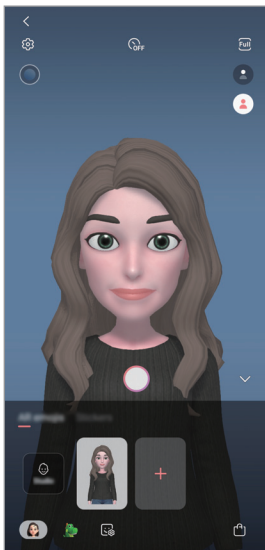


AR EMOJI

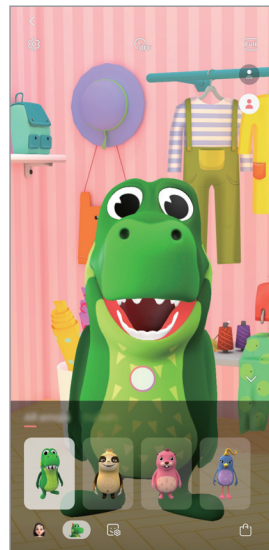
Introduction

Create a My Emoji that looks just like you, and take photos and record videos using My Emojis, character Emojis, or stickers.

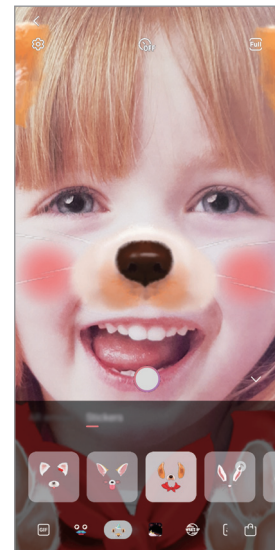
You can customise My Emoji's features, such as the face shape or hairstyle, and decorate My Emoji with various accessories. You can also express yourself in fun ways using My Emoji stickers during a conversation.



My Emojis




Character Emojis



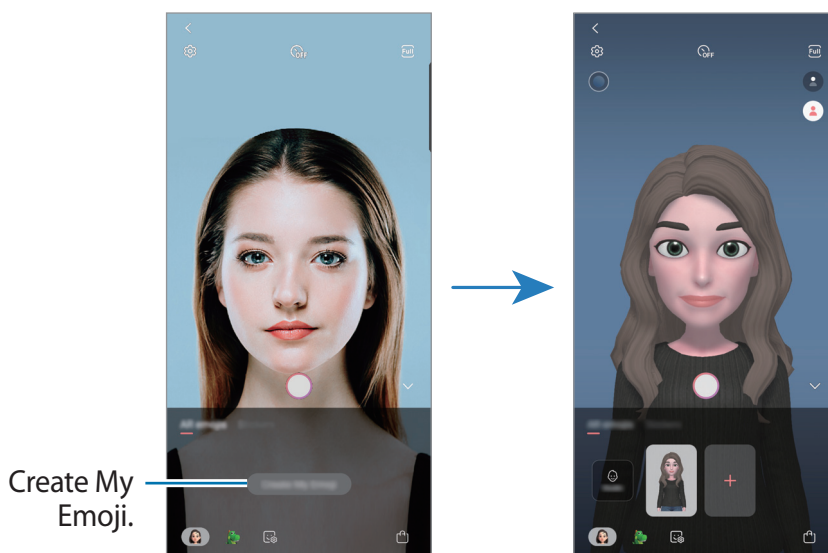
Stickers

Creating My Emoji

Make a My Emoji that looks like you. My Emoji stickers with various expressions will be automatically generated.


- 1 Launch the **Camera** app, tap **MORE** on the shooting modes list, and then tap **AR EMOJI** → **Create My Emoji**.
- 2 Align your face on the screen and tap  to take a photo.
- 3 Select My Emoji's gender and age range and tap **Next**.
- 4 Decorate a My Emoji and tap **Next**.

The My Emoji and My Emoji stickers are now created. You can view My Emoji stickers in the My Emoji Studio. Refer to [My Emoji stickers](#) for more information.



You can use the **AR EMOJI** feature in both the front and rear cameras. If you are using the rear camera, it will automatically switch to the front camera. To switch between cameras, swipe upwards or downwards on the preview screen.

Deleting My Emoji

Launch the **Camera** app, tap **MORE** on the shooting modes list, and then tap **AR EMOJI**. Tap and hold the My Emoji that you want to delete and tap . The My Emoji and My Emoji stickers will be deleted.

Customising My Emoji

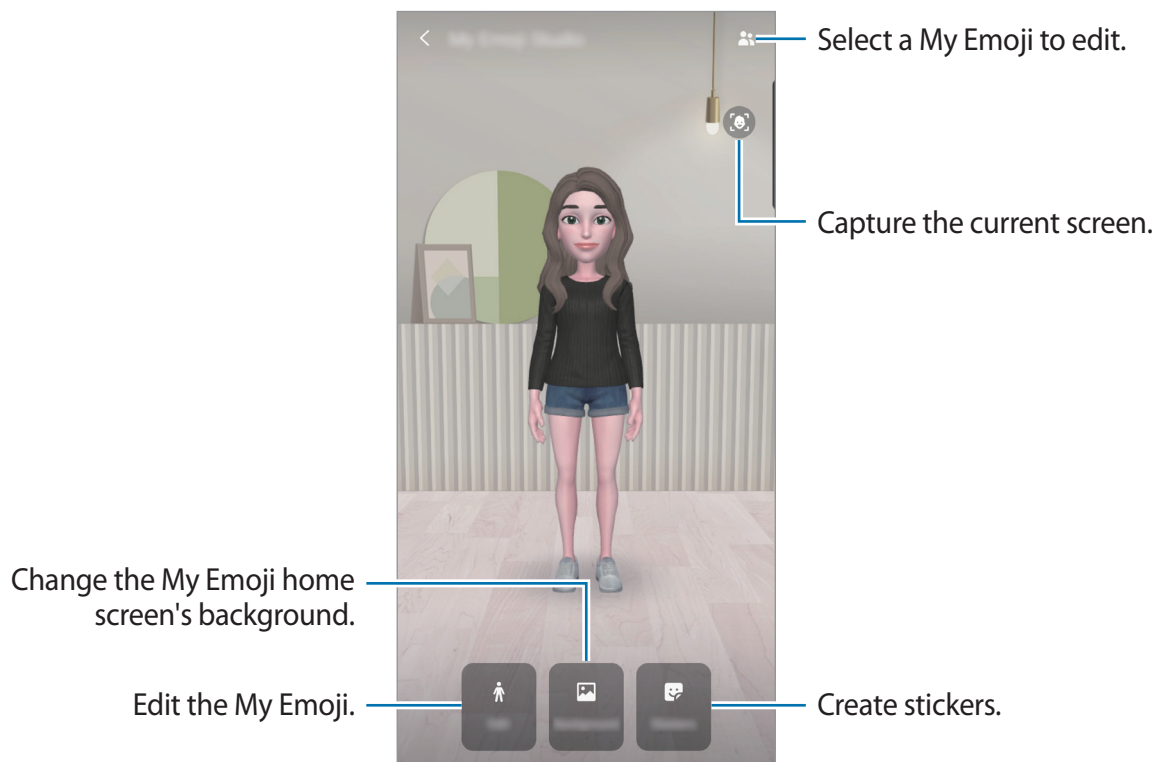
Edit or decorate a My Emoji in the My Emoji Studio. You can also create your own My Emoji stickers.



Available options may vary depending on the region or service provider.

My Emoji Studio

Launch the **Camera** app, tap **MORE** on the shooting modes list, and then tap **AR EMOJI** → **Studio**. My Emoji Studio will appear.

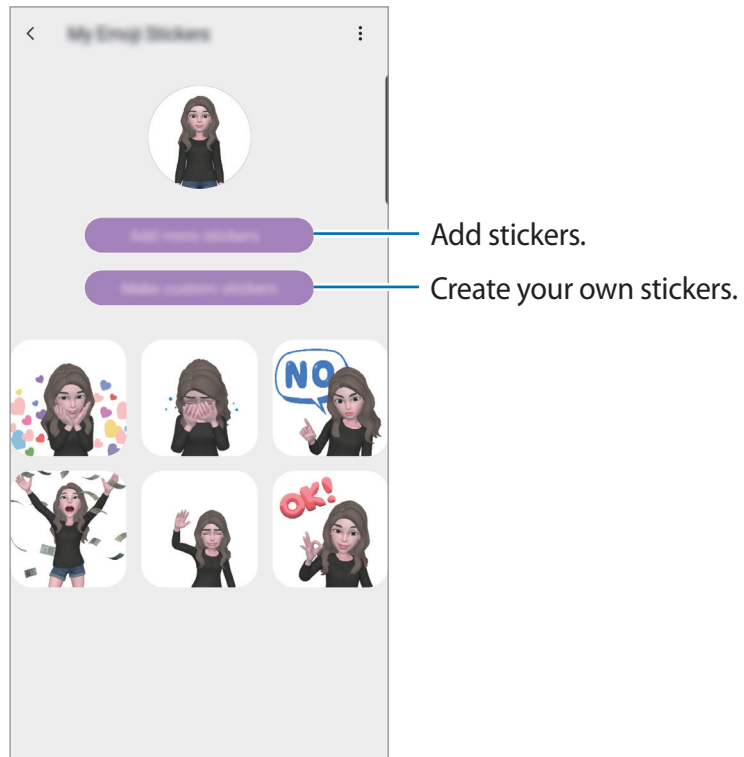


My Emoji stickers

Create your own stickers with My Emoji expressions and actions. You can use My Emoji stickers when sending messages or on a social network.

Viewing My Emoji stickers

In the My Emoji Studio, tap **Stickers**. Then, you can view My Emoji stickers.



