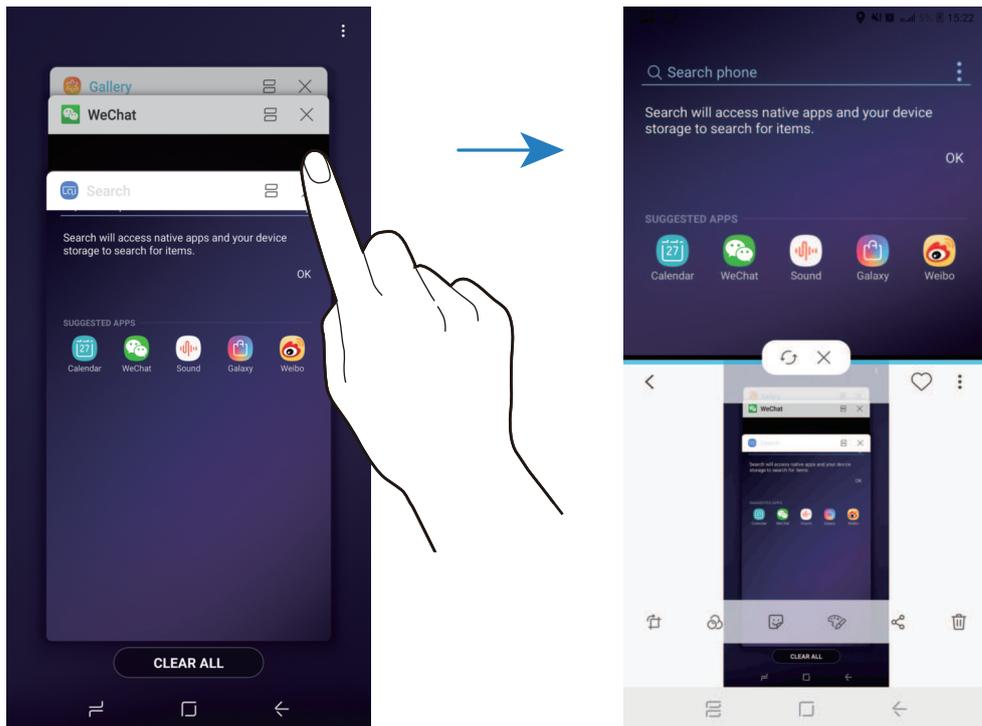


Split screen view

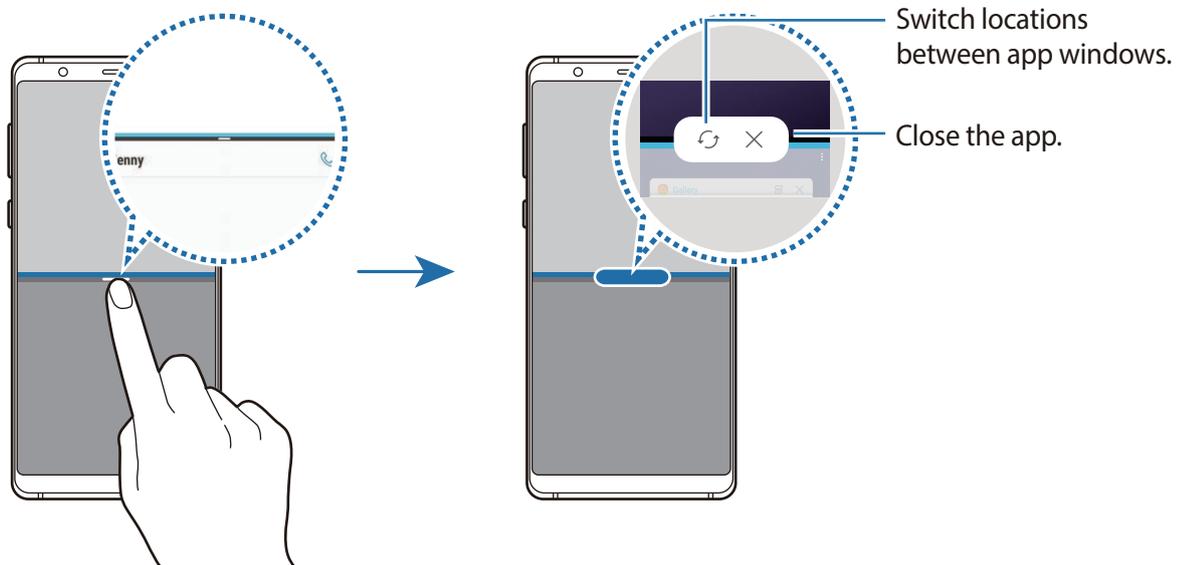
- 1 Tap the Recents button to open the list of recently used apps.
- 2 Swipe upwards or downwards and tap  on a recent app window.
The selected app will launch in the upper window.



