

Using the screen keyboard

Open the screen keyboard on the connected TV or monitor to enter text.

On the quick access toolbar, tap .

The screen keyboard will appear.

Enjoying games vividly on a large screen

Play your tablet's games on a large screen. On the connected TV or monitor, launch the **Game Launcher** app.

Answering calls

While using Samsung DeX, you can answer calls from your tablet's on the connected TV or monitor. Select the call answering option on the connected TV or monitor to answer a call. Your tablet's speaker will be used during the calls.

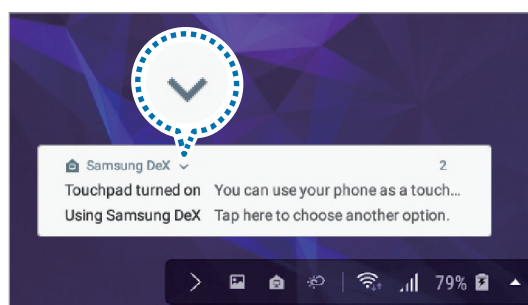


If you do not want to use the speakerphone, connect earphones or remove your tablet from the DeX Pad.

Changing screen mode

You can change the screen mode on the connected TV or monitor.

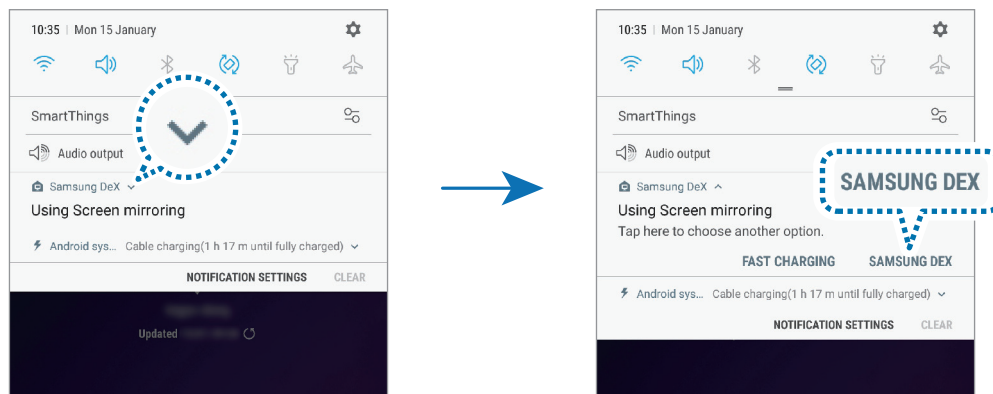
1 On the status bar, tap  and tap  next to **Samsung DeX**.



- 2 Tap  above **Using Samsung DeX** and tap **SCREEN MIRRORING**.

Samsung DeX mode will be ended and the same screen as your tablet will appear on the connected TV or monitor.

If you want to switch modes on your tablet, open the notification panel, tap  next to **Samsung DeX**, and then tap **SAMSUNG DEX**.



Charging the tablet's battery

You can charge your tablet's battery using the DeX Pad.

- 1 On the status bar, tap  and tap  next to **Samsung DeX**.

- 2 Tap  above **Using Samsung DeX** and tap **FAST CHARGING**.

The connected TV or monitor will turn off and your tablet will start charging.

Ending the connection

To disconnect your tablet from the connected monitor, remove your tablet from the DeX Pad.



Be sure to remove your tablet horizontally. Raising it up too high, pulling it excessively, or shaking it may damage the mobile device connector (USB Type-C).

Connecting to an external display

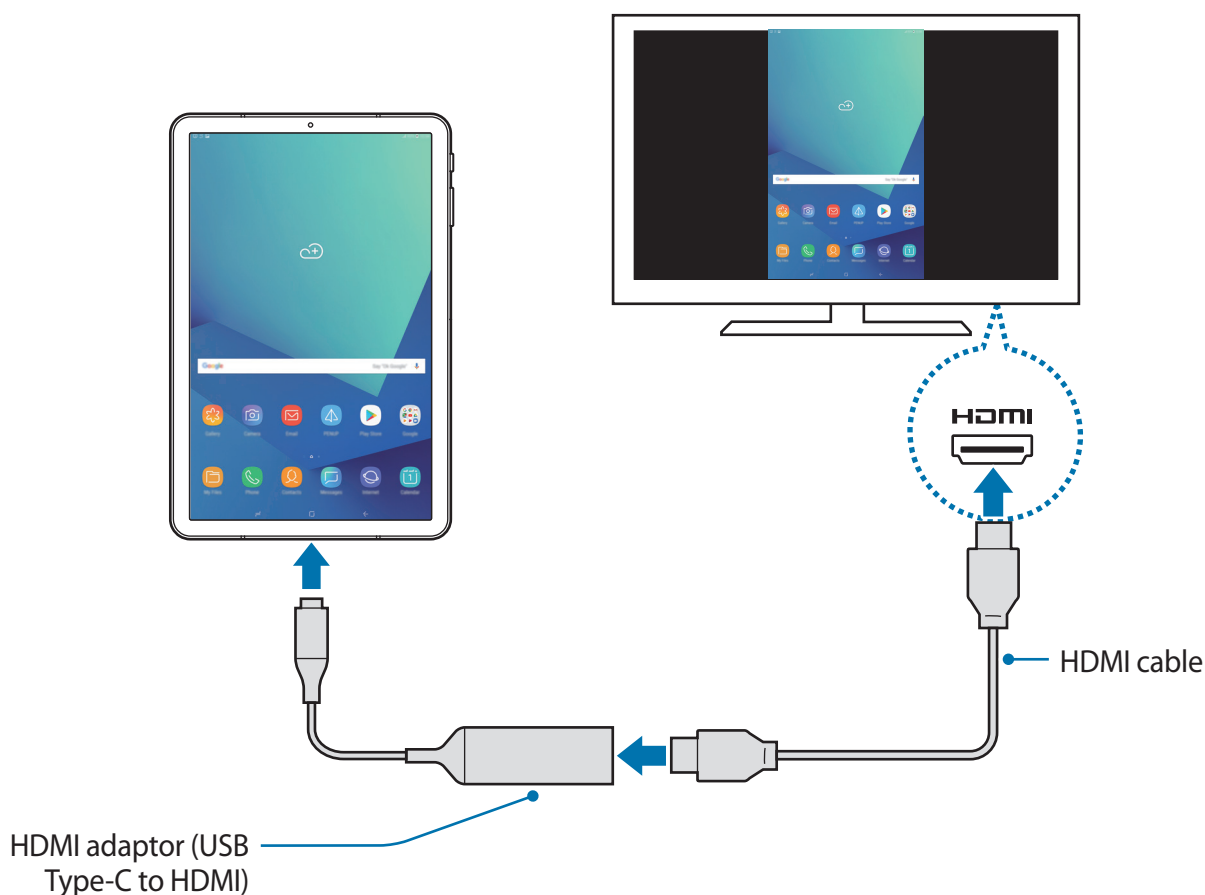
You can connect your tablet to an external display, such as a TV or monitor, and view presentations or movies on the connected display. Connect your tablet to an external display using an HDMI cable and HDMI adaptor (USB Type-C to HDMI). You can view your tablet's content on the connected screen.