Creating your own stickers

1 In the My Emoji Studio, tap **Stickers** → **Make custom stickers**.


2 Edit stickers how you want.

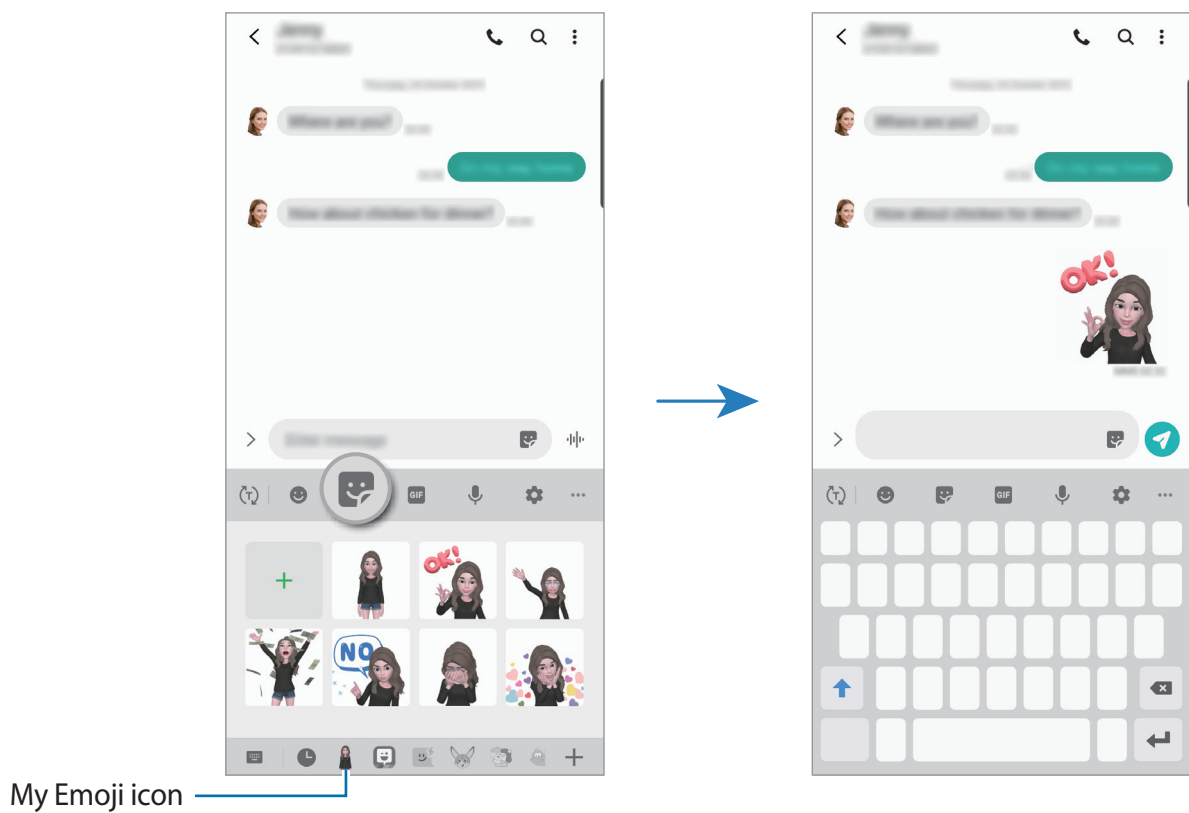
- 🗨️ : Add stickers.
- 🖼️ : Select the sticker's background.
- 😊 : Select an expression.
- 🚶 : Select an action.
- T : Enter text.
- 🎨 : Write or draw on stickers.

3 Tap **Save**.

Using My Emoji stickers in chats

You can use My Emoji stickers during a conversation via messages or on a social network. The following actions are an example of using My Emoji stickers in the **Messages** app.

- 1 While composing a message in the **Messages** app, tap  on the Samsung keyboard.
- 2 Tap the My Emoji icon.
- 3 Select one of the My Emoji stickers.
The My Emoji sticker will be inserted.



Deleting My Emoji stickers

On the Samsung keyboard, tap  and tap  at the bottom of the keyboard. Select the My Emoji stickers you want to delete and tap **Delete**.

Capturing photos or videos with My Emoji

Create fun photos or videos with My Emoji using various shooting modes.

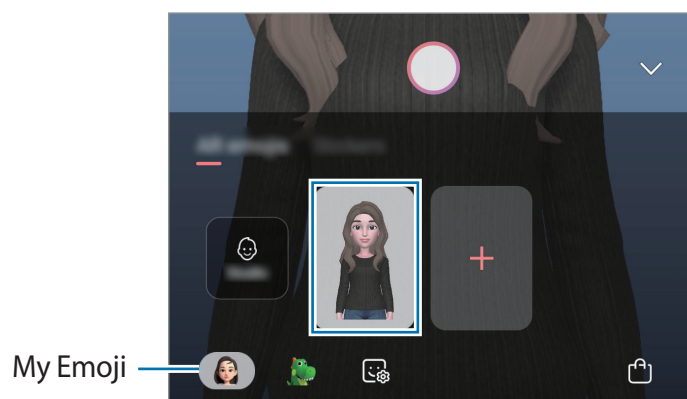


Basic






Mask

- 1 Launch the **Camera** app, tap **MORE** on the shooting modes list, and then tap **AR EMOJI**.
- 2 Select a My Emoji you want to use.



3 Select the mode you want to use.

-  (**Mask**): My Emoji's face appears over your face so it looks like you are wearing a mask.
-  (**Basic**): My Emoji mimics your expressions.

4 Tap  to take a photo, or swipe to the left on the preview screen and tap  to record a video.

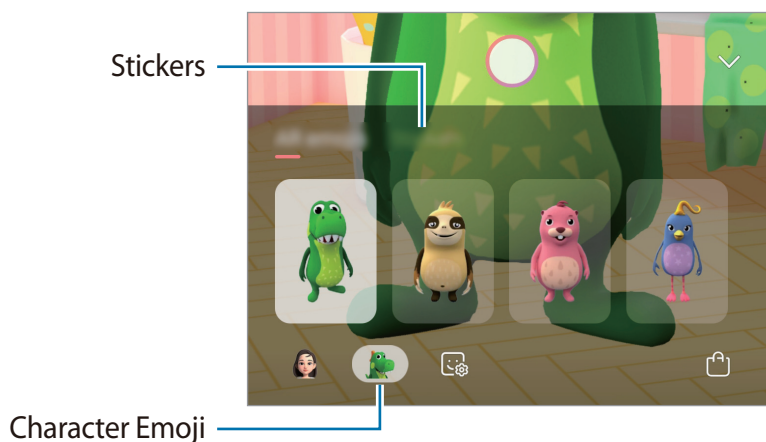
You can view and share the photos and videos that you have captured in **Gallery**.



Capturing photos or videos with character Emojis or stickers

Character Emojis mimic your expressions. You can also apply sticker effects that follow your face.

1 Launch the **Camera** app, tap **MORE** on the shooting modes list, and then tap **AR EMOJI**.

2 Select a character Emoji, or tap **Stickers** and select a sticker you want to use.



3 Tap  to take a photo, or swipe to the left on the preview screen and tap  to record a video.

You can view and share the photos and videos that you have captured in **Gallery**.

AR Doodle

Record fun videos with virtual handwriting or drawings on faces or anywhere else. When the camera recognises a face or space, the doodles on the face will follow the face as it moves, and the doodles in the space will be fixed in the same place even if the camera moves.


1 Launch the **Camera** app and tap **VIDEO** on the shooting modes list.

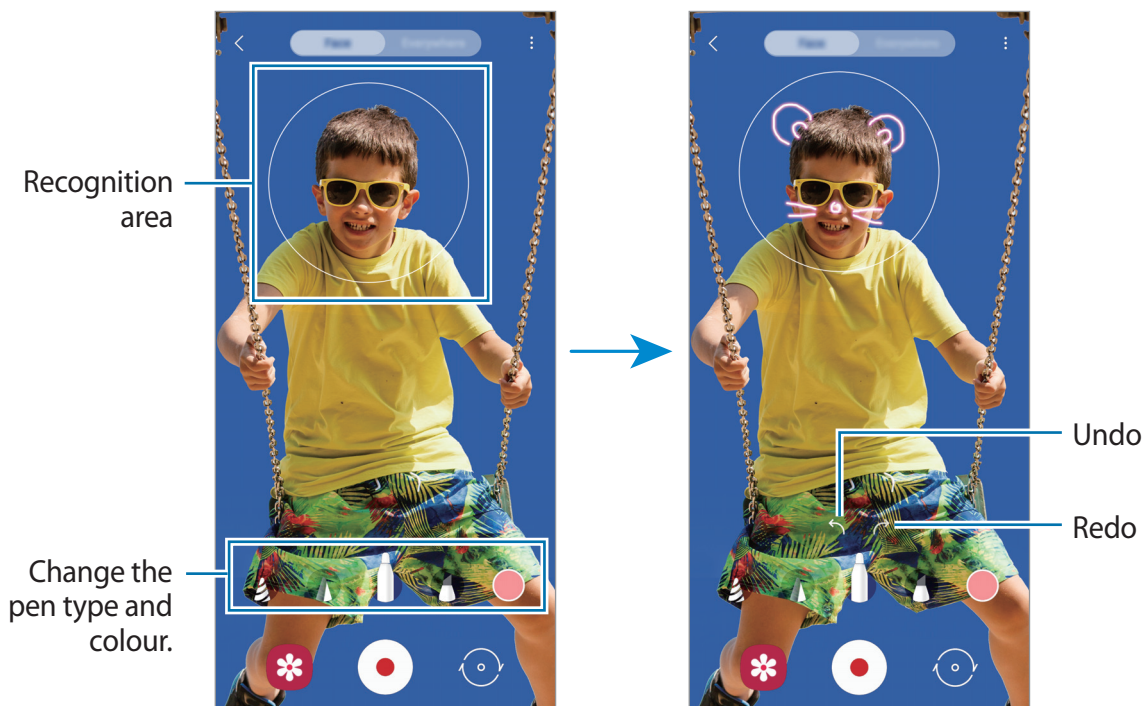
2 Tap  and select a mode you want.


When the camera recognises the subject, the recognition area will appear on the screen.

- **Face:** Doodle on a face.
- **Everywhere:** Doodle anywhere else.

3 Write or draw in the recognition area.

If you tap  and begin to doodle, you can record yourself doodling.



4 Tap  to record a video.

5 Tap  to stop recording the video.

You can view and share the video in **Gallery**.

Always On Display

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

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



The brightness of the Always On Display may change automatically depending on the lighting conditions.

Setting how to display the Always On Display

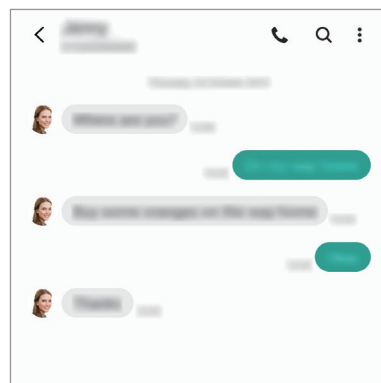
You can select how to display the Always On Display. The Always On Display can be set to appear continuously or only appear when tapping the screen while it is turned off. Also, you can set the time to display the Always On Display.

Launch the **Settings** app, tap **Lock screen** → **Always On Display**, and then select the mode you want.