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

Using additional options

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



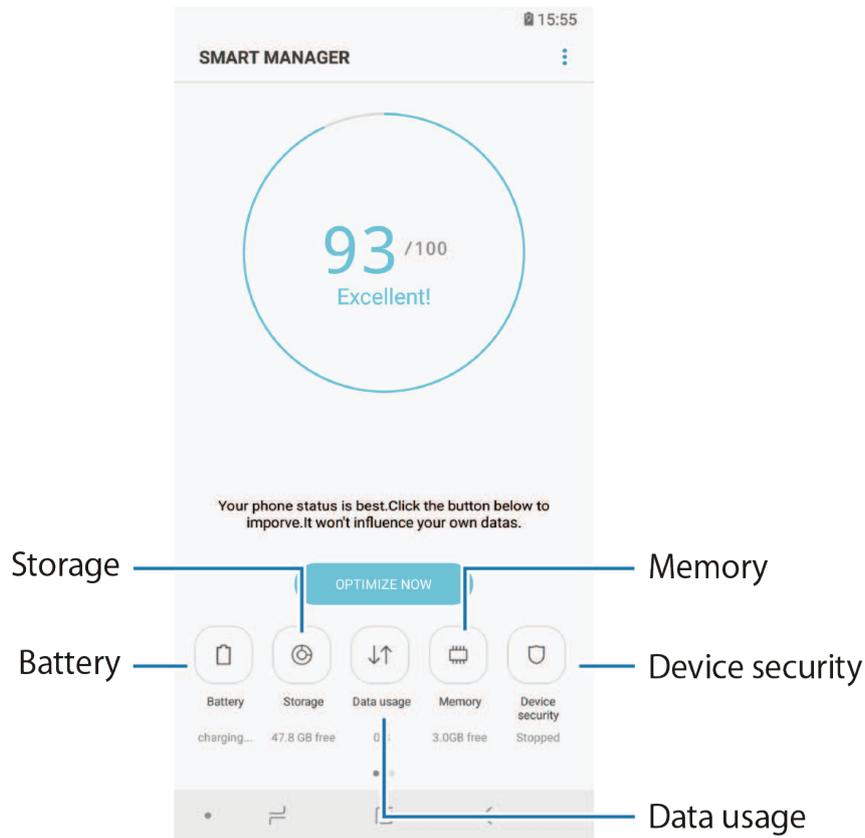
Adjusting the window size

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

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

Smart Manager

The Smart manager 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

Launch the **Smart Manager** app and tap **OPTIMIZE 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.

Launch the **Smart Manager** app and tap **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**.

Storage

Check the status of the used and available storage.

Launch the **Smart Manager** app and tap **Storage**.



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

Managing the storage

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**.

Data usage

Check the device's data usage amount. You can customise the settings for the limitation.

Launch the **Smart Manager** app and tap **Data usage**.

Memory

Launch the **Smart Manager** app and tap **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.

Launch the **Smart Manager** app and tap **Device security** → **SCAN PHONE**.

Blocked calls/messages

Reject calls or messages from specified phone numbers or reject messages containing specified text.

Launch the **Smart Manager** app and tap **Blocked calls/messages**.

Auto run apps

Turn off auto run for each app to prevent them from running in the background.

Launch the **Smart Manager** app and tap **Auto run apps**.

App lock

Set a lock method to prevent others from accessing selected apps.

Launch the **Smart Manager** app and tap **App lock**.

Notifications

Change the notification settings for each app.

Launch the **Smart Manager** app and tap **Notifications**.

App permissions

Manage the app settings for permissions.

Launch the **Smart Manager** app and tap **App permissions**.

Samsung Notes

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

Creating notes

- 1 Launch the **Samsung Notes** app and tap **ALL** → .
- 2 Select an input method from the toolbar at the top of the screen and compose a note.
Tap  → **Image** to insert an image by selecting from **Gallery** or by taking a photo.
Tap  → **Voice** to record a voice recording and insert it into the note. Voice recording will start immediately.



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

Deleting notes

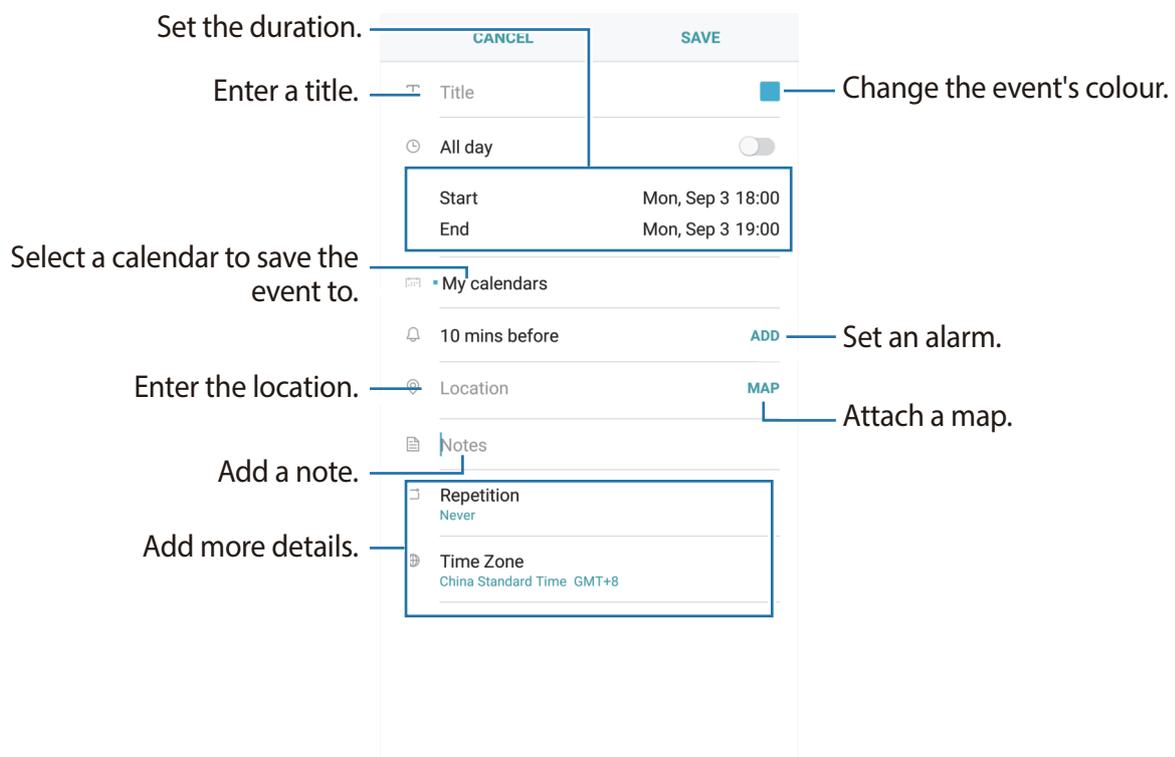
- 1 Launch the **Samsung Notes** app, tap **ALL** or **COLLECTIONS**, and then select a category.
- 2 Tap and hold a note to delete.
To delete multiple notes, tick more notes to delete.
- 3 Tap .

