsung and to change the closed caption settings.
  - **Google subtitles (CC)**: Set the device to display closed captions on content supported by Google and to change the closed caption settings.
  - **Left/right sound balance**: Set the device to adjust the sound balance when using a headset.
  - **Mono audio**: Set the device to switch the sound output from stereo to mono when a headset is connected.
- **Dexterity and interaction**: Customise the settings to improve accessibility for users who have reduced dexterity.
  - **Universal switch**: Set the device to scan and highlight items on the screen. You can control the touch screen by connecting an external switch, tapping the screen, or by using head movements and face gestures.
  - **Assistant menu**: Set the device to show the assistive shortcut icon that helps you access functions supported by external buttons or features on the notifications panel. You can also edit the menu on the shortcut icon.
  - **Tap and hold delay**: Set the recognition time for tapping and holding the screen.
  - **Interaction control**: Activate interaction control mode to restrict the device's reaction to inputs while using apps.

- **Direct access**: Set the device to open selected accessibility menus when you press the Home button three times quickly.
- **Notification reminder**: Set the device to alert you to notifications that you have not checked at the interval.
- **Answering and ending calls**: Change the method of answering or ending calls.
- **Single tap mode**: Set the device to control incoming calls or notifications by tapping the button instead of dragging it.
- **Manage accessibility**: Export or import the accessibility settings to share them with other devices.
- **Services**: View accessibility services installed on the device.

Accounts

Add email or SNS accounts.

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

Backup and reset

Change the settings for managing settings and data.

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

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

System

Language and input

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

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

- **Language**: Select a display language for all menus and apps.
- **Default keyboard**: Select a default keyboard type for text input.
- **Samsung keyboard**: Change the Samsung keyboard settings.

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

- **Google voice typing**: Change the voice input settings.
- **Voice input**: Change the settings for the voice recogniser.
- **Text-to-speech options**: Change the text-to-speech settings.
- **Pointer speed**: Adjust the pointer speed for the mouse or trackpad connected to your device.

Battery

View battery power information and change power saving options.

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

- **Power saving mode**: Activate power-saving mode and change the settings for power-saving mode.
- **Ultra power saving mode**: Extend standby time and reduce battery consumption by displaying a simpler layout and allowing limited access to an app.
- **Display battery percentage**: Set the device to display the remaining battery life.

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

Storage

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

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

Formatting a memory card permanently deletes all data from it.

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

Accessories

Change the accessory settings.

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

- **Automatic unlock**: Set the device to unlock automatically when the cover is flipped open. You can use this feature only for some screen lock methods.

Date and time

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

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

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

- **Automatic date and time**: Automatically update the time and date when moving across time zones.
- **Automatic time zone**: Set the device to receive time zone information from the network when you move across time zones.
- **Set date**: Set the current date manually.
- **Set time**: Set the current time manually.
- **Select time zone**: Set the home time zone.
- **Use 24-hour format**: Display time in 24-hour format.
- **Select date format**: Select a date format.

User manual

View more information about using the device.

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

The user manual may not be available depending on the web browser or service provider.

About device

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

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

Appendix

Troubleshooting

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

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

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

Your device displays network or service error messages

- When you are in areas with weak signals or poor reception, you may lose reception. Move to another area and try again. While moving, error messages may appear repeatedly.
- You cannot access some options without a subscription. For more information, contact your service provider.

Your device does not turn on

When the battery is completely discharged, your device will not turn on. Fully charge the battery before turning on the device.

The touch screen responds slowly or improperly

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

Your device freezes or has fatal errors

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

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

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

A cellular network or the Internet is often disconnected or audio quality is poor

- Ensure that you are not blocking the device's internal antenna.
- When you are in areas with weak signals or poor reception, you may lose reception. You may have connectivity problems due to issues with the service provider's base station. Move to another area and try again.
- When using the device while moving, wireless network services may be disabled due to issues with the service provider's network.

The battery icon is empty

Your battery is low. Charge the battery.

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

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

The battery depletes faster than when first purchased

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

Your device is hot to the touch

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

Error messages appear when launching the camera

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

- Charge the battery.
- Free some memory by transferring files to a computer or deleting files from your device.
- Restart the device. If you are still having trouble with the camera app after trying these tips, contact a Samsung Service Centre.

Photo quality is poorer than the preview

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

Error messages appear when opening multimedia files

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

- Free some memory by transferring files to a computer or deleting files from your device.
- Ensure that the music file is not Digital Rights Management (DRM)-protected. If the file is DRM-protected, ensure that you have the appropriate licence or key to play the file.
- Ensure that the file formats are supported by the device. If a file format is not supported, such as DivX or AC3, install an app that supports it. To confirm the file formats that your device supports, visit www.samsung.com.

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

Another Bluetooth device is not located

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

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

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

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

Your device cannot find your current location

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

Data stored in the device has been lost

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

A small gap appears around the outside of the device case

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

Removing the battery (non-removable type)

- These instructions are only for your service provider or an authorised repair agent.
- Damage or faults caused by the unauthorised removal of the battery are not covered by the warranty.
- To remove or replace the battery, contact your service provider or an authorised repair agent.

1 Insert the device opening tool into the gap between the device's screen and the back cover.

Then, start separating the screen from the back cover by using the tool to pry them apart as shown in the image below.