- **Tap to show:** The Always On Display appears for 10 seconds when you tap the screen.
- **Show always:** The Always On Display continuously appears.
- **Show as scheduled:** The Always On Display appears during the time you set. Tap **Set schedule** to set the start and end time.

Opening notifications on the Always On Display

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



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

Controlling music playback on the Always On Display

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

Displaying an image to the Always On Display

- 1 Launch the **Settings** app → **Lock screen** → **Clock style** → **Always On Display**.
- 2 Drag the types list to the left and select the type with an image on it.
- 3 Tap **+** and select an image.
To insert an animated GIF, tap **GIF** and select a file.
- 4 Tap **Done**.

Deactivating the Always On Display feature

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

Edge screen

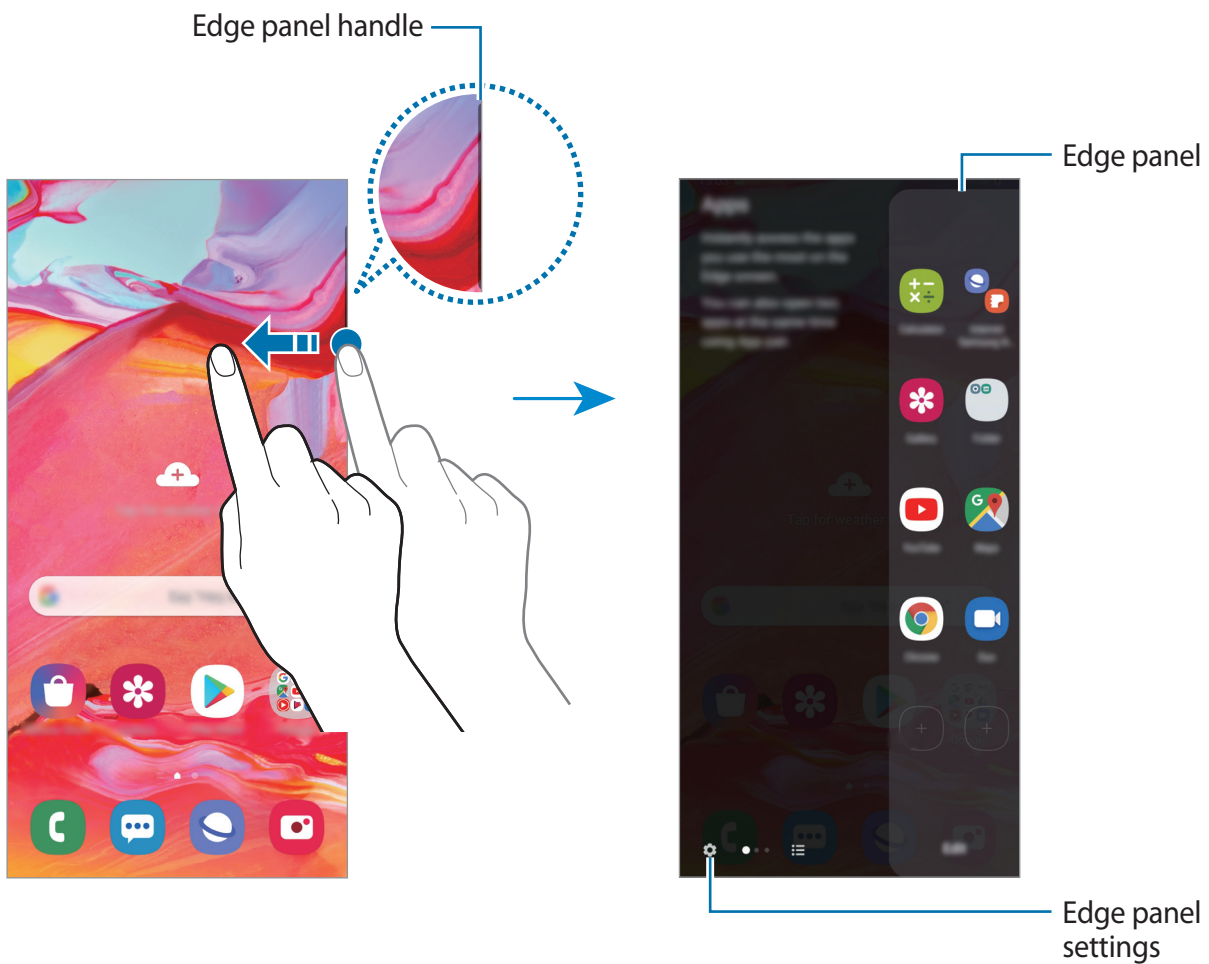
Introduction

You can quickly access your favourite apps and features from the Edge panels.

Using the Edge panels





Drag the Edge panel handle towards the centre of the screen.

If the Edge panel handle is not visible, launch the **Settings** app, tap **Display** → **Edge screen**, and then tap the **Edge panels** switch to activate it.




Editing the Edge panels

Select panels to display on the Edge screen or edit them.

- 1 Drag the Edge panel handle towards the centre of the screen.
- 2 Tap  to open the Edge panel settings screen.
- 3 Tick Edge panels to display.
 - To edit a panel, tap **Edit**.
 - To download additional panels, tap **Galaxy Store**.
 - To rearrange the panels, tap  → **Reorder** and drag   to another location.

Setting the Edge panel handle

You can change the location, size, transparency, or vibration settings of the handle.



Drag the Edge panel handle towards the centre of the screen. Then, tap  →  → **Handle settings**.

Apps edge

Quickly launch frequently used apps.

- 1 Drag the Edge panel handle towards the centre of the screen.
- 2 On the Apps edge panel, select an app to launch it.

Editing the Apps edge panel


- To add an app, tap  on the panel and tap an app from the apps list.
- To create a folder on the panel, tap  on the panel, tap and hold an app from the apps list, and then drag it over another app on the Apps edge panel.
- To delete an app, tap and hold an app on the panel and drag it to **Remove** at the top of the panel.
- To change the order of apps, tap and hold an app and drag it to another location.



You can also edit the Apps edge panel by tapping **Edit**.

Adding app pairs

Add two frequently used apps, such as a video player and a messenger app, to the Apps edge panel to launch them together in the split screen view with a single tap. For more information about the split screen view, refer to [Split screen view](#).

- 1 Drag the Edge panel handle towards the centre of the screen.
- 2 On the Apps edge panel, tap  → **Create App pair**.
- 3 Select two apps from the list.
The first app will appear at the top and the second app will appear at the bottom when opened in the split screen view.
- 4 Tap **Done**.

Edge lighting

You can set the device to light up the edges of the screen and display a pop-up window when you receive notifications, such as new messages.

When a pop-up window appears while using an app, drag the window downwards to quickly view the content and perform available actions.

Managing notifications to display as the edge lighting

- 1 Launch the **Settings** app, tap **Display** → **Edge screen** → **Edge lighting**, and then tap the switch to activate it.
- 2 Tap **Choose apps** and tap the switches next to apps to receive notifications as the edge lighting.

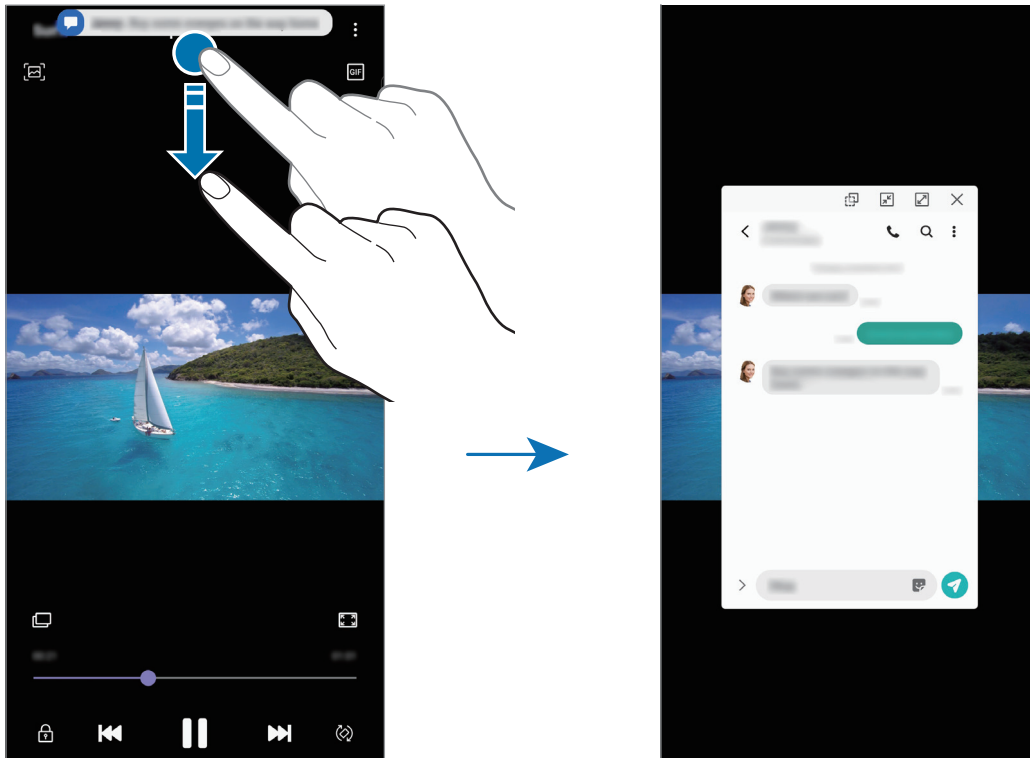


Some notifications may not display as the edge lighting depending on notification types.

Viewing notifications via the pop-up window

When you receive a notification with edge lighting, you can quickly view its content and perform available actions by opening the pop-up window. For example, if you receive a message while watching a video or playing a game, you can view the message and reply to it without switching the screen.

When you receive a notification with edge lighting while using an app, drag the notification downwards.



This feature is only available to apps that support the Multi window and edge lighting features. To view supported apps, launch the **Settings** app, tap **Display** → **Edge screen** → **Edge lighting** → **Choose apps**.

Multi window

Introduction

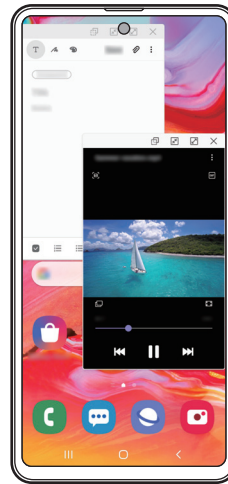
Multi window lets you run two apps at the same time in the split screen view. You can also run multiple apps at the same time in the pop-up view.