- HDMI cables and adaptors (USB Type-C to HDMI) are sold separately.
- Use only a Samsung-approved HDMI adaptor (USB Type-C to HDMI). Performance problems and malfunctions caused by using unapproved accessories are not covered by the warranty.

- 1 Connect an HDMI adaptor (USB Type-C to HDMI) to your tablet.
- 2 Connect an HDMI cable to the HDMI adaptor (USB Type-C to HDMI) and to a TV or monitor's HDMI port.

Your tablet's screen will appear on the connected screen.



Google apps

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

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



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

Chrome

Search for information and browse webpages.

Gmail

Send or receive emails via the Google Mail service.

Maps

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

Play Music

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

Play Movies & TV

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

Drive

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

YouTube

Watch or create videos and share them with others.

Photos

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

Google

Search quickly for items on the Internet or your device.

Duo

Make a simple video call.

Settings

Introduction

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

Launch the **Settings** app.

To search for settings by entering keywords, tap .

Connections

Options

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

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

- **Wi-Fi:** Activate the Wi-Fi feature to connect to a Wi-Fi network and access the Internet or other network devices. Refer to [Wi-Fi](#) for more information.
- **Bluetooth:** Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices. Refer to [Bluetooth](#) for more information.
- **Tablet visibility:** Allow other devices to find your device to share content with you. When this feature is activated, your device will be visible to other devices when they search for available devices using their Transfer files to device option.
- **Data usage:** Keep track of your data usage amount and customise the settings for the limitation. Set the device to automatically disable the mobile data connection when the amount of mobile data you have used reaches your specified limit.

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

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



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

- **Mobile Hotspot and Tethering:** Use the device as a mobile hotspot to share the device's mobile data connection with other devices when the network connection is not available. Connections can be made via Wi-Fi, USB, or Bluetooth. Refer to [Mobile Hotspot and Tethering](#) for more information.
- **Mobile networks:** Configure your mobile network settings.
- **Location:** Change settings for location information permissions.
- **More connection settings:** Customise settings to control other features. Refer to [More connection settings](#) for more information.

Wi-Fi

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



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

Connecting to a Wi-Fi network

1 On the Settings screen, tap **Connections** → **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. Enter the password and 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**.
- If you cannot connect to a Wi-Fi network properly, restart your device's Wi-Fi feature or the wireless router.

Wi-Fi Direct

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

- 1 On the Settings screen, tap **Connections** → **Wi-Fi**, and then tap the switch to activate it.
- 2 Tap **Wi-Fi Direct**.
The detected devices are listed.
If the device you want to connect to is not in the list, request that the device turns on its Wi-Fi Direct feature.
- 3 Select a device to connect to.
The devices will be connected when the other device accepts the Wi-Fi Direct connection request.

Sending and receiving data

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

- 1 Launch the **Gallery** app and select an image.
- 2 Tap  → **Wi-Fi Direct** and select a device to transfer the image to.
- 3 Accept the Wi-Fi Direct connection request on the other device.
If the devices are already connected, the image will be sent to the other device without the connection request procedure.

Ending the device connection

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

Bluetooth

Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices.



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

Pairing with other Bluetooth devices

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

The detected devices will be listed.

- 2 Select a device to pair with.

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



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

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

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

Sending and receiving data

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

- 1 Launch the **Gallery** app and select an image.
- 2 Tap  → **Bluetooth**, and then select a device to transfer the image to.
If your device has paired with the device before, tap the device name without confirming the auto-generated passkey.
If the device you want to pair with is not in the list, request that the device turns on its visibility option.
- 3 Accept the Bluetooth connection request on the other device.

Unpairing Bluetooth devices

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

Data saver

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

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

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



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

Mobile Hotspot and Tethering

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

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



You may incur additional charges when using this feature.

- **Mobile Hotspot:** Use the mobile hotspot to share the device's mobile data connection with computers or other devices.
- **Bluetooth tethering:** Use Bluetooth tethering to share the device's mobile data connection with computers or other devices via Bluetooth.
- **USB tethering:** Use USB tethering to share the device's mobile data connection with a computer via USB. When connected to a computer, the device is used as a wireless modem for the computer.

Using the mobile hotspot

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

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

More connection settings

Customise settings to control other features.

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

- **Nearby device scanning:** Set the device to scan for nearby devices to connect to.
- **Printing:** Configure settings for printer plug-ins installed on the device. You can search for available printers or add one manually to print files. Refer to [Printing](#) for more information.
- **Download booster:** Set the device to download files larger than 30 MB, faster via Wi-Fi and mobile networks simultaneously. Refer to [Download booster](#) for more information.
- **VPN:** Set up virtual networks (VPNs) on your device to connect to a school or company's private network.
- **Ethernet:** When you connect an Ethernet adaptor, you can use a wired network and configure network settings.

Printing

Configure settings for printer plug-ins installed on the device. You can connect the device to a printer via Wi-Fi or Wi-Fi Direct, and print images or documents.



Some printers may not be compatible with the device.

Adding printer plug-ins

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

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



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

Printing content

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



Printing methods may vary depending on the content type.

Download booster

Set the device to download files larger than 30 MB, faster via Wi-Fi and mobile networks simultaneously. A stronger Wi-Fi signal will provide a faster download speed.

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



- This feature may not be supported by some devices.
- You may incur additional charges when downloading files via the mobile network.
- When you download large files, the device may heat up. If the device exceeds a set temperature, the feature will turn off.
- If network signals are unstable, the speed and performance of this feature may be affected.
- If the Wi-Fi and mobile network connections have significantly different data transfer speeds, the device may use only the fastest connection.
- This feature supports Hypertext Transmission Protocol (HTTP) 1.1 and Hypertext Transmission Protocol Secure (HTTPS). The feature cannot be used with other protocols, such as FTP.

Sounds and vibration

Options

Change settings for various sounds on the device.