Calendar

Manage your schedule by entering upcoming events or tasks in your planner.

Creating events

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



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

Creating tasks

- 1 Launch the **Calendar** app and tap **VIEW** → **Tasks**.
- 2 Tap **+** and enter task details.
- 3 Tap **SAVE** to save the task.

Samsung Health

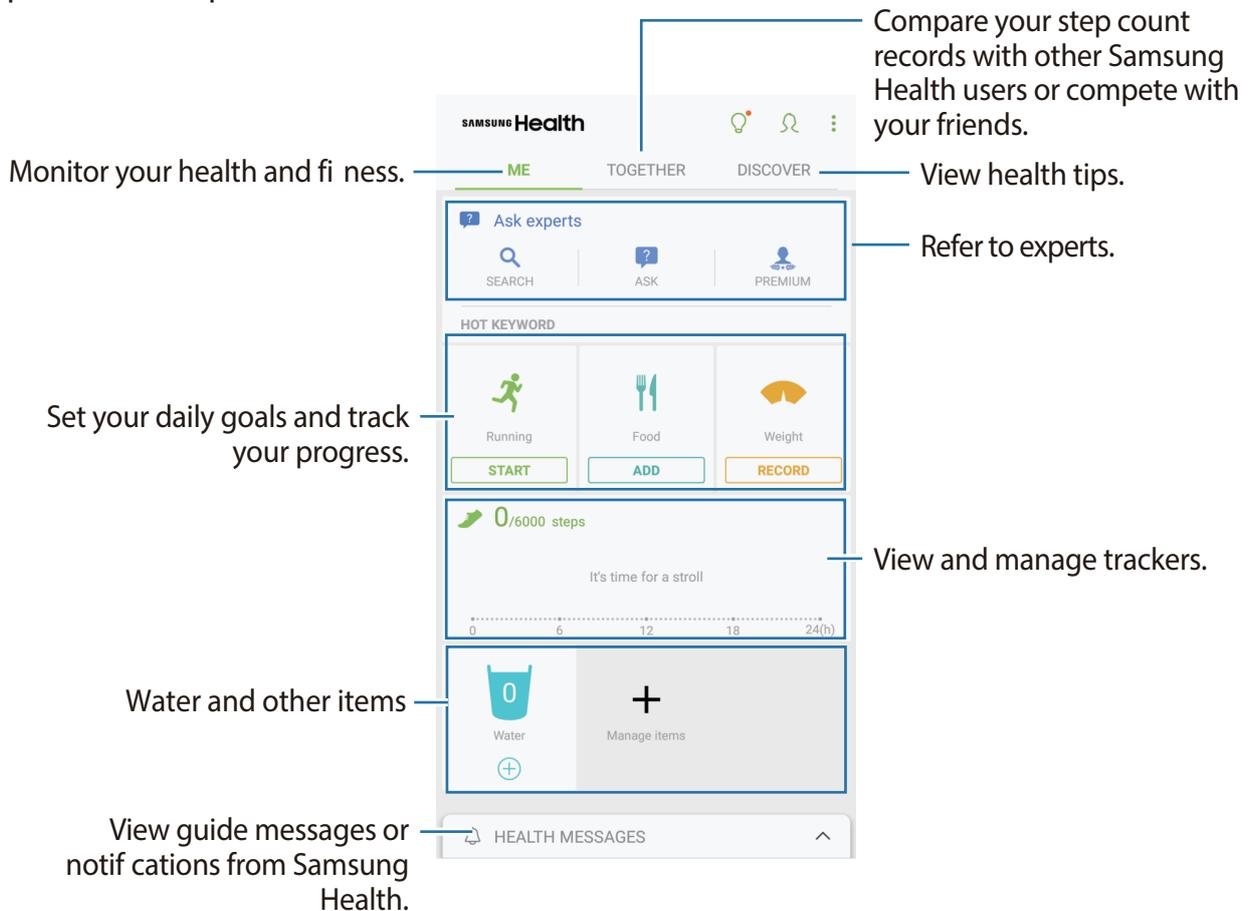
Introduction

Samsung Health helps you manage your wellness and fitness. Set fitness goals, check your progress, and keep track of your overall wellness and fitness.