Some apps may not support this feature.



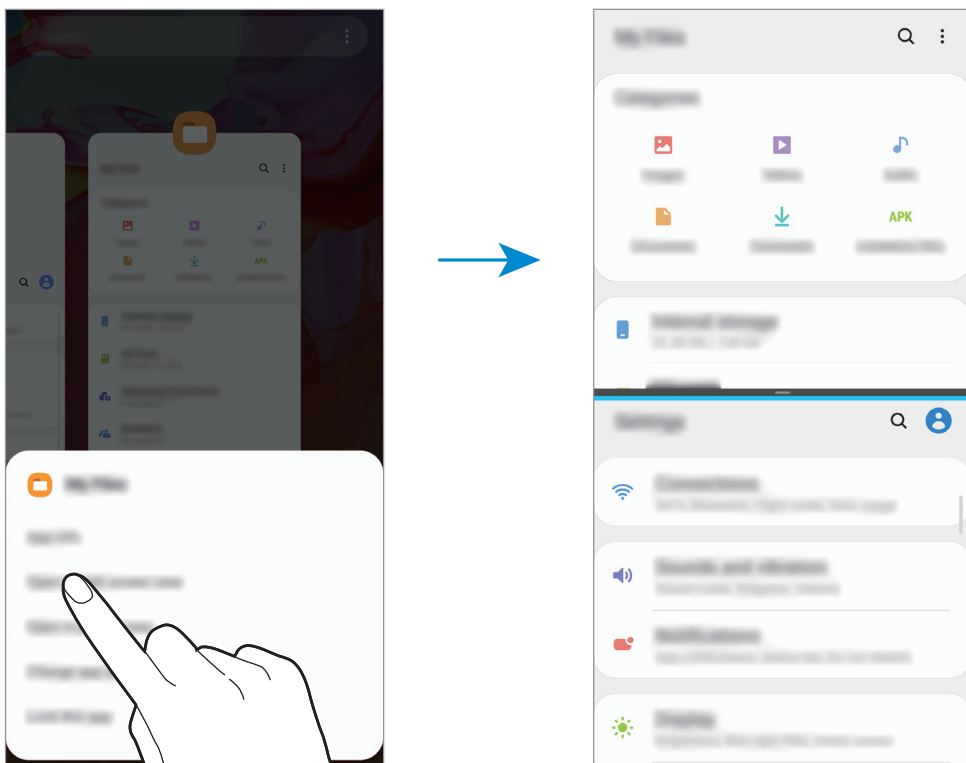
Split screen view



Pop-up view

Split screen view

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



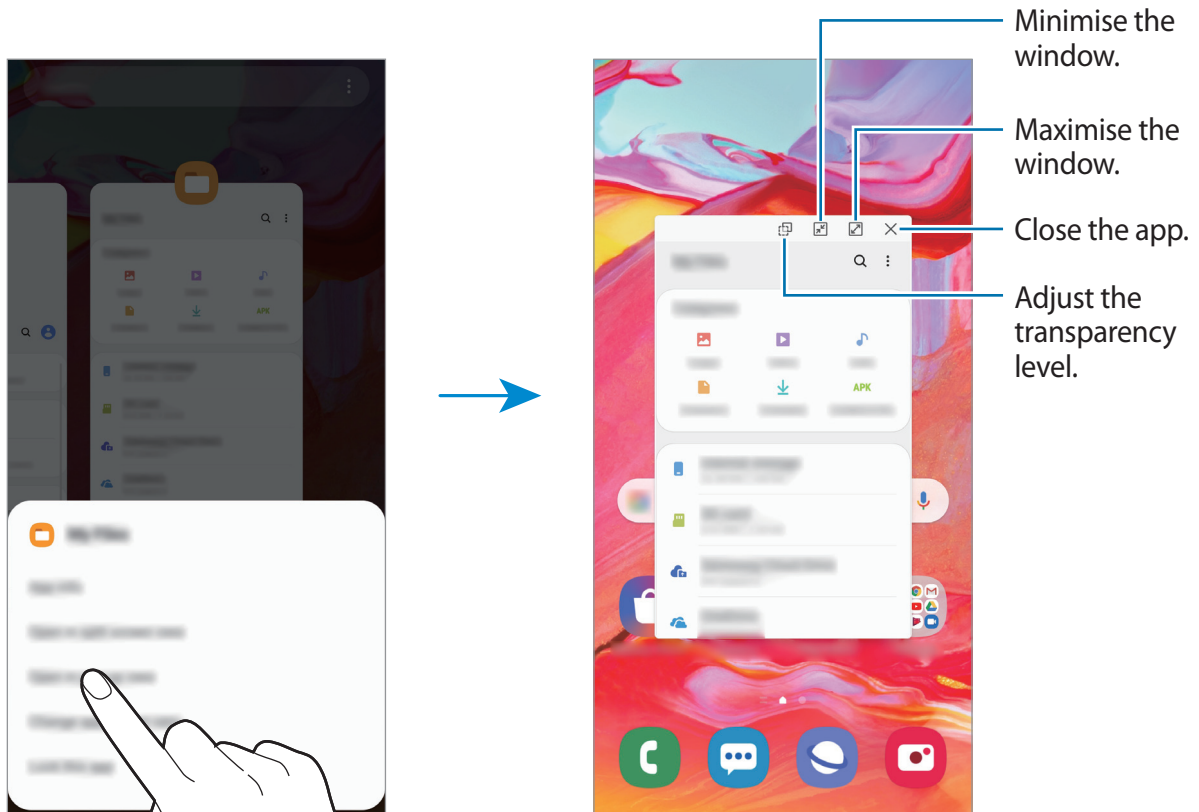
Adjusting the window size

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

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

Pop-up view

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



Moving pop-up windows

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

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. You can also compare your step count records with other Samsung Health users, compete with your friends, and view health tips.

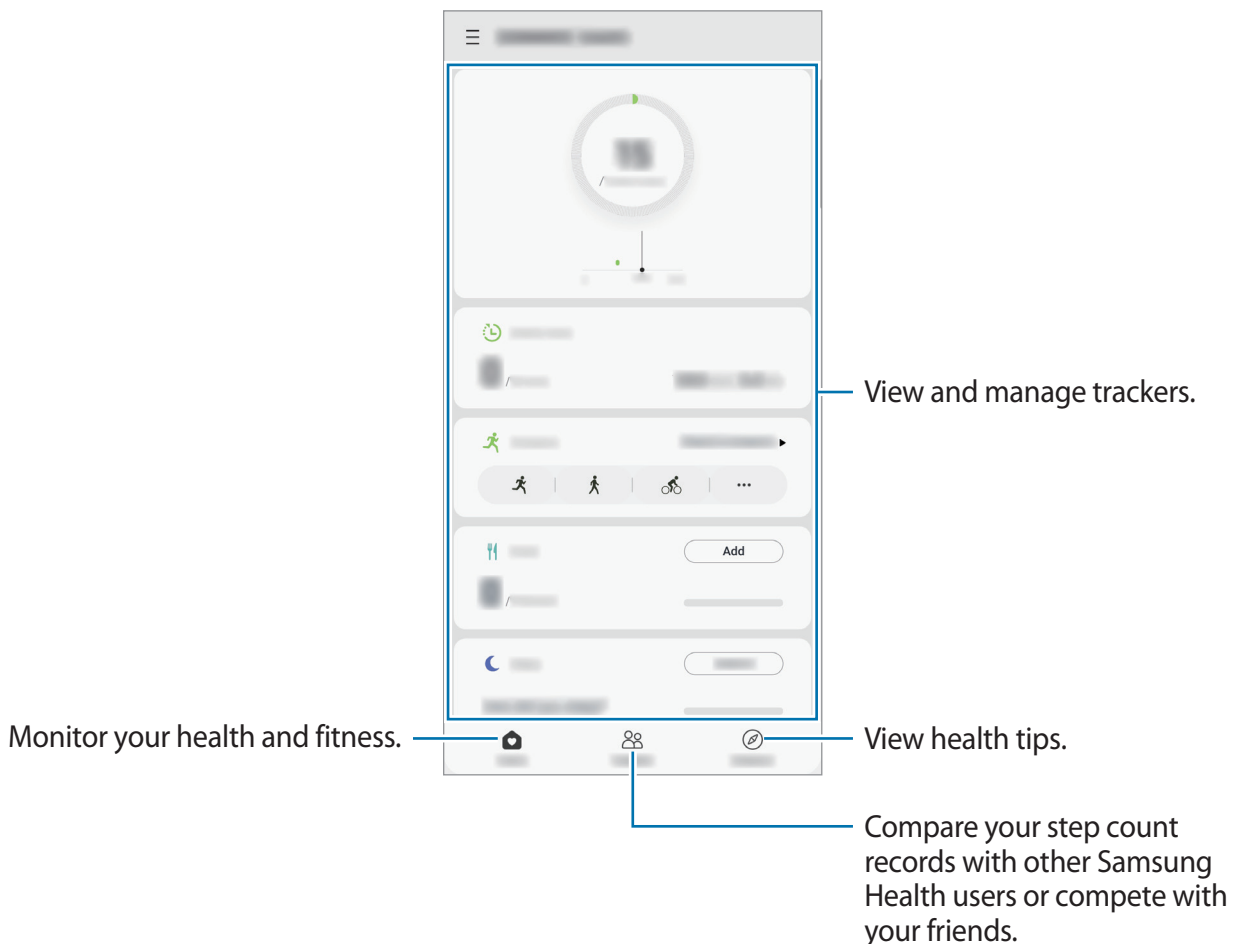
Using Samsung Health

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.



Some features may not be available depending on the region.

To add items to the Samsung Health home screen, tap **Manage items** at the bottom of the trackers list and tap **+** on the items to add.