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

- **Sound mode:** Set the device to use sound mode, vibration mode, or silent mode.
- **Vibrate while ringing:** Set the device to vibrate and play a ringtone for incoming calls.
- **Use Volume keys for media:** Set the device to adjust the media volume level when you press the Volume key.
- **Volume:** Adjust the volume level for call ringtones, music and videos, system sounds, and notifications.
- **Vibration intensity:** Adjust the force of the vibration notification.
- **Ringtone:** Change the call ringtone.
- **Vibration pattern:** Select a vibration pattern.

- **Notification sounds:** Change the notification sound.
- **Do not disturb:** Set the device to mute incoming calls, notification sounds, and media, except for allowed exceptions.
- **Touch sounds:** Set the device to sound when you select an app or option on the touchscreen.
- **Screen lock sounds:** Set the device to sound when you lock or unlock the touchscreen.
- **Charging sound:** Set the device to sound when it is connected to a charger.
- **Vibration feedback:** Set the device to vibrate when you tap the buttons on the navigation bar and for other actions, such as tapping and holding items.
- **Dialling keypad tones:** Set the device to sound when you tap the buttons on the keypad.
- **Keyboard sound:** Set the device to sound when a key is touched.
- **Keyboard vibration:** Set the device to vibrate when a key is touched.
- **Sound quality and effects:** Configure additional sound settings.

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

- **Separate app sound:** Set the device to play media sound from a specific app on the connected Bluetooth speaker or headset separate from the sound of other apps. For example, you can listen to the Navigation app through your device's speaker while listening to playback from the Music app through the vehicle's Bluetooth speaker.

Dolby Atmos (surround sound)

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

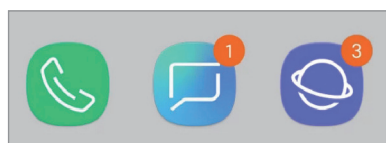
On the Settings screen, tap **Sounds and vibration** → **Sound quality and effects** → **Dolby Atmos**, tap the switch to activate it, and then select a mode.

Notifications

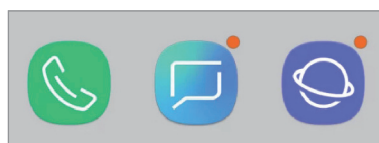
Change the notification settings for each app.

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

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



With number



Without number

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

Display

Options

Change the display and the Home screen settings.

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

- **Brightness:** Adjust the brightness of the display.
- **Auto brightness:** Set the device to keep track of your brightness adjustments and apply them automatically in similar lighting conditions.
- **Blue light filter:** Activate the blue light filter and change the filter settings. Refer to [Blue light filter](#) for more information.
- **Font and screen zoom:** Change the screen zoom setting or font size and style.
- **Screen mode:** Change the screen mode or adjust the display's colour. Refer to [Changing the screen mode or adjusting the display colour](#) for more information.
- **Home screen:** Change the Home screen settings.

- **Icon frames:** Set whether to display shaded backgrounds to make icons stand out.
- **Status bar:** Customise the settings for displaying notifications or indicators on the status bar.
- **Navigation bar:** Change the navigation bar settings. Refer to [Navigation bar \(soft buttons\)](#) for more information.
- **Screen timeout:** Set the length of time the device waits before turning off the display's backlight.
- **Block accidental touches:** Set the device to prevent the screen from detecting touch input when it is in a dark place, such as a pocket or bag.
- **Screensaver:** Set the device to launch a screensaver when the device is charging or connected to a dock. Refer to [Screensaver](#) for more information.
- **Double tap to wake up:** Set the device to turn on the screen by double-tapping anywhere on the screen while the screen is turned off.

Blue light filter

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



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

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

Changing the screen mode or adjusting the display colour

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

Changing the screen mode

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

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



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

Optimising the full screen colour balance

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

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

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



Adjusting the screen tone by colour value

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

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

Screensaver

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

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



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

Wallpaper

Change the wallpaper settings for the Home screen and the locked screen.

On the Settings screen, tap Wallpaper.

Advanced features

Options

Activate advanced features and change the settings that control them.

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



Excessive shaking or an impact to the device may cause an unintended input for some features using sensors.

- **S Pen:** Change the settings for using the S Pen. Refer to [S Pen features](#) for more information about **Air view** and **Screen off memo**.
- **Samsung DeX:** Set the device to use like a computer. Refer to [Samsung DeX](#) for more information.
- **Accessories:** Change the accessory settings.
- **Daily Board:** Set the device to show a slideshow with selected images.
- **Smart stay:** Set the device to prevent the display from turning off while you are looking at it.
- **Games:** Activate the Game Launcher. Refer to [Game Launcher](#) for more information.
- **Device assistance app:** Select a device assistance app to launch when you tap and hold the Home button. The device assistance app will gather information from the current screen and provide related information, apps, and features.
- **Multi window:** Select a Multi window launch method.
- **Smart capture:** Set the device to capture the current screen and scrollable area, and crop and share the screenshot immediately.
- **Palm swipe to capture:** Set the device to capture a screenshot when you swipe your hand to the left or right across the screen. You can view the captured images in **Gallery**.

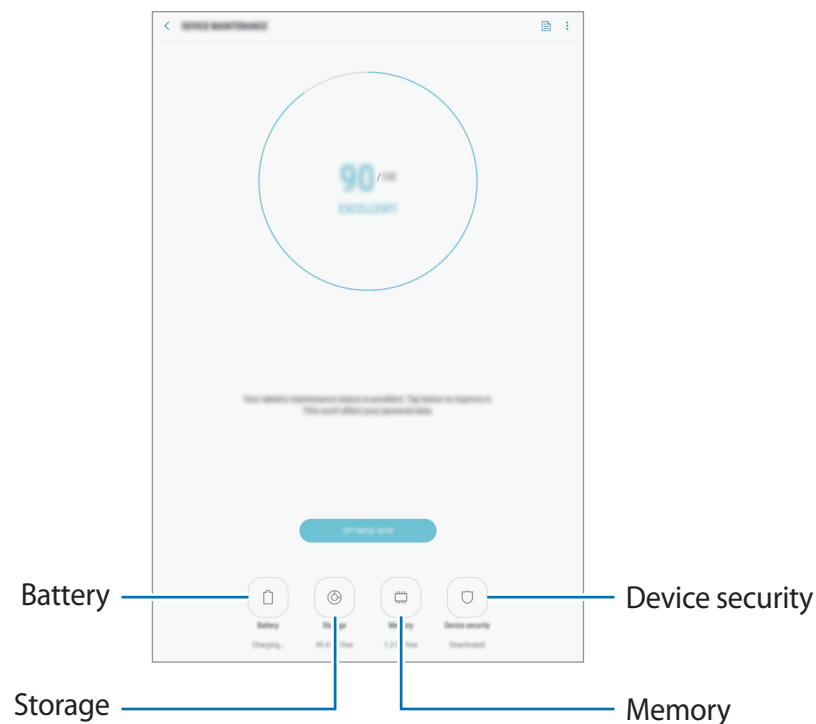


It is not possible to capture a screenshot while using some apps and features.