Using Samsung Health

You can view the key information from Samsung Health menus and trackers to monitor your wellness and fitness. You can also compare your step count records with other Samsung Health users, compete with your friends, and view health tips.

Open the **Samsung** folder and launch the **Samsung Health** app. When running this app for the first time or restart it after performing a data reset, follow the on-screen instructions to complete the setup.



To add items to the Samsung Health screen, tap  → **Manage items**, and then select items.

- **GOALS:** Set your daily fitness goals and view your progress.
- **PROGRAMS:** Use customisable exercise programmes.
- **GENERAL TRACKERS:** Monitor your activities, food intake, and body measurements.
- **EXERCISE TRACKERS:** Add trackers of various exercises and monitor your activities.

Goals

You can set your goals for weight management or a more balanced life. After setting your goals, you can track your progress or view guides on the Samsung Health screen.

On the Samsung Health screen, tap **SET GOALS**. Alternatively, tap  → **Manage items** and select **Weight management** or **Balanced life**.

TOGETHER

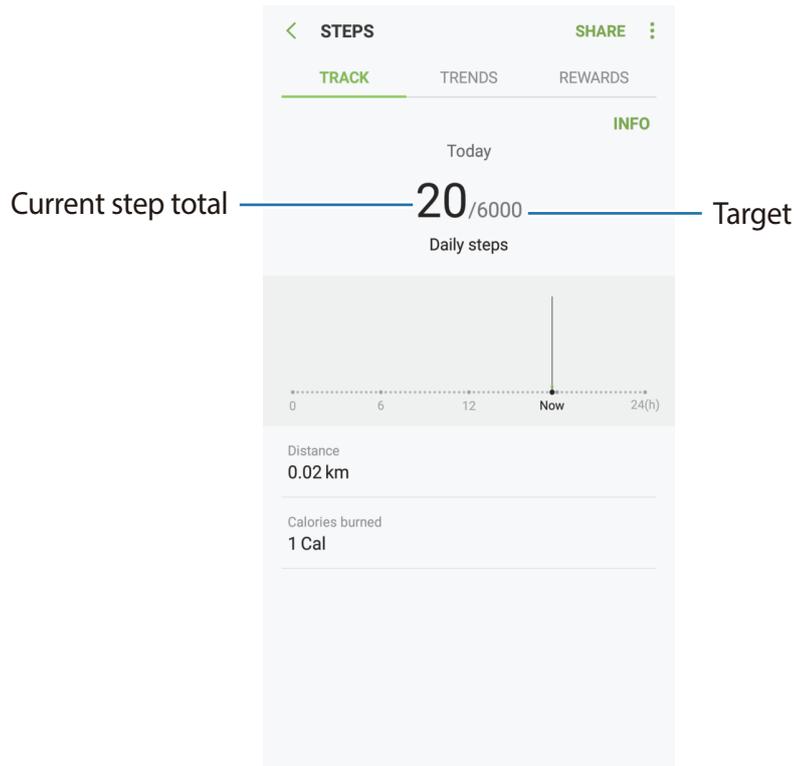
Together allows you to set up step count goals and compete with your friends. You can invite friends to walk together, set target step counts, compete in challenges, and view your ranking on the **Steps leaderboard**.

On the Samsung Health screen, tap **TOGETHER**.

Steps

The device counts the number of steps you take and measures the distance travelled.

On the Samsung Health screen, tap the steps tracker.



- You may experience a brief delay while the steps tracker monitors your steps and then displays your step count. You may also experience a brief delay before the pop-up window indicates that your goal has been reached.
- If you use the steps tracker while travelling by car or train, vibration may affect your step count.

Additional information

- Samsung Health is intended for fitness and wellness purposes only and is not intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease.
- The available functions, features and addable applications for Samsung Health may vary from country to country due to different local laws and regulations. You should check the features and applications available in your specific region before use.
- The purpose for data collection is limited to providing the service that you have requested, including providing additional information to enhance your wellness, sync data, data analysis and statistics or to develop and provide better services. (But if you sign in to your Samsung account from Samsung Health, your data may be saved on the server for data backup purposes.) Personal information may be stored until the completion of such purposes. You can delete personal data stored by Samsung Health by using the Reset data option in the Settings menu. To delete any data you have shared with social networks or transferred to storage devices, you must delete them separately.
- You may share and/or sync your data with additional Samsung services or compatible third party services that you select, as well as with any of your other connected devices. Access to Samsung Health information by such additional services or third party devices will only be permitted with your express approval.
- You assume full responsibility for the inappropriate use of data shared on social networks or transmitted to others. Use caution when sharing your personal data with others.
- If the device is connected to measuring devices, verify the communication protocol to confirm proper operation. If you use a wireless connection, such as Bluetooth, the device may be affected by electronic interference from other devices. Avoid using the device near other devices that transmit radio waves.
- Please read Terms and Conditions and Privacy Policy of Samsung Health carefully before using it.