Together

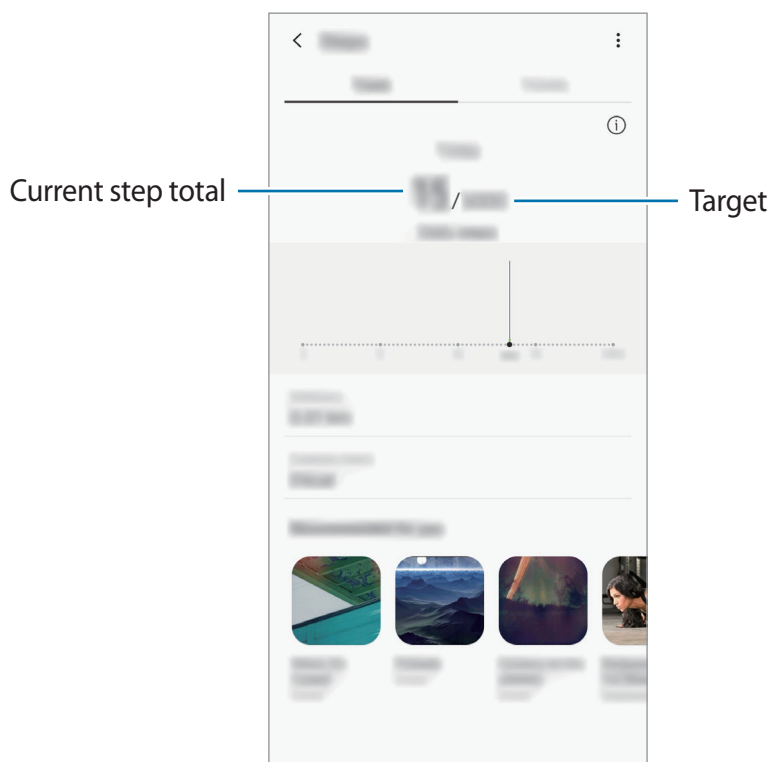
Together allows you to set up step count goals and compete with your friends. You can invite friends to walk together, set target step counts, compete in challenges, and view your ranking.

On the Samsung Health home screen, tap **Together**.

Steps

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

On the Samsung Health home 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.
- You can check your current steps on the notification panel. To turn off notifications, on the Samsung Health home screen, tap \equiv → ⚙ → **Notifications**, and then tap the **Steps** switch under **Categories** to deactivate it. Alternatively, open the notification panel, tap and hold the notification, tap **Details**, and then tap the **Steps** switch to deactivate it.

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.
- Samsung Health applications and its service can be changed or discontinued without prior notice.
- 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 Erase personal 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 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.

Galaxy Wearable

Galaxy Wearable is an app that allows you to manage your wearable devices. When you connect your device to the wearable device, you can customise the wearable device's settings and apps.

Launch the **Galaxy Wearable** app.

Tap **Get started** to connect your device to the wearable device. Follow the on-screen instructions to finish the setup. Refer to the wearable device's user manual for more information about how to connect and use the wearable device with your device.

Samsung Members

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



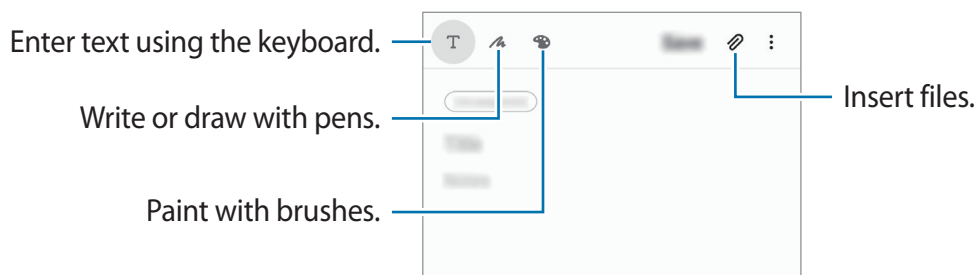
To submit your feedback or post your comments, you must sign in to your Samsung account. Refer to [Samsung account](#) for more information.

Samsung Notes

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

Creating notes

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



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

Deleting notes

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

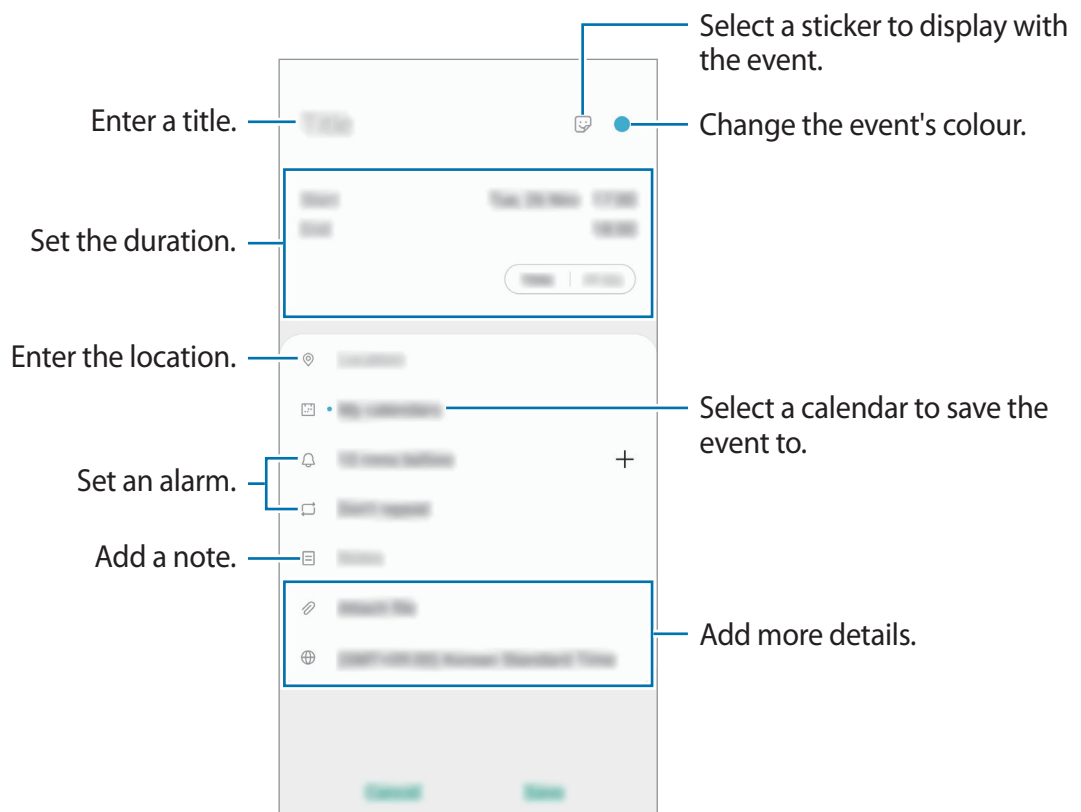
Calendar

Manage your schedule by entering upcoming events or reminders 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 reminders

You can create tasks as reminders and receive notifications at the preset time or location for each reminder. Launch the **Calendar** app and tap  → **Reminder**. The **Reminder** app will launch. Refer to [Reminder](#) for more information.

Syncing events with your accounts

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


To add accounts to sync with, launch the **Calendar** app and tap  →  → **Add new account**. Then, select an account to sync with and sign in. When an account is added, a blue circle is displayed next to the account name.

Radio

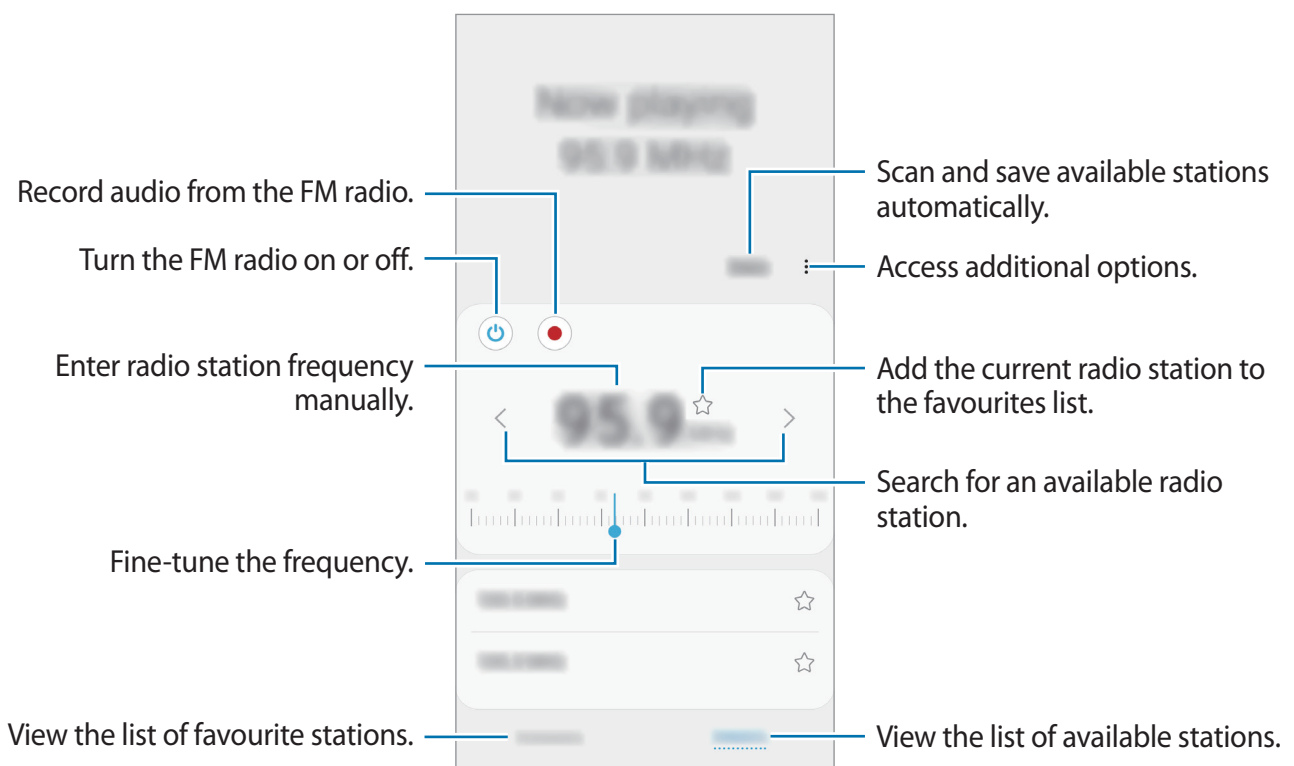
Listening to the FM radio

Launch the **Radio** app.

Before you use this app, you must connect an earphone, which serves as the radio antenna.

 The FM radio scans and saves available stations automatically when running for the first time.

Select the radio station you want from the stations list.



Playing through the speaker

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

Tap  → **Play through speaker**.

Scanning radio stations

Launch the **Radio** app.

Tap **Scan**. The FM radio scans and saves available stations automatically.



Select the radio station you want from the stations list.