Take care when inserting the tool to avoid damaging the device's internal components.

2 Continue reinserting the tool and prying the screen and the back cover apart at close intervals around the device.

Rotate the back cover carefully and ensure that the hooks are not damaged.

3 When the screen is disengaged, separate the screen and the back cover.

Then, put the back cover aside and place the screen face down on a flat work surface.

4 Loosen and remove the screws.

5 Disconnect the battery connectors as shown in the image below.

6 Peel the flap from the battery, and then pull it to remove the battery.

TBD

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 http://www.fcc.gov/oet/ea/fccid/. Please use the phone FCC ID number for search, A3LSMA307GN. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at http://www.fcc.gov/encyclopedia/specific-absorption-rate-sar-cellular-telephones

Consumer Information on Wireless Phones

The U.S. Food and Drug Administration (FDA) has published a series of Questions and Answers for consumers relating to radio frequency (RF) exposure from wireless phones. The FDA publication includes the following information:

What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called “cell,” “mobile,” or “PCS” phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called “cordless phones,” which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- “Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- “Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- “Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- “National Institute for Occupational Safety and Health

- “Environmental Protection Agency
- “Federal Communications Commission
- “Occupational Safety and Health Administration
- “National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radio frequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phones RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but ten or more years' follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of

epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radio frequency energy (RF).

FDA has been a leading participant in the World Health Organization international Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

What steps can I take to reduce my exposure to radio frequency energy from my wireless phone?

If there is a risk from these products - and at this point we do not know that there is - it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radio frequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

- “If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body.

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radio frequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in

the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike “hand-free” kits, these so-called “shields” may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. FDA has tested wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a compatible hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will

conduct testing to assess the interference and work to resolve the problem.
Additional information on the safety of RF exposures from various sources can be obtained from the following organizations:

- FCC RF Safety Program: http://www.fcc.gov/oet/rfsafety/
- Environmental Protection Agency (EPA): http://www.epa.gov/radiation/
- Occupational Safety and Health Administration's (OSHA): http://www.osha.gov/SLTC/radiofrequencyradiation/index.html
- National institute for Occupational Safety and Health (NIOSH): http://www.cdc.gov/niosh/
- World health Organization (WHO): http://www.who.int/peh-emf/
- International Commission on Non-Ionizing Radiation Protection: http://www.icnirp.de
- National Radiation Protection Board (UK): http://www.hpa-radiationservices.org.uk/rpa
- Updated 4/3/2002: US food and Drug Administration http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm

Road Safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.
When driving a car, driving is your first responsibility. When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

1. Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
2. When available, use a hands-free device. If possible, add an additional layer of convenience and safety to your wireless phone with one of the many hands free accessories available today.
3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
4. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice and even heavy traffic can be hazardous.
5. Do not take notes or look up phone numbers while driving. Jotting down a “to do” list or flipping through your address book takes attention away from your primary responsibility, driving safely.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations that have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special non-emergency number.

"The wireless industry reminds you to use your phone safely when driving."
For more information, please call 1-888-901-SAFE, or visit our web-site www.wow-com.com
Provided by the Cellular Telecommunications & Internet Association

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger. When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.
As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position.

Using Your Phone Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker.
These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

- should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on.
- should not carry the phone in a breast pocket.
- should use the ear opposite the pacemaker to minimize potential interference.

If you have any reason to suspect that interference is taking place, switch your phone off immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Switch your phone off in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Switch your phone off in any facility where posted notices require you to do so.

Potentially Explosive Environments

Switch your phone off when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Users are advised to switch the phone off while at a refueling point (service station).

Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency Calls

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user programmed functions, which cannot guarantee connection in all conditions. Therefore, you should never rely solely on any wireless phone for essential communications (medical emergencies, for example).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/ or phone features are in use. Check with local service providers.

To make an emergency call:

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.
3. Press .

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this

document and your local cellular service provider.
When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Restricting Children's access to your Phone

Your phone is not a toy. Children should not be allowed to play with it because they could hurt themselves and others, damage the phone or make calls that increase your phone bill.

FCC Notice and Cautions

FCC Notice

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

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

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

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

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

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

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

Cautions

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

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

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

Other Important Safety Information

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

Product Performance

Getting the Most Out of Your Signal Reception

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

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

Understanding the Power Save Feature

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

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

Maintaining Your Phone's Peak Performance

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

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

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

Availability of Various Features/Ring Tones

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

Battery Standby and Talk Time

Standby and talk times will vary depending on phone usage patterns and conditions. Battery power consumption depends on factors such as network configuration, signal strength, operating temperature, features selected, frequency of calls, and voice, data, and other application usage patterns.

Battery Precautions

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short- circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and - terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.
- Dispose of used batteries in accordance with local regulations. In some areas, the disposal of batteries in household or business trash may be prohibited. For safe disposal options for Li-Ion batteries, contact your nearest Samsung authorized service center. Always recycle. Do not dispose of batteries in a fire.

Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and

allow you to enjoy this product for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- When the phone or battery gets wet, the label indicating water damage inside the phone changes color. In this case, phone repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.
- If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Correct disposal of this product

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be

disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it 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 this item for environmentally safe recycling.

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

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste 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. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

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

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