- **Easy mute:** Set the device to mute incoming calls or alarms by using palm motions.
- **Swipe to call or send messages:** Set the device to make a call or send a message when you swipe to the right or left on a contact or a phone number in the **Phone** or **Contacts** app.
- **Direct share:** Set the device to display the people you contacted on the sharing options panel to allow you to share content directly.

Device maintenance

The device maintenance feature provides an overview of the status of your device's battery, storage, memory, and system security. You can also automatically optimise the device with a tap of your finger.



Using the quick optimisation feature

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

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

- Clearing some memory.
- Deleting unnecessary files and closing apps running in the background.
- Managing abnormal battery usage.
- Scanning for crashed apps and malware.

Battery

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

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



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

Power saving mode

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

Managing the battery

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

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

Storage

Check the status of the used and available memory.

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



- The actual available capacity of the internal memory is less than the specified capacity because the operating system and default apps occupy part of the memory. The available capacity may change when you update the device.
- You can view the available capacity of the internal memory in the Specification section for your device on the Samsung website.

Managing the memory

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

Memory

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

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

Device security

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

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

Apps

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

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

Lock screen

Options

Change settings for the locked screen.

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



The available options may vary depending on the screen lock method selected.

- **Screen lock type:** Change the screen lock method.
- **Smart Lock:** Set the device to unlock itself when trusted locations or devices are detected. Refer to [Smart Lock](#) for more information.
- **Secure lock settings:** Change screen lock settings for the selected lock method.
- **Clock style:** Change the settings of the items displayed on the locked screen.
- **Roaming clock:** Change the clock to show both the local and home time zones on the locked screen when roaming.
- **FaceWidgets:** Change the settings of the items displayed on the locked screen.
- **Contact information:** Set the device to show contact information, such as your email address, on the locked screen.
- **Notifications:** Set whether or not to show notifications on the locked screen and select which notifications to display.
- **App shortcuts:** Select apps to display shortcuts to them on the locked screen.

Smart Lock

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

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



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

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

Biometrics and security

Options

Change the settings for securing the device.

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

- **Intelligent Scan:** Register both your face and irises to the device to unlock the screen more conveniently. Refer to [Intelligent Scan](#) for more information.
- **Face Recognition:** Set the device to unlock the screen by recognising your face. Refer to [Face recognition](#) for more information.
- **Iris Scanner:** Register your irises to unlock the screen. Refer to [Iris recognition](#) for more information.
- **Google Play Protect:** Set the device to check for harmful apps and behaviour and warn about potential harm and remove them.
- **Find My Mobile:** Activate or deactivate the Find My Mobile feature. Access the Find My Mobile website (findmymobile.samsung.com) to track and control your lost or stolen device.

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

- **Security update:** View the version of your device's security system and check for updates.
- **Install unknown apps:** Set the device to allow the installation of apps from unknown sources.
- **Samsung Pass:** Verify your identity easily and securely via your biometric data. Refer to [Samsung Pass](#) for more information.
- **Secure Folder:** Create a secure folder to protect your private content and apps from others. Refer to [Secure Folder](#) for more information.
- **App permission monitor:** Set to receive notifications when the permissions you select are used by apps that you are not using. You can manage the settings of each app and view their permission usage history.
- **Secure startup:** Protect your device by setting it to require a screen unlock code when turning on the device. You must enter the unlock code to start the device and receive messages and notifications.
- **Encrypt SD card:** Set the device to encrypt files on a memory card.
 -  If you reset your device to the factory defaults with this setting enabled, the device will not be able to read your encrypted files. Disable this setting before resetting the device.
- **Other security settings:** Configure additional security settings.

Intelligent Scan

By using both your face and irises, you can easily and conveniently unlock the screen and verify your identity.



- This feature may not be available depending on the region or service provider.
- If you use Intelligent Scan as a screen lock method, your face and irises cannot be used to unlock the screen for the first time after turning on the device. To use the device, you must unlock the screen using the pattern, PIN, or password you set when registering your face and irises. Be careful not to forget your pattern, PIN, or password.
- If your irises are not recognised, unlock the device using the pattern, PIN, or password you set when registering the irises, and then re-register your irises. If your pattern, PIN, or password is forgotten, you will not be able to use the device if you do not reset it. Samsung is not responsible for any data loss or inconvenience caused by forgotten unlock codes.
- If you change the screen lock method to **Swipe** or **None**, which are not secure, all of your biometric data will be deleted. If you want to use your biometric data in apps or features, such as **Samsung Pass**, you must register your biometric data again.



Precautions for using Intelligent Scan

Before using Intelligent Scan, keep the following precautions in mind.

- To protect your eyes, keep the screen at least 20 cm away from your face when using iris recognition.
- If you attach screen protectors (privacy protection films, tempered glass protectors, etc.), the recognition may fail.
- Do not use this feature with infants. Doing so may damage their eyesight.
- Anyone who has experienced dizziness, seizures, loss of awareness, blackouts, or other symptoms linked to an epileptic condition, or has a family history of such symptoms or conditions, should consult a doctor before using this feature.
- Intelligent Scan is not intended for any diagnostic, therapeutic, or preventative medical purposes.
- Your phone could be unlocked by someone that looks like you.
- Keep secure of your phone and do not let anyone else unlock your phone.

For better face and iris recognition

The phone may not recognise your irises or face when:

- something prevents a good view of your face or eyes (e.g. glasses, contact lenses, hat, low eyelids, recent eye surgery, disease, dirt, damage to the camera, or excessive movement).

Registering irises and face

1 On the Settings screen, tap **Biometrics and security** → **Intelligent Scan**.

2 Unlock the screen using the preset screen lock method.
If you have not set a screen lock method, create one.

3 Read the on-screen instructions and tap **CONTINUE**.

4 Register your face and irises.

For more information, refer to [Face recognition](#) and [Iris recognition](#).

When an intelligent scan unlock screen appears, tap **TURN ON** to use your face and irises to unlock the screen.

Deleting registered face and iris data

You can delete face and iris data that you have registered.

1 On the Settings screen, tap **Biometrics and security** → **Intelligent Scan**.

2 Unlock the screen using the preset screen lock method.

3 Tap **Remove face and iris data**.

Once the registered face and iris data has been deleted, all the related features will also be deactivated.