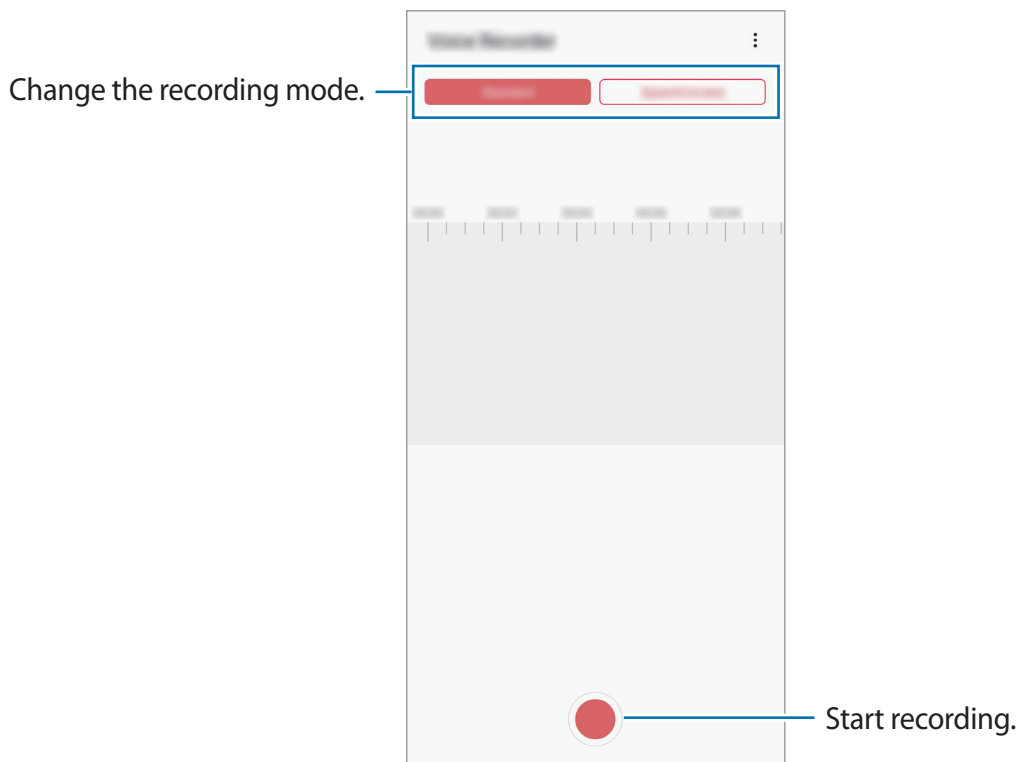
Voice Recorder


Introduction

Use different recording modes for various situations. The device can convert your voice to text.

Making voice recordings

- 1 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**.

Changing the recording mode

Launch the **Voice Recorder** app.

Select a mode from the top of the voice recorder screen.

- **Standard:** This is the normal recording mode.
- **Speech-to-text:** The device records your voice and simultaneously converts it to on-screen text. For best results, keep the device near your mouth and speak loudly and clearly in a quiet place.



If the voice memo system language does not match the language you are speaking, the device will not recognise your voice. Before using this feature, tap the current language to set the voice memo system language.

My Files

Access and manage various files stored in the device or in other locations, such as cloud storage services.

Launch the **My Files** app.

View files that are stored in each storage.

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

To search for files or folders, tap **Q**.

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 map, and then tap **Add**.

To use the time zone converter, tap **⋮** → **Time zone converter**.

Deleting clocks

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

Stopwatch

- 1 Launch the **Clock** app and tap **Stopwatch**.
- 2 Tap **Start** to time an event.
To record lap times while timing an event, tap **Lap**.
- 3 Tap **Stop** to stop timing.
 - To restart the timing, tap **Resume**.
 - To clear lap times, tap **Reset**.





Timer

- 1 Launch the **Clock** app and tap **Timer**.
To add a frequently used timer, tap **+**, set the duration and name, and then tap **Add**.
- 2 Set the duration, and then tap **Start**.
To open the keypad to enter the duration, tap the duration input field.
- 3 Tap **Dismiss** when the timer goes off.

Calculator

Perform simple or complex calculations.

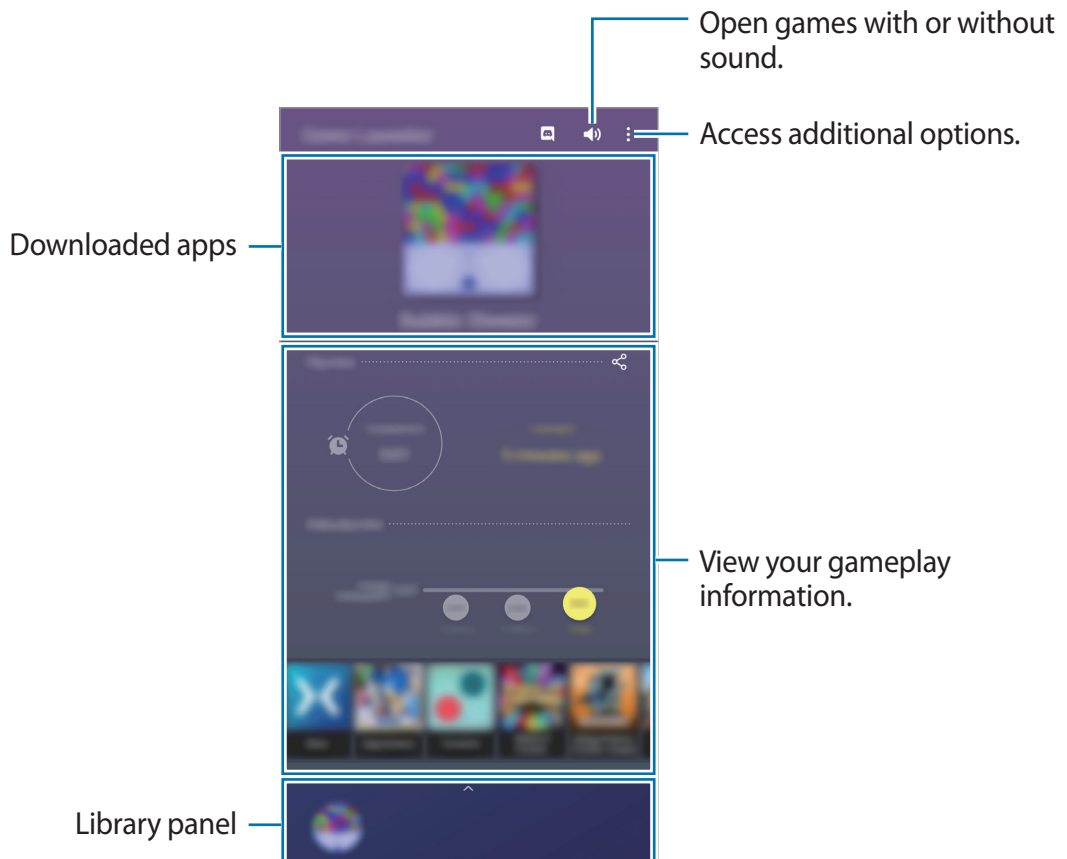
Launch the **Calculator** app.

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

Game Launcher

Introduction

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



Using Game Launcher


1 Launch the **Game Launcher** app.



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

2 Drag the Library panel upwards and tap a game.



Games downloaded from **Play Store** and **Galaxy Store** will be automatically shown on the Game Launcher screen. If you cannot see your games, drag the Library panel upwards and tap  → **Add apps**.

Removing a game from Game Launcher

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

Changing the performance mode

You can change the game performance mode.

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

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




Battery power efficiency may vary by game.

Game Booster

Introduction

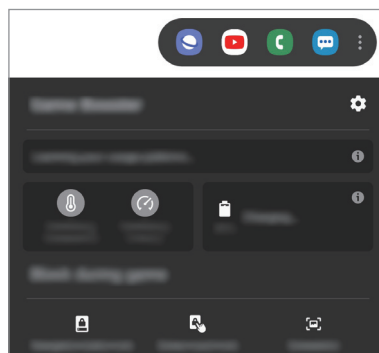
Game Booster lets you play games in a better environment and provides you with useful options via the Game Booster panel.



Using Game Booster

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



- You can set to open the Game Booster panel from the navigation bar while the navigation bar is set to **Full screen gestures**. On the Game Booster panel, tap **Block during game** and tap the **Full screen gestures** switch to activate it.
- Available options may vary depending on the game.



-  : Configure settings for Game Booster.
- Monitoring temperature / Monitoring memory**: Set the device to automatically adjust settings to prevent device overheating and to stop apps running in the background to better manage memory.
- Block during game**: Lock some features during games.
- Navigation button lock**: Hide the buttons on the navigation bar. To display the buttons, tap  on the navigation bar.
- Screen touch lock**: Lock the touchscreen while the game is being played. To unlock the touchscreen, drag the lock icon in any direction.
- Screenshot**: Capture screenshots.

Launching apps in pop-up windows while playing games

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

Tap  and select an app from the apps list.


To edit the apps list, tap .

Kids Home

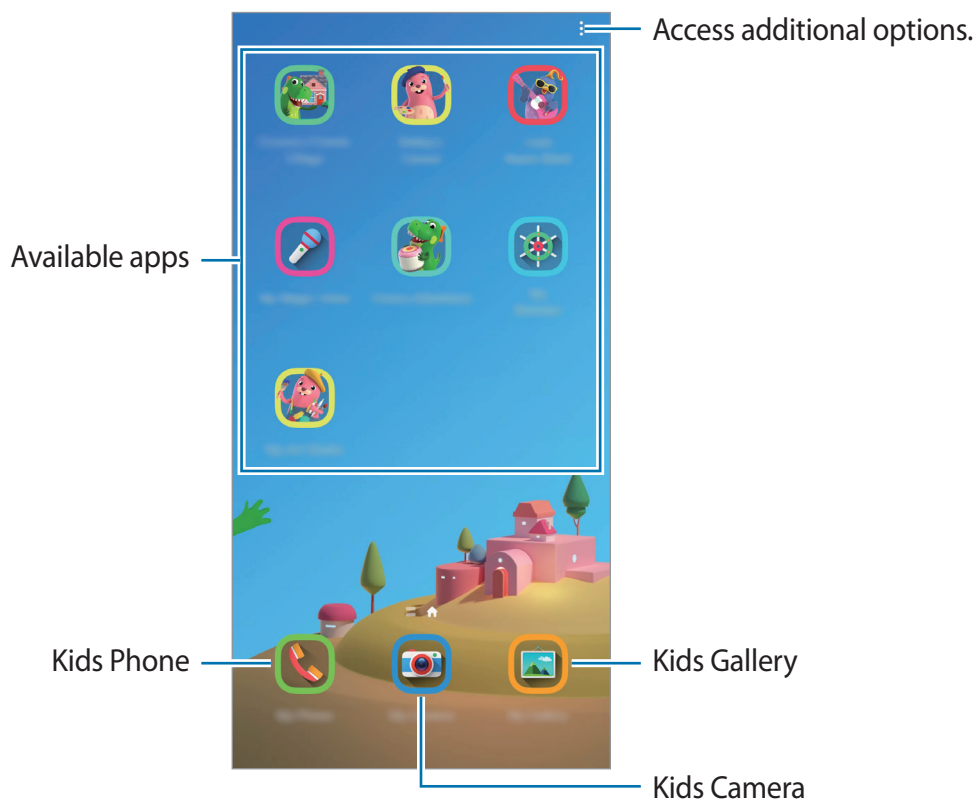
Introduction

You can restrict children's access to certain apps, set their usage times, and configure settings to provide a fun and safe environment for children when they use the device.