Samsung Assistant

Samsung Assistant helps you to organise your daily schedule. You can use recommended services and remember events by receiving reminder cards. You can also use convenient assistant services to do things, like make hotel reservations or track deliveries.

Launch the **Samsung Assistant** app.



You can set up your profile to receive more specific reminder cards. Tap **My page** → **Profile** to customise settings, such as your favourite places, sleep time, and work time.

Creating custom reminders

- 1 On the Samsung Assistant screen, tap **Reminders** → **+**.
- 2 Select a reminder type and enter reminder details.
- 3 Tap **SAVE** to save the reminder.

You will receive the reminder card at the time or location you set.



If you receive a hotel or a flight booking confirmation by text message, a reservation reminder card will appear automatically in the **Samsung Assistant** app. You can receive flight status notifications on your day of departure. Other useful travel information will also appear on the reservation card on the **Samsung Assistant** app to provide convenient information.

Viewing reminder cards

When you receive reminder cards, a card notification will appear on the notification panel.

- 1 Open the notification panel and select a card notification.
The card will open in the **Samsung Assistant** app.
- 2 Swipe upwards or downwards on the card to view its information and recommended actions.

Using assistant services

You can use convenient assistant services to do things, like making hotel reservations or tracking deliveries.

On the Samsung Assistant screen, tap **Life** and select a service to use.

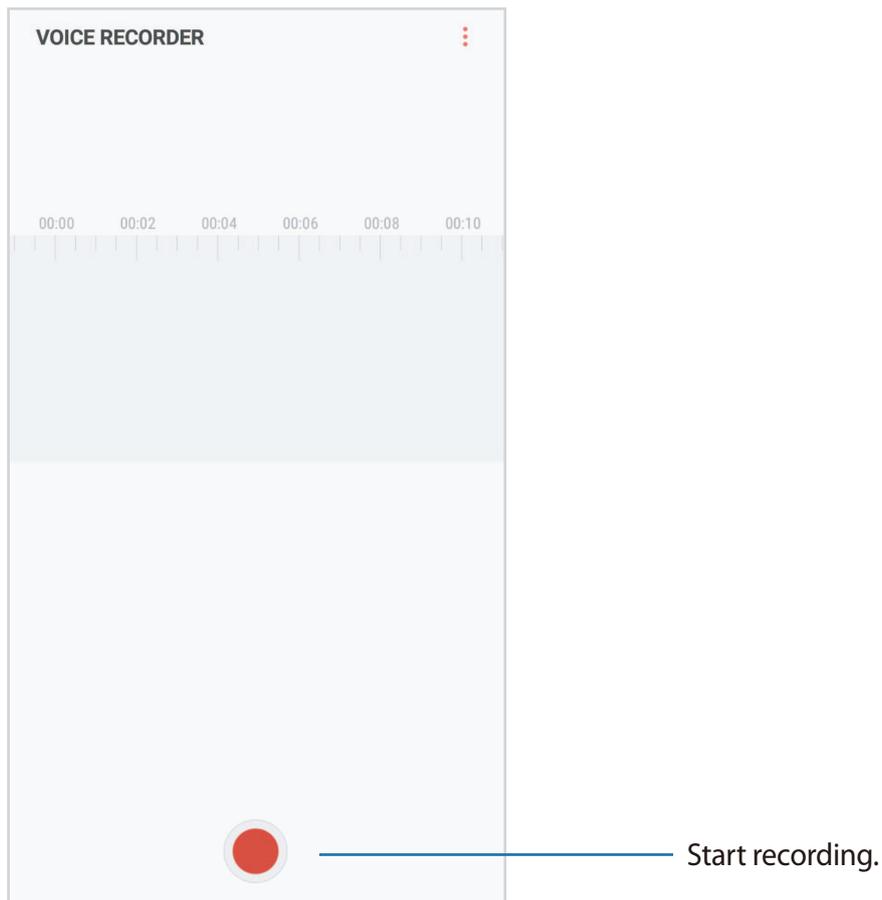
Voice Recorder

Introduction

Use different recording modes for various situations.

Making sound recordings

- 1 Open the **Samsung** folder and launch the **Voice Recorder** app.
- 2 Tap  to start recording. Speak into the microphone.
Tap  to pause recording.
While making a voice recording, tap **BOOKMARK** to insert a bookmark.



3 Tap  to finish recording.

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

My Files

Access and manage various files stored in the device.

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

View files that are stored in each storage.

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

To search for files or folders, tap .

Clock

Introduction

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

ALARM

Launch the **Clock** app and tap **ALARM**.

Setting alarms

Tap  in the alarms list, set an alarm time, select the days on which the alarm will repeat, set other various alarm options, and then tap **SAVE**.

To open the keypad to enter an alarm time, tap the time input field.

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

Stopping alarms

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

Deleting alarms

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

WORLD CLOCK

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

Creating clocks

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

Deleting clocks

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

STOPWATCH

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

TIMER

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

Calculator

Perform simple or complex calculations.

Launch the **Calculator** app.