Unlocking the screen using Intelligent Scan

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

1 On the Settings screen, tap **Biometrics and security** → **Intelligent Scan**.

2 Unlock the screen using the preset screen lock method.

3 Tap the **Intelligent Scan unlock** switch to activate it.

4 On the locked screen, look at the screen.

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

Face recognition

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



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



Precautions for using face recognition

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

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

For better face recognition

Consider the following when using face recognition:

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

Registering your face

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

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



- 5 Position your face inside the circle on the screen.

The camera will scan your face.

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



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

Deleting the registered face data

You can delete face data that you have registered.

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

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

Unlocking the screen with your face

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

- 1 On the Settings screen, tap **Biometrics and security** → **Face Recognition**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap the **Face unlock** switch to activate it.



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

- 4 On the locked screen, look at the screen.

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

Iris recognition

The iris recognition feature uses the unique characteristics of your irises, such as their shape and pattern, to strengthen the security of your device. Your iris data can be used for various authentication purposes. After registering your irises, you can set the device to use your irises for the following features:

- Samsung Pass (Samsung account verification and web sign-in)
- Screen lock
- Secure Folder



- This feature may not be available depending on the region or service provider.
- If you use your iris as a screen lock method, your irises cannot be used to unlock the screen for the first time after turning on the device. To use the device, you must unlock the screen using the pattern, PIN, or password you set when registering the irises. Be careful not to forget your pattern, PIN, or password.
- If your irises are not recognised, unlock the device using the pattern, PIN, or password you set when registering the irises, and then re-register your irises. If your pattern, PIN, or password is forgotten, you will not be able to use the device if you do not reset it. Samsung is not responsible for any data loss or inconvenience caused by forgotten unlock codes.
- If you change the screen lock method to **Swipe** or **None**, which are not secure, all of your biometric data will be deleted. If you want to use your biometric data in apps or features, such as **Samsung Pass**, you must register your biometric data again.



Precautions for using iris recognition

Before using iris recognition, keep the following precautions in mind.

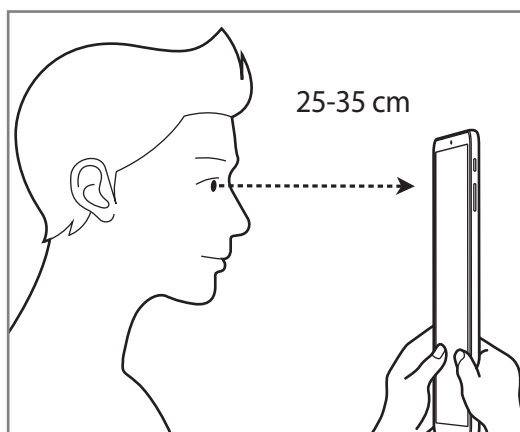
- To protect your eyes, keep the screen at least 20 cm away from your face when using iris recognition.
- If you attach screen protectors (privacy protection films, tempered glass protectors, etc.), the recognition may fail.
- Do not use iris recognition with infants. Doing so may damage their eyesight.
- Anyone who has experienced dizziness, seizures, loss of awareness, blackouts, or other symptoms linked to an epileptic condition, or has a family history of such symptoms or conditions, should consult a doctor before using iris recognition.
- Biometric data collected and stored locally by the iris scanner is not intended for any diagnostic, therapeutic, or preventative medical purposes.

For better iris recognition

The phone may not recognise your eyes when:

- something prevents the camera from getting a good view of your irises (e.g. glasses, low eyelids, recent eye surgery, disease, dirt, damage to the camera, or excessive movement).
- the lighting is very different from when you recorded your irises (e.g. direct sunlight).

Hold your device about 25-35 cm away from your face with the screen facing towards you.

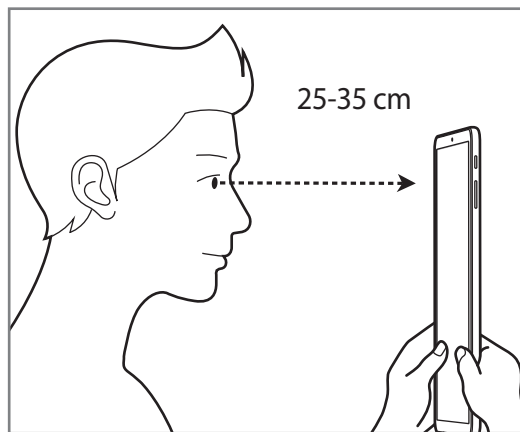


Registering irises

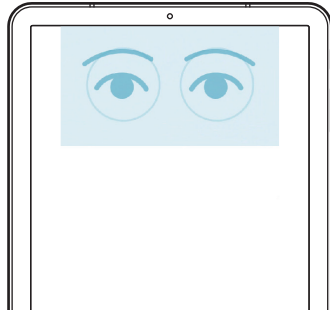


The device can save the iris data of one person only. You cannot register more than one set of irises.

- 1 On the Settings screen, tap **Biometrics and security** → **Iris Scanner**.
- 2 Unlock the screen using the preset screen lock method.
If you have not set a screen lock method, create one.
- 3 Read the on-screen instructions and tap **CONTINUE**.
To register only one iris of your eyes, tap **Register just 1 iris**.
- 4 Hold the device with the screen facing towards you and look at the screen.



- 5 Position your eyes inside the circles on the screen and open your eyes wide.
The iris recognition camera will scan your irises.
When an iris unlock screen appears, tap **TURN ON** to use your irises to unlock the screen.



Deleting registered iris data

You can delete iris data that you have registered.

- 1 On the Settings screen, tap **Biometrics and security** → **Iris Scanner**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap **Remove iris data**.

Once the registered iris data has been deleted, all the related features will also be deactivated.

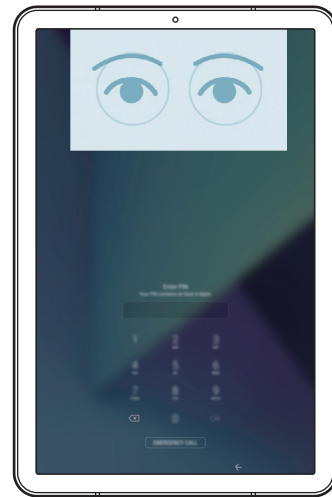
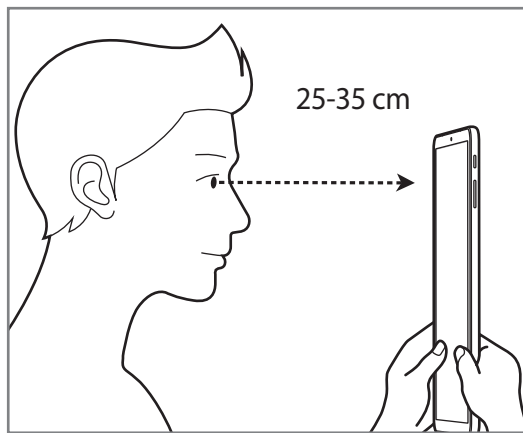
Using Samsung Pass

When you register your irises to Samsung Pass, you can use them to easily verify your identity or sign in to websites. Refer to [Samsung Pass](#) for more information.