Using Kids Home

Open the notification panel, swipe downwards, and then tap  (**Kids Home**) to activate it. The Kids Home screen will appear. When starting Kids Home for the first time or after performing a data reset, follow the on-screen instructions to complete the setup.

On the Kids Home screen, select the app you want to use.





Your preset screen lock method or your created PIN will be used when activating the **Parental control** feature or closing Kids Home.


Using parental control features

You can configure the settings for Kids Home and view the usage history.

On the Kids Home screen, tap  → **Parental control** and enter your unlock code.

- **Kid's name:** Manage your child's profile.
- **Set daily playtime:** Restrict the usage time for Kids Home.
- **Daily usage:** View the daily usage time of Kids Home.
- **Activity:** View the activity history of Kids Home.
- **Frequently contacted:** View the frequently used contacts in Kids Home.
- **My kid's creations:** View the works created from the apps in Kids Home.
- **Allowed content:** Check the apps or content supported by Kids Home and add them.
- **Show Content page:** Set the device to display the Samsung partner's content page on the Kids Home screen.

Closing Kids Home

To close Kids Home, tap the Back button or tap  → **Close Kids Home**, and then enter your unlock code.

SmartThings

Introduction

Control and manage smart appliances and Internet of Things (IoT) products with your smartphone.

- **Connecting with nearby devices:** Connect with nearby devices, such as Bluetooth headsets or wearable devices, easily and quickly.
- **Registering and controlling home appliances, TVs, and IoT products:** Register smart refrigerators, washers, air conditioners, air purifiers, TVs, and Internet of Things (IoT) products on your smartphone, and view their status or control them from your smartphone's screen.
- **Receiving notification:** Receive notifications from connected devices on your smartphone. For example, when the laundry is finished, you can receive a notification on your smartphone.



- To use SmartThings, your smartphone and other devices must be connected to a Wi-Fi or mobile network. To fully use SmartThings, you must sign in to your Samsung account.
- The devices you can connect may vary depending on the region or service provider. Available features may differ depending on the connected device.
- Connected devices' own errors or defects are not covered by the Samsung warranty. When errors or defects occur on the connected devices, contact the device's manufacturer.

Connecting to nearby devices

Connect to nearby devices, such as Bluetooth headsets, easily and quickly.




Connection methods may vary depending on the type of connected devices or the shared content.

- 1 Launch the **SmartThings** app.
- 2 Tap **Add device** or tap **+** → **Add device**.
- 3 Tap **Scan**.
- 4 Select a device from the list and connect to it by following the on-screen instructions.

Using home appliances, TVs, and IoT products

View the status of your smart appliances, TVs, and IoT products from your smartphone's screen. You can group devices by location and add rules to control the devices easily and conveniently.

Connecting devices

- 1 Launch the **SmartThings** app.
- 2 Tap **Add device** or tap **+** → **Add device**.
- 3 Select a device type.
Or, tap **Scan** or tap the search field to search for devices.
You can also tap  to connect devices by scanning the QR code.
- 4 Follow the on-screen instructions to connect devices.

Viewing and controlling connected devices




You can view and control the devices. For example, you can check the ingredients in your refrigerator or adjust the TV volume.

- 1 Launch the **SmartThings** app.
The list of connected devices will appear.
- 2 View the status of devices on the list.
To control the devices, select a device. When the device controller supplied with the selected device is downloaded, you can control the device.

Adding devices and scenes by locations





Add devices by locations, view the list of devices in a same location, and control them. You can also add a scene to a location to control multiple devices at the same time.

Adding locations

- 1 Launch the **SmartThings** app and tap  →  → **Add location**.
- 2 Enter the location name.
 - To set a location, tap **Geolocation** to select a location on the map and tap **Done**.
 - To add rooms to the location, tap **Rooms**, tick rooms you want to add, and then tap **Done**.
- 3 Tap **Done**.
Your location will be added.
To add devices to the location, tap **Add device** or tap  → **Add device** and follow the on-screen instructions to register devices.

Adding scenes






Add a scene and register devices to it to control multiple devices at the same time.

- 1 Launch the **SmartThings** app.
- 2 Tap  →  and select a location.
- 3 Tap  → **Scenes** → **Add scene**.
- 4 Enter the scene name.
- 5 Tap  under **Actions** to add actions to perform.
- 6 Tap **Save**.

Adding automations



You can also set an automation to operate devices automatically depending on the preset time, the status of devices, and more.

For example, add an automation to turn on the audio automatically every day at 7:00 AM.

- 1 Launch the **SmartThings** app.
- 2 Tap  →  and select a location.
- 3 Tap  → **Automations** → **Add automation**.
- 4 Tap  under **If**, set the activation conditions for the automation, and then tap **Next**.
- 5 Tap  under **Then**, set actions to perform, and then tap **Done**.
- 6 Enter the automation name and tap **OK**.

Receiving notifications

You can receive notifications from connected devices on your smartphone. For example, when the laundry is finished, you can receive a notification on your smartphone.


To set devices to receive notifications, launch the **SmartThings** app, tap  →  → **Notifications**, and then tap the switches next to the devices you want.

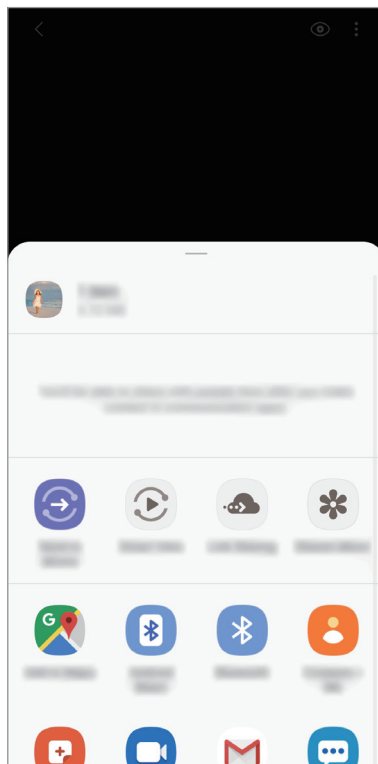
Sharing content

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



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

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



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

Using additional features

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

Samsung Global Goals

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

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

Google apps

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

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



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.

YT 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 **Q**.

Connections

Options

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

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

- **Wi-Fi:** Activate the Wi-Fi feature to connect to a Wi-Fi network and access the Internet or other network devices. Refer to [Wi-Fi](#) for more information.
- **Bluetooth:** Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices. Refer to [Bluetooth](#) for more information.
- **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.
- **NFC and payment:** Set the device to allow you to read near field communication (NFC) tags that contain information about products. You can also use this feature to make payments and buy tickets for transportation or events after downloading the required apps. Refer to [NFC and payment](#) for more information.
- **Flight mode:** Set the device to disable all wireless functions on your device. You can use only non-network services.



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

- **Mobile networks:** Configure your mobile network settings.

- **Data usage:** Keep track of your data usage amount and customise the settings for the limitation. Set the device to automatically disable the mobile data connection when the amount of mobile data you have used reaches your specified limit.

You can 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.

- **SIM card manager** (dual SIM models): Activate your SIM or USIM cards and customise the SIM card settings. Refer to [SIM card manager \(dual SIM models\)](#) for more information.
- **Mobile Hotspot and Tethering:** Use the device as a mobile hotspot to share the device's mobile data connection with other devices 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.
- **More connection settings:** Customise settings to control other features. Refer to [More connection settings](#) for more information.

Wi-Fi

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


Connecting to a Wi-Fi network

1 On the Settings screen, tap **Connections** → **Wi-Fi** and 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 from connecting to the network automatically, tap  next to the network 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 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 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 select a device to transfer the image to.
If the device you want to pair with is not in the list, request that the device turns on its visibility option.
- 3 Accept the Bluetooth connection request on the other device.

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**.

NFC and payment

Your device allows you to read near field communication (NFC) tags that contain information about products. You can also use this feature to make payments and buy tickets for transportation or events after downloading the required apps.

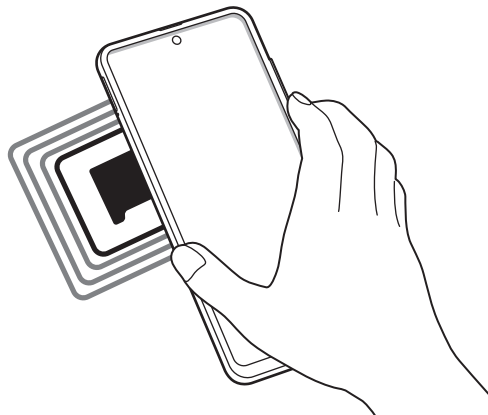


The device contains a built-in NFC antenna. Handle the device carefully to avoid damaging the NFC antenna.

Reading information from NFC tags

Use the NFC feature to read product information from NFC tags.

- 1 On the Settings screen, tap **Connections** and tap the **NFC and payment** switch to activate it.
- 2 Place the NFC antenna area on the back of your device near an NFC tag.
The information from the tag appears.



Ensure that the device's screen is turned on and unlocked. Otherwise, the device will not read NFC tags or receive data.

Making payments with the NFC feature

Before you can use the NFC feature to make payments, you must register for the mobile payment service. To register or get more information about the service, contact your service provider.

- 1 On the Settings screen, tap **Connections** and tap the **NFC and payment** switch to activate it.
- 2 Touch the NFC antenna area on the back of your device to the NFC card reader.

To set the default payment app, open the Settings screen and tap **Connections** → **NFC and payment** → **Tap and pay** → **PAYMENT**, and then select an app.



The payment services list may not include all available payment apps.

Sending data with the NFC feature

Transfer data, such as images or contacts, with other devices by touching your device's NFC antenna to the other device's NFC antenna.