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

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

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

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

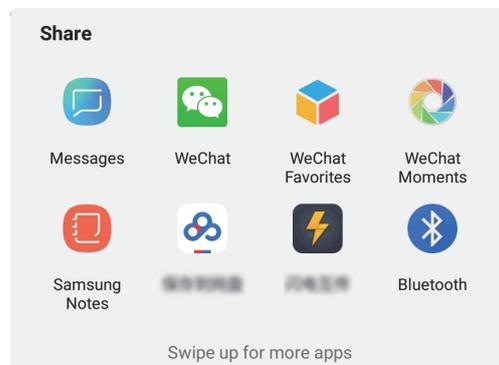
Sharing content

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



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

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



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

Using additional features

- **Link Sharing:** Share large files. Upload files to the Samsung storage server and share them with others via a Web link or a code. To use this feature, your phone number must be verified.
- **Share to device:** Share content with nearby devices via Wi-Fi Direct or Bluetooth, or with Samsung Connect supported devices. You can also view your device's displayed content on a large screen by connecting your device to a Smart View-enabled TV or monitor.

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

Settings

Introduction

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

Launch the **Settings** app.

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

Connections

Options

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

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

- **WLAN:** Activate the Wi-Fi feature to connect to a Wi-Fi network and access the Internet or other network devices. Refer to [WLAN](#) for more information.
- **Bluetooth:** Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices. Refer to [Bluetooth](#) for more information.
- **Phone 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.
- **Airplane 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.
- **SIM card manager:** Activate your nano-SIM cards and customise the SIM card settings. Refer to [SIM card manager](#) for more information.
- **Location:** Change settings for location information permissions.
- **More connection settings:** Customise settings to control other features. Refer to [More connection settings](#) for more information.

WLAN

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** → **WLAN**, 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.

Bluetooth

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



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

Pairing with other Bluetooth devices

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

The detected devices will be listed.

- 2 Select a device to pair with.

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



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

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

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

Sending and receiving data

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

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

Unpairing Bluetooth devices

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

Mobile Hotspot and Tethering

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

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



You may incur additional charges when using this feature.

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

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.

SIM card manager

Activate your nano-SIM cards and customise the SIM card settings.

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

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



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

More connection settings

Customise settings to control other features.

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

- **Printing:** Configure settings for printer plug-ins installed on the device. You can search for available printers or add one manually to print files. Refer to [Printing](#) for more information.
- **VPN:** Set up virtual networks (VPNs) on your device to connect to a school or company's private network.

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 Search for a printer plug-in in **Galaxy Apps**.
- 2 Select a printer plug-in and install it.
- 3 On the Settings screen, tap **Connections** → **More connection settings** → **Printing**.
- 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.

Sounds and vibration

Options

Change settings for various sounds on the device.

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

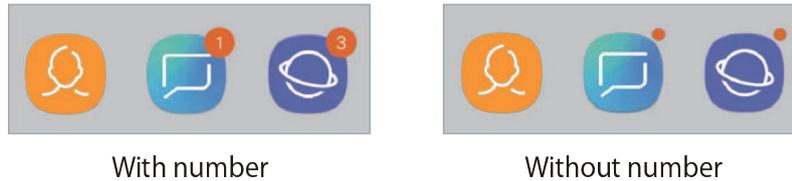
- **Sound mode:** Set the device to use sound mode, vibration mode, or silent mode.
- **Vibrate while ringing:** Set the device to vibrate and play a ringtone for incoming calls.
- **Use Volume keys for media:** Set the device to adjust the media volume level when you press the Volume key.
- **Volumes:** Adjust the volume level for call ringtones, music and videos, system sounds, and notifications.
- **Ringtone:** Change the ringtones for calls or notifications.
- **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.
- **Dialing keypad tones:** Set the device to sound when you tap the buttons on the keypad.
- **Keyboard sound:** Set the device to sound when a key is touched.
- **Sound vibration:** Vibrate when the Keyboard is tapped.

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**.



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 level:** Adjust the brightness of the display.
- **Adaptive brightness:** Set the device to keep track of your brightness adjustments and apply them automatically in similar lighting conditions.
- **Blue light filter:** 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.
- **Home screen:** Change the size of the grid to display more or fewer items on the Home screen and more.
- **Full screen apps:** Select apps to use with the full screen aspect ratio.
- **Easy mode:** Switch to easy mode to display larger icons and apply a simpler layout to the Home screen.

- **LED indicator:** Set the device to turn on the LED indicator when you charge the battery, when you have notifications, or when you make voice recordings while the screen is turned off.
- **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 \(touch buttons\)](#) 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.
- **Screen saver:** Set the device to launch a screensaver when the device is charging. Refer to [Screen saver](#) for more information.

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.

Screen saver

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

1 On the Settings screen, tap **Display** → **Screen saver** and tap the switch to activate it.

2 Select an option.

If you select **Photo frame**, a slideshow with selected images will start. If you select **Photo Table**, selected images will appear as small cards and overlap.

3 Tap  to select albums for displaying images.

4 When you are finished, tap the Back button.

To preview the selected option, tap **PREVIEW**.



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

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.