Unlocking the screen with your irises

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

- 1 On the Settings screen, tap **Biometrics and security** → **Iris Scanner**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap the **Iris unlock** switch to activate it.
- 4 On the locked screen, swipe in any direction and position your eyes inside the circles on the screen to scan your irises.



To unlock the screen using iris recognition, without swiping on the locked screen, tap **Screen-on iris recognition** switch to activate it.

Samsung Pass

Samsung Pass allows you to sign in to your Samsung account, websites, or apps more easily and securely via your biometric data, such as irises, rather than entering your login information.

Register your biometric data to Samsung Pass and set to sign in to supported websites or apps using the data via Samsung Pass.



- To use this feature, your device must be connected to a Wi-Fi or mobile network.
- To use this feature, you must register and sign in to your Samsung account. For more information, refer to [Samsung account](#).
- The website sign-in feature is only available for websites that you access via the **Internet** app. Some websites may not support this feature.

Registering Samsung Pass

Before using Samsung Pass, register your biometric data to Samsung Pass.

1 On the Settings screen, tap **Biometrics and security** → **Samsung Pass**.

2 Read the on-screen instructions and tap **SIGN IN**.

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

4 Tap **IRIS** and register your irises.

Refer to [Iris recognition](#) for more information.

5 Scan your irises and tap **NEXT** to complete the Samsung Pass registration.

If the **Add to Home screen** option is ticked, the Samsung Pass icon will be added on the Home screen.

Verifying the Samsung account password

You can use Samsung Pass to verify your Samsung account password. You can use your biometric data instead of entering your password, for example, when you purchase content from **Galaxy Apps**.

- 1 On the Settings screen, tap **Biometrics and security** → **Samsung Pass**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap  → **Settings** → **Samsung account**, and then tap the **Use with Samsung Pass** switch to activate it.

Using Samsung Pass to sign in to websites

You can use Samsung Pass to easily sign in to websites that support ID and password autofill.

- 1 Open a website that you want to sign in to.
- 2 Enter your user name and password, and then tap the website's sign in button.
- 3 When a pop-up window asking whether you want to save the sign-in information appears, tick **Sign in with Samsung Pass** and tap **REMEMBER**.

You can now use the biometric data you registered to Samsung Pass when signing in to the website.

Using Samsung Pass to sign in to apps

You can use Samsung Pass to easily sign in to apps that support ID and password autofill.

- 1 Open an app that you want to sign in to.
- 2 Enter your user name and password, and then tap the app's sign in button.
- 3 When a pop-up window asking whether you want to save the sign-in information appears, tap **SAVE**.

You can now use the biometric data you registered to Samsung Pass when signing in to the app.

Managing sign-in information

View the list of websites and apps you have set to use Samsung Pass and manage your sign-in information.

- 1 On the Settings screen, tap **Biometrics and security** → **Samsung Pass**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Select a website or app from the list.
- 4 Tap  → **Edit** and modify your ID, password, and the website's or app's name.
To delete the website or app, tap  → **Delete**.

Using Samsung Pass with websites and apps

When using websites or apps that support Samsung Pass, you can easily sign in with Samsung Pass.

To see the list of websites and apps that support Samsung Pass, open the Settings screen, tap **Biometrics and security** → **Samsung Pass**, and then select the site or app tab. If there are no websites or apps that support Samsung Pass, the site or app tab will not appear.



- Available websites and apps may vary depending on the region or service provider.
- Samsung is not responsible for any loss or inconvenience caused by signing in to websites or apps via Samsung Pass.

Deleting your Samsung Pass data

You can delete your biometric data, web sign-in information, and app data registered to Samsung Pass with **Delete data**. Your agreement to the terms and conditions and your Samsung account will remain active.

- 1 On the Settings screen, tap **Biometrics and security** → **Samsung Pass**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap  → **Settings** → **Delete data** → **DELETE**.
- 4 Enter your Samsung password and tap **CONFIRM**.
Your Samsung Pass data will be deleted.

Secure Folder

Secure Folder protects your private content and apps, such as photos and contacts, from being accessed by others. You can keep your private content and apps secure even when the device is unlocked.



Secure Folder is a separate, secured storage area. The data in Secure Folder cannot be transferred to other devices via unapproved sharing methods, such as USB or Wi-Fi Direct. Attempting to customise the operating system or modifying software will cause Secure Folder to be automatically locked and inaccessible. Before saving data in Secure Folder, make sure to back up a copy of the data in another secure location.

Setting up Secure Folder

- 1 Launch the **Secure Folder** app.
Alternatively, launch the **Settings** app and tap **Biometrics and security** → **Secure Folder**.
- 2 Tap **START**.
- 3 Tap **SIGN IN** and sign in to your Samsung account.
- 4 Select a lock method to use for Secure Folder and follow the on-screen instructions to complete the setup.

To change the name or icon colour of Secure Folder, tap  → **Customise icon**.



- When you launch the **Secure Folder** app, you must unlock the app using your preset lock method.
- If you forget your Secure Folder unlock code, you can reset it using your Samsung account. Tap the reset button at the bottom of the locked screen, and enter your Samsung account password.

Setting auto lock for Secure Folder

Set the device to automatically lock Secure Folder when it is not being used.

- 1 Launch the **Secure Folder** app and tap  → **Settings** → **Auto lock Secure Folder**.
- 2 Select a lock option.



To manually lock your Secure Folder, tap **Lock**.

Moving content to Secure Folder

Move content, such as photos and contacts, to Secure Folder. The following actions are an example of moving an image from the default storage to Secure Folder.

1 Launch the **Secure Folder** app and tap **Add files**.

2 Tap **Images**, tick images to move, and then tap **DONE**.

3 Tap **MOVE**.

The selected items will be deleted from the original folder and moved to Secure Folder.
To copy items, tap **COPY**.



The method for moving content may vary depending on the content type.

Moving content from Secure Folder

Move content from Secure Folder to the corresponding app in the default storage. The following actions are an example of moving an image from Secure Folder to the default storage.