- 1 On the Settings screen, tap **Connections** → **NFC and payment** and tap the switch to activate it.
- 2 Tap the **Android Beam** switch to activate it.
- 3 Select an item and touch the other device's NFC antenna to your device's NFC antenna.
- 4 When **Touch to beam.** appears on the screen, tap your device's screen to send the item.




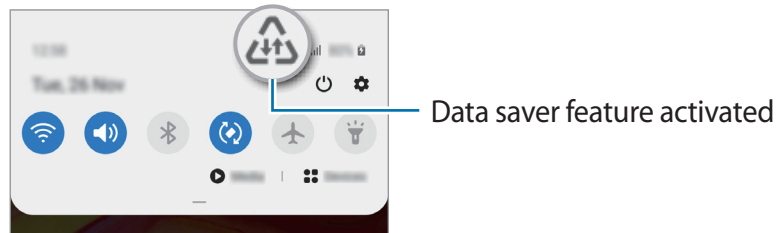
If both devices try to send data simultaneously, the file transfer may fail.

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 data only apps

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

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

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



You may incur additional charges when using this feature.

SIM card manager (dual SIM models)

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

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

- **Calls:** Select a SIM or USIM card for voice calls.
- **Text messages:** Select a SIM or USIM card for messaging.
- **Mobile data:** Select a SIM or USIM card for data services.
- **Confirm SIM card for calls:** Set the device to ask which SIM or USIM card to use for the next call when you make a call without using your preferred SIM or USIM card for calls.
- **Dual SIM always on:** Set the device to allow incoming calls from the other SIM or USIM card during a call.



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

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.

To connect without entering the password, tap  and scan the QR code with the other device.



If the mobile hotspot is not found, on your device, tap  → **Configure Mobile Hotspot** and deselect **Hide my device**.

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

Auto Hotspot

You can share your device's mobile data connection with other devices signed in to your Samsung account without entering a password.

Tap the **Auto Hotspot** switch to activate it.

More connection settings

Customise settings to control other connection features.

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

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

Printing

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



Some printers may not be compatible with the device.

Adding printer plug-ins

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

- 1 On the Settings screen, tap **Connections** → **More connection settings** → **Printing** → **Download plugin**.
- 2 Search for a printer plug-in in **Play Store**.
- 3 Select a printer plug-in and install it.

4 Select the installed printer plug-in.

The device will automatically search for printers that are connected to the same Wi-Fi network as your device.

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.

MirrorLink

You can display your device's screen on the vehicle's head unit monitor.

Connect your device to a vehicle to control your device's MirrorLink apps on the vehicle's head unit monitor.

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



Your device is compatible with vehicles that support MirrorLink version 1.1 or higher.

Connecting your device to a vehicle via MirrorLink

When using this feature for the first time, connect the device to a Wi-Fi or mobile network.

1 Pair your device with a vehicle via Bluetooth.

Refer to [Pairing with other Bluetooth devices](#) for more information.

2 Connect your device to the vehicle using a USB cable.

When they are connected, access your device's MirrorLink apps on the head unit monitor.

Ending the MirrorLink connection

Unplug the USB cable from your device and the vehicle.

Sounds and vibration

Options

Change settings for various sounds on the device.

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

- **Sound mode:** Set the device to use sound mode, vibration mode, or silent mode.
- **Vibrate while ringing:** Set the device to vibrate and play a ringtone for incoming calls.
- **Temporary mute:** Set the device to use silent mode for a certain period.
- **Ringtone:** Change the call ringtone.
- **Notification sound:** Change the notification sound.
- **Volume:** Adjust the device's volume level.
- **Vibration pattern:** Select a vibration pattern.
- **System sound:** Set the device to sound for actions, such as controlling the touchscreen.
- **Sound quality and effects:** Set the device's sound quality and effects. Refer to [Dolby Atmos \(surround sound\)](#) for more information.
- **Separate app sound:** Set the device to play media sound from a specific app separately on the other audio device. Refer to [Separate app sound](#) for more information.

Dolby Atmos (surround sound)

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

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



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

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.

- 1 On the Settings screen, tap **Sounds and vibration** → **Separate app sound** and tap the switch to activate it.
- 2 Select an app to play media sounds separately and tap the Back button.
- 3 Select a device for playing the selected app's media sound.

Notifications

Change the notification settings.

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

- **Suggest actions and replies:** Set the device to suggest actions and replies for notifications.
- **Show snooze option:** Set whether to show the snooze option.
- **App icon badges:** Change the settings for app icon badges.
- **Status bar:** Set how to display notification icons and whether to show the remaining battery percentage on the status bar.
- **Do not disturb:** Set the device to mute all sounds except for allowed exceptions.
- **Recently sent:** View the apps that received recent notifications and change the notification settings. To customise notification settings for more apps, tap **See all** → ▼ → **All** and select an app from the apps list.

Display

Options

Change the display and the Home screen settings.

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

- **Brightness:** Adjust the brightness of the display.
- **Adaptive brightness:** Set the device to keep track of your brightness adjustments and apply them automatically in similar lighting conditions.
- **Blue light filter:** Activate the blue light filter and change the filter settings. Refer to [Blue light filter](#) for more information.
- **Dark mode:** Reduce eye strain by applying the dark theme when using the device at night or in a dark place. Refer to [Dark mode](#) for more information.
- **Screen mode:** Change the screen mode to adjust the display's colour and contrast. Refer to [Changing the screen mode or adjusting the display colour](#) for more information.
- **Font size and style:** Change the font size and style.
- **Screen zoom:** Change the screen zoom setting.
- **Full screen apps:** Select apps to use with the full screen aspect ratio. You can also set the device to hide the front camera from the screen.
- **Screen timeout:** Set the length of time the device waits before turning off the display's backlight.
- **Home screen:** Configure settings for the Home screen, such as the screen grid or layout.
- **Easy mode:** Switch to easy mode to display larger icons and apply a simpler layout to the Home screen.
- **Edge screen:** Change the settings for the Edge screen. Refer to [Edge screen](#) for more information.
- **Navigation bar:** Change the navigation bar settings. Refer to [Navigation bar \(soft buttons\)](#) for more information.
- **Accidental touch protection:** Set the device to prevent the screen from detecting touch input when it is in a dark place, such as a pocket or bag.
- **Touch sensitivity:** Increase the touch sensitivity of the screen for use with screen protectors.

- **Show charging information:** Set the device to display the remaining battery percentage and the estimated time until it is fully charged when the screen is off.
- **Screensaver:** Set the device to launch a screensaver when the device is charging. Refer to [Screensaver](#) 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 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.

Dark mode

Reduce eye strain by applying the dark theme when using the device at night or in a dark place.



- The dark theme may not be applied in some apps.
- You can quickly activate or deactivate dark mode on the notification panel. Open the notification panel, swipe downwards, and then tap  (**Dark mode**).

- 1 On the Settings screen, tap **Display** → **Dark mode** and tap the **Turn on now** switch to activate it.
- 2 To set the schedule to apply dark mode to the screen, tap the **Turn on as scheduled** switch to activate it and select an option.
 - **Sunset to sunrise:** Set the device to turn on dark mode at night and turn it off in the morning based on your current location.
 - **Custom schedule:** Set a specific time to turn on and off dark mode.

Changing the screen mode or adjusting the display colour

Change the screen mode or adjust the display colour to your preference.

Changing the screen mode

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

- **Vivid:** This optimises the colour range, saturation, and sharpness of your display. You can also adjust the display colour balance by colour value.
- **Natural:** This adjusts the screen to a natural tone.



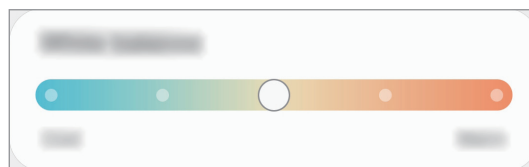
- You can adjust the display colour only in **Vivid** mode.
- **Vivid** mode may not be compatible with third-party apps.
- You cannot change the screen mode while applying the blue light filter.

Optimising the full screen colour balance

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

On the Settings screen, tap **Display** → **Screen mode** → **Vivid** and adjust the colour adjustment bar under **White balance**.

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.



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** → **Vivid**.
- 2 Tap **Advanced settings**.
- 3 Adjust the **R** (Red), **G** (Green), or **B** (Blue) colour bar to your preference.
The screen tone screen will be adjusted.

Screensaver

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

1 On the Settings screen, tap **Display** → **Screensaver**.

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**.

Themes

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

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

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

Lock screen

Options

Change the settings for the locked screen.

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



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

- **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.
- **Always On Display:** Set the device to display information while the screen is turned off. Refer to [Always On Display](#) for more information.
- **Wallpaper services:** Set the device to use wallpaper services such as Dynamic Lock screen.
- **Clock style:** Change the type and colour of the clock on the locked screen.
- **Roaming clock:** Change the clock to show both the local and home time zones on the locked screen when roaming.
- **FaceWidgets:** Change the settings of the items displayed on the locked screen.
- **Contact information:** Set the device to show contact information, such as your email address, on the locked screen.
- **Notifications:** Set how to show notifications on the locked screen.
- **Shortcuts:** Select apps to display shortcuts to them on the locked screen.
- **About Lock screen:** View the Lock screen version and legal information.

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 setup.


Biometrics and security

Options

Change the settings for securing the device.

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

- **Face recognition:** Set the device to unlock the screen by recognising your face. Refer to [Face recognition](#) for more information.
- **Fingerprints:** Register your fingerprints to unlock the screen. Refer to [Fingerprint recognition](#) for more information.
- **Biometrics preferences:** Change the settings for biometric data.
- **Biometrics security patch:** View the version of the biometrics security patch and check for updates.
- **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.
- **Security update:** View the version of your device's software and check for updates.

- **Google Play system update:** View the Google Play system version and check for updates.
- **Samsung Pass:** Verify your identity easily and securely via your biometric data. Refer to [Samsung Pass](#) for more information.
- **Samsung Blockchain Keystore:** Manage your blockchain private key safely.
- **Install unknown apps:** Set the device to allow the installation of apps from unknown sources.
- **Secure Folder:** Create a secure folder to protect your private content and apps from others. Refer to [Secure Folder](#) for more information.
- **Secure Wi-Fi:** Set the device to protect your data while using unsecured Wi-Fi networks.
- **Encrypt or decrypt SD card:** Set the device to encrypt files on a memory card.
 -  If you reset your device to the factory defaults with this setting enabled, the device will not be able to read your encrypted files. Disable this setting before resetting the device.
- **Other security settings:** Configure additional security settings.

Face recognition

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



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



Precautions for using face recognition

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

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

For better face recognition