- **Smart stay:** Set the device to prevent the display from turning off while you are looking at it.
- **App lock:** Set a lock method to prevent others from accessing selected apps.
- **Game Mode: Set the device to suit environment for game-players.**
- **Call/message spam filter:** Set the device to identify unsaved phone numbers when you receive incoming calls or messages. You can also set the device to reject calls or messages from specific phone number types or to update database automatically when connected a Wi-Fi network.
- **Hongbao assistant:** Set the device to notify you when you receive a hongbao via WeChat. This feature will help you quickly open hongbaos.
- **One-handed mode:** Activate one-handed operation mode for your convenience when using the device with one hand.
- **Finger sensor gestures:** Set the device to open or close the notification panel when you swipe upwards or downwards on the fingerprint recognition sensor. This feature is not available when the sensor is detecting your fingerprint.
- **Quick launch Camera:** Set the device to launch the camera by pressing the Power key twice quickly.
- **Device assistance app:** Select a device assistance app to launch when you press 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.

- **Record screen:** Change the settings for recording videos of the screen.



It is not possible to record the screen while using some apps and features.

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



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

- **Easy mute:** Set the device to mute incoming calls or alarms by using palm motions or facing the device's screen downwards.
- **Swipe to call or send messages:** Set the device to make a call or send a message when you swipe to the right or left on a contact or a phone number in the **Phone** or **Contacts** app.
- **Dual Messenger:** Install the second app and use two separate accounts for the same messenger app. Refer to [Dual Messenger](#) for more information.
- **SOS:** Set the device to send help messages by pressing the Power key three times. You can also send sound recordings along with the message to the recipients.

Dual Messenger

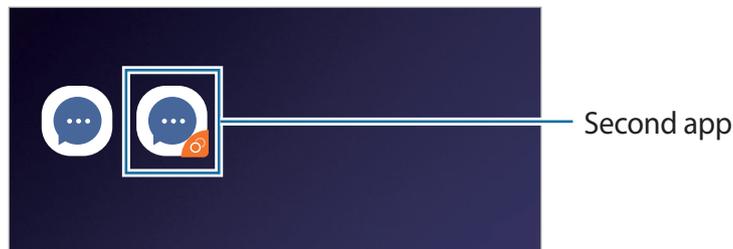
Install the second app and use two separate accounts for the same messenger app.

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

Supported apps will appear.

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

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



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

Uninstalling a second app

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

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

All data related to the second app will be deleted.



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

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**.

Wallpapers and themes

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

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

- **Wallpapers:** Change the wallpaper settings for the Home screen and the locked screen.
- **Themes:** Change the device's theme.
- **Icons:** Change the icon style.

Lock screen and security

Options

Change the settings for the locked screen. On the Settings screen, tap **Lock screen and security**.



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

- **Screen lock type:** Change the screen lock method.
- **Face Recognition:** Set the device to unlock the screen by recognising your face. Refer to Face recognition for more information.
- **Fingerprint Scanner:** Register your fingerprints to unlock the screen. Refer to Fingerprint recognition for more information.
- **Clock and Facewidgets:** Change the type and colour of the clock and access to useful widgets on the locked screen.
- **Roaming clock:** Change the clock to show both the local and home time zones on the locked screen when roaming.
- **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.

- **Application shortcut:** Select apps to display shortcuts to them on the locked screen.
- **Install unknown apps:** Set the device to allow the installation of apps from unknown sources.
- **Secure startup:** Protect your device by setting it to require a screen unlock code when turning on the device. You must enter the unlock code to start the device and receive messages and notifications.
- **Other security settings:** Configure additional security settings.

Face recognition

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



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



Precautions for using face recognition

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

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

For better face recognition

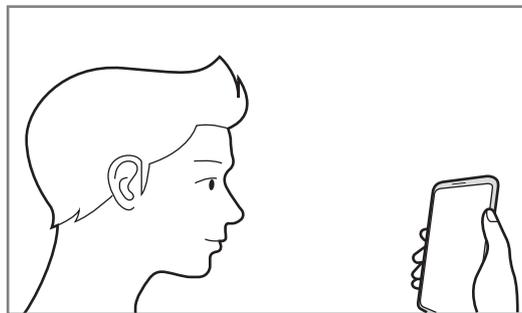
Consider the following when using face recognition:

- 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 unlock screen appears, tap **TURN ON** to use your face to unlock the screen.



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

Deleting the registered face data

You can delete face data that you have registered.

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



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

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

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

Fingerprint recognition

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

For better fingerprint recognition

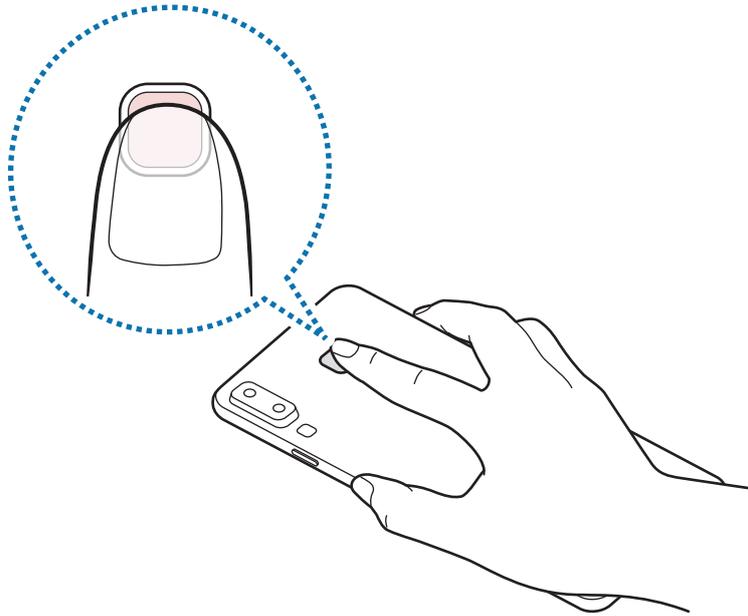
When you scan your fingerprints on the device, be aware of the following conditions that may affect the feature's performance:

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

Registering fingerprints

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

- 3 Place your finger on the fingerprint recognition sensor.