1 Launch the **Secure Folder** app and tap **Gallery**.

2 Select an image and tap **⋮ → Move out of Secure Folder**.

The selected items will be moved to **Gallery** in the default storage.

Adding apps

Add an app to use in Secure Folder.

- 1 Launch the **Secure Folder** app and tap **Add apps**.
- 2 Tick one or more apps installed on the device and tap **ADD**.
To install apps from **Play Store** or **Galaxy Apps**, tap **DOWNLOAD FROM PLAY STORE** or **DOWNLOAD FROM GALAXY APPS**.

Removing apps from Secure Folder

Tap **Edit apps**, tick apps, and then tap **Uninstall**.

Adding accounts

Add your Samsung and Google accounts, or other accounts, to sync with the apps in Secure Folder.

- 1 Launch the **Secure Folder** app and tap **⋮** → **Settings** → **Accounts** → **Add account**.
- 2 Select an account service.
- 3 Follow the on-screen instructions to complete the account setup.

Hiding Secure Folder

You can hide the Secure Folder shortcut from the Apps screen.

Launch the **Secure Folder** app, tap **⋮** → **Settings**, and then tap the **Show Secure Folder** switch to deactivate it.

Alternatively, drag the status bar downwards to open the notification panel. Then, swipe downwards on the notification panel and tap **Secure Folder** to deactivate the feature.

Backing up and restoring Secure Folder

Back up content and apps in Secure Folder to Samsung Cloud using your Samsung account and restore them later.

Backing up data

- 1 Launch the **Secure Folder** app and tap **⋮** → **Settings** → **Backup and restore**.
- 2 Tap **Add account** and register and sign in to your Samsung account.
- 3 Tap **Back up Secure Folder data**.
- 4 Tick items you want to back up and tap **BACK UP NOW**.
Data will be backed up to Samsung Cloud.

Restoring data

- 1 Launch the **Secure Folder** app and tap **⋮** → **Settings** → **Backup and restore**.
- 2 Tap **Restore**.
- 3 Select a device and the data types you want to restore and tap **RESTORE NOW**.
Backed up data will be restored to your device.

Uninstalling Secure Folder

You can uninstall Secure Folder, including the content and apps in it.

Launch the **Secure Folder** app and tap **⋮** → **Settings** → **More settings** → **Uninstall**.

To back up content before uninstalling Secure Folder, tick **Move media files out of Secure Folder** and tap **UNINSTALL**. To access data backed from Secure Folder, open the **Samsung** folder, launch the **My Files** app, and then tap **Internal storage** → **Secure Folder**.



Notes saved in **Samsung Notes** will not be backed up.

Cloud and accounts

Options

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

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



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

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

Users

Set up additional user accounts for other users to use the device with personalised settings, such as email accounts, wallpaper preferences, and more. Following types of user accounts are available:

- **Administrator:** The administrator account is created only when setting up the device for the first time, and cannot be created more than one. This account has full control of the device including user account management. You can add or delete user accounts only when using this account.
- **Guest:** This account allows guests to access the device. Information and data used during a guest session is temporarily stored. Each time you use this account, you are asked whether to continue the previous guest session or reset it.
- **User:** This account allows users to access their own apps and content, and customise the device settings that affect all accounts.

Adding users

1 On the Settings screen, tap **Cloud and accounts** → **Users**.

2 Tap **Add user** → **OK** → **SET UP NOW**.

The device will switch to a new user account and the default locked screen will appear on the screen.

3 Unlock the device and follow the on-screen instructions to complete the account setup.

Switching users

Tap the user account icon at the top of the locked screen and select an account to switch to.



Locked screen

Managing users

When using the owner account, you can delete accounts or change account settings.

To delete a user account, tap  next to the account and then tap **Delete user**.

To change an account's settings, tap  next to an account.

Google

Configure settings for some features provided by Google.

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

Accessibility

Configure various settings to improve accessibility to the device.

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

- **Vision:** Customise the settings to improve accessibility for visually impaired users.
- **Hearing:** Customise the settings to improve accessibility for users with hearing impairment.
- **Dexterity and interaction:** Customise the settings to improve accessibility for users who have reduced dexterity.
- **Text-to-speech:** Change the settings for text-to-speech features used when Voice Assistant is activated, such as languages, speed, and more.
- **Direction lock:** Change the directional combination settings for unlocking the screen.
- **Direct access:** Set the device to launch selected accessibility menus when you press the Power key and the Volume Up key simultaneously.
- **Accessibility shortcut:** Set the device to activate Voice Assistant or Samsung universal switch when you press and hold the Volume Up key and the Volume Down key simultaneously for more than 3 seconds.
- **Notification reminder:** Set the device to alert you to notifications that you have not checked at the interval.
- **Answering and ending calls:** Change the method of answering or ending calls.
- **Single tap mode:** Set the device to control incoming calls or notifications by tapping the button instead of dragging it.
- **Accessibility settings backup:** Import, export, or share your accessibility settings.
- **SERVICES:** View accessibility services installed on the device.

General management

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

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

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



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

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

Adding device languages

You can add languages to use on your device.

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

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

- 2 Select a language to add.

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

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

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

Software update

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

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



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

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

Security updates information

Security updates are provided to strengthen the security of your device and protect your personal information. For security updates for your model, visit security.samsungmobile.com.



The website supports only some languages.

User manual

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

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

About tablet

Access your device's information.

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

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

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

Appendix

Troubleshooting

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

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

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

Your device displays network or service error messages

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

Your device does not turn on

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

The touchscreen responds slowly or improperly

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

Your device freezes or encounters a fatal error

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

Restarting the device

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

Forcing restart

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

Resetting the device

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

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

If you registered a Google account to the device, you must sign in to the same Google account after resetting the device.

Calls are not connected

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

Others cannot hear you speaking on a call

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

Sound echoes during a call

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

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

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

The battery icon is empty

Your battery is low. Charge the battery.

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

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

The battery depletes faster than when first purchased

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

Error messages appear when launching the camera

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

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

Photo quality is poorer than the preview

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

Error messages appear when opening multimedia files

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

- Free some memory by transferring files to a computer or deleting files from your device.
- Ensure that the music file is not Digital Rights Management (DRM)-protected. If the file is DRM-protected, ensure that you have the appropriate licence or key to play the file.
- Ensure that the file formats are supported by the device. If a file format is not supported, such as DivX or AC3, install an app that supports it. To confirm the file formats that your device supports, visit www.samsung.com.
- Your device supports photos and videos captured with the device. Photos and videos captured by other devices may not work properly.
- Your device supports multimedia files that are authorised by your network service provider or providers of additional services. Some content circulated on the Internet, such as ringtones, videos, or wallpapers, may not work properly.

Bluetooth is not working well

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

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

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

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

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

Your device cannot find your current location

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

Data stored in the device has been lost

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

A small gap appears around the outside of the device case

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

There is not enough space in the device's storage

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

The Apps button does not appear on the Home screen

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

The Home button does not appear

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

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

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

Samsung Cloud does not work

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

The device does not recognise my irises from the locked screen

- Ensure that nothing obstructing the iris recognition camera and LED and try again.
- If light conditions are very different from when you registered your irises, the device may not recognise your irises. Move to another location and try again.
- Ensure that the device is not moving or tilted too much.

Removing the battery

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

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Health and safety information

Exposure to Radio Frequency (RF) Signals

Certification Information (SAR)

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

The exposure limit set by the FCC for wireless mobile devices 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 devices 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 device 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 device while operating can be well below the maximum value. This is because the device 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 device 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 device are performed in positions and locations as required by the FCC.

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

SAR information on this and other model devices can be viewed on-line at www.fcc.gov/oet/fccid. This site uses the device FCC ID number **A3LSMT835**.

Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular device, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular device. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

Consumer Information on Wireless devices

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 devices. The FDA publication includes the following information:

What kinds of devices are the subject of this update?

The term wireless device refers here to hand-held wireless devices with built-in antennas, often called “cell,” “mobile,” or “PCS” devices. These types of wireless devices can expose the user to measurable radio frequency energy (RF) because of the short distance between the device 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 device 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” devices, 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 devices pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless devices. There is no proof, however, that wireless devices are absolutely safe. Wireless devices 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 devices?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless devices before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless devices 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 devices to notify users of the health hazard and to repair, replace or recall the devices so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless device 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 devices;
- "Design wireless devices 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 devices with the best possible information on possible effects of wireless device 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 devices with the Federal Communications Commission (FCC). All devices 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 devices.

FCC also regulates the base stations that the wireless device networks rely upon. While these base stations operate at higher power than do the wireless devices themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless devices. 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 devices 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 devices, 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 devices 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 devices RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of device use in these studies was around three years.

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

A combination of laboratory studies and epidemiological studies of people actually using wireless devices 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 years¹ 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 devices. Many factors affect this measurement, such as the angle at which the device is held, or which model of device is used.

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

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 device will reduce RF exposure.

- If you must conduct extended conversations by wireless device 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 device away from your body or use a wireless device connected to a remote antenna.

Again, the scientific data do not demonstrate that wireless devices 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 device use.

What about children using wireless devices?

The scientific evidence does not show a danger to users of wireless devices, 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 devices. Reducing the time of wireless device 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 devices 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 device causes brain tumors or other ill effects. Their recommendation to limit wireless device use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

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

Since there are no known risks from exposure to RF emissions from wireless devices, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless devices for convenience and comfort. These systems reduce the absorption of RF energy in the head because the device, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the device 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 devices 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 device accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless devices, 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 device cases, while others involve nothing more than a metallic accessory attached to the device. 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 device. The device 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 device 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 device interference with medical equipment?

Radio frequency energy (RF) from wireless devices 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 device EMI. FDA has tested wireless devices 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 devices so that no interference occurs when a person uses a compatible device 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 devices 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/emfpg.html>
- 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.nrpb.org.uk>
- Updated 4/3/2002: US Food and Drug Administration <http://www.fda.gov/cellphones>

Road Safety

Your wireless device gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless devices, one that every user must uphold.

When driving a car, driving is your first responsibility. When using your wireless device behind the wheel of a car, practice good common sense and remember the following tips:

- 1 Get to know your wireless device 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 device with one of the many hands free accessories available today.
- 3 Position your wireless device within easy reach. Be able to access your wireless device 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 device numbers while driving. Jotting down a 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 device 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 device!
- 9 Use your wireless device 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 device 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 device off whenever it is forbidden to use it, or when it may cause interference or danger. When connecting the device 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 (held to your ear with the antenna pointing over your shoulder).

Using Your device 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 device. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless device and a pacemaker to avoid potential interference with the pacemaker.

These recommendations are consistent with the independent research and recommendations of Wireless Technology Research. If you have any reason to suspect that interference is taking place, switch off your device immediately.

Persons with pacemakers:

- should always keep the device more than 15 cm (6 inches) from their pacemaker when the device is switched on.
 - should not carry the device 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 device off immediately.

Hearing Aids

Some digital wireless devices 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 device 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.

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 device off in any facility where posted notices require you to do so.

Statics Devices

When camera is in operation, Your device should not be near devices that produces static field.

Potentially Explosive Environments

Switch your device 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 device 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 the areas below decks 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 device, like any wireless device, 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 device for essential communications (medical emergencies, for example).

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

To make an emergency call:

- 1 If the device 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 device 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 device

Your device is not a toy. Children should not be allowed to play with it because they could hurt themselves and others, damage the device or make calls that increase your device 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 device may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the device 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 device, not expressly approved by Samsung, will void the user's authority to operate the equipment.

Only use approved batteries, antennas and chargers. The use of any unauthorized accessories may be dangerous and void the device warranty if said accessories cause damage or a defect to the device.

Although your device 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 device or install the device in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless device 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 device, 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 off your device before boarding an aircraft. It is dangerous and illegal to use wireless devices in an aircraft because they can interfere with the operation of the aircraft.
- 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 device 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 device is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your device 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 device returns to standby mode.

Maintaining Your device's Peak Performance

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

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

- Hold the device with the antenna raised, fully-extended and over your shoulder.
- Try not to hold, bend or twist the device's antenna.
- Don't use the device if the antenna is damaged.
- Speak directly into the device's receiver.
- Avoid exposing your device and accessories to rain or liquid spills. If your device 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 device 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 device 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 device 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 device 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 your device and all its parts and accessories out of the reach of small children and pets. They may accidentally damage these things or choke on small parts.
- Keep the device dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the device with a wet hand. Doing so may cause an electric shock to you or damage to the device.
- Do not use or store the device in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device warms up to its normal operating temperature, moisture can form inside the device, which may damage the device's electronic circuit boards.
- Do not drop, knock or shake the device. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the device. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the device. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the device in or on heating devices, such as a microwave oven, a stove or a radiator. The device may explode when overheated.
- When the device or battery gets wet, the label indicating water damage inside the device changes color. In this case, device repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your device has not expired.
- If your device 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 device and violate regulations governing radio devices.
- If the device, 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.

* Some of the contents of this manual may differ from your device, depending on the software installed or your service provider.

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