- 4 After the device detects your finger, rotate your hand and place the same finger on the fingerprint recognition sensor again.

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

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

Deleting registered fingerprints

You can delete registered fingerprints.

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

Using fingerprints to sign in to accounts

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



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

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

Verifying the Samsung account password

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

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

Unlocking the screen with your fingerprints

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

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

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 transfer data to or from other devices via Smart Switch.

On the Settings screen, tap **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 account and other accounts to sync with.

- **Backup and restore:** Keep your personal information, app data, and settings safe on your device. You can back up your sensitive information and access it later. You must sign in to your Samsung account to back up or restore data. Refer to [Backup and restore](#) for more information.
- **Smart Switch:** Launch Smart Switch and transfer data from your previous device. Refer to [Smart Switch](#) for more information.

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 Samsung account to back up or restore data.

Using a Samsung account

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

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

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

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:** Set the text-to-speech options such as language or speech rate while using Voice Assistant.

- **Direct access:** Set the device to launch selected accessibility menus when you press and hold the Power key and the Volume Up key simultaneously or press the Home key three times.
- **Accessibility shortcut:** Set the device to start a shortcut service when you simultaneously press and hold the Volume Up key and the Volume Down key for three seconds.
- **Answering and ending calls:** Change the method of answering or ending calls.
- **Single tap mode:** Use a single tap instead of a swipe to respond to alarms, alerts, and incoming calls.
- **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**.

- **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.
- **Storage:** Check the status of the used and available storage.
 -  The actual available capacity of the internal storage is less than the specified capacity because the operating system and default apps occupy part of the storage. The available capacity may change when you update the device.
 - You can view the available capacity of the internal storage in the Specification section for your device on the Samsung website.
- **Memory:** Check the memory's status. You can speed up your device by reducing the amount of memory you are using.
- **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.

- **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.



- Some preloaded apps will be deleted. After you perform the factory data reset, you can reinstall some apps during the initial setup procedure.
- The factory data reset procedure may vary depending on the service provider.

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**.
- 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 **APPLY**. 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**.



The device supports only authorised operating system updates. Do not update an unauthorised operating system. Doing so may make your personal information vulnerable to leakage or theft.



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 phone

Access your device's information.

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

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

- **Status:** View various device information, such as the SIM card status, Wi-Fi MAC address, and serial number.
- **Legal information:** View legal information related to the device, such as safety information and the open source licence.
- **Software information:** View the device's software information, such as its operating system version and firmware version.
- **Preloaded apps:** View the preloaded apps list.
- **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 nano-SIM card. You can disable this feature by using the Lock SIM card menu.
- **PUK:** Your nano-SIM 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 nano-SIM card. For more information, contact your service provider.

Your device displays network or service error messages

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

Your device does not turn on

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

The touchscreen responds slowly or improperly

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

Your device freezes or encounters a fatal error

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

Restarting the device

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

Forcing restart

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

Resetting the device

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

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

Calls are not connected

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

Others cannot hear you speaking on a call

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

Sound echoes during a call

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

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

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

The battery icon is empty

Your battery is low. Charge the battery.

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

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

The battery depletes faster than when first purchased

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

Error messages appear when launching the camera

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

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

Photo quality is poorer than the preview

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

Error messages appear when opening multimedia files

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

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

Bixby Voice does not respond

- Restart your device to clear any temporary software bugs.
- Ensure that your device software is updated to the latest version.
- If you are still having trouble with Bixby Voice after trying these tips, contact a Samsung Service Centre.

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

Open the notification panel by dragging the status bar downwards, and then drag the notification panel downwards. Tap  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.

Information about the RF exposure from FCC

FCC Statement:

15.19(a)(1) -- licensed radio service (label/ manual)

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

15.19(a)(3) -- All other devices (label/ manual)

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.

15.21 (manual)

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.105 -- Class B digital device or peripheral (manual)

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: 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.

RF Exposure info -- (manual)

General information

- GSM850/900: 33.5dBm
- GSM1800/1900: 31dBm
- UMTS B1/2/5/8: 24dBm
- FDD LTE B1/3/5/7/8: 24/24/24/24 dBm
- TDD LTE B34/B38/B39/B40/B41: 24/24/24/24/24 dBm
- Bluetooth GFSK/4_DQPSK/8DPSK/LE: 14/12/12/3.5 dBm
- 802.11 b/g/n (2.4GHz band) 19/19/17.5dBm
- 802.11 a/n/ac (5GHz band) 18/17/17dBm
- GPS (Rx only)
- SAR Maximum value:Head 1.54 , Body 1.37

Safety and Precautions

This product meets applicable national SAR limits of 1.6 W/kg. The specific maximum SAR values can be found on Radio waves section. When carrying the product or using it while worn on your body, either use an approved accessory such as a holster or otherwise maintain a distance of 10mm from the body to ensure compliance with RF exposure requirements.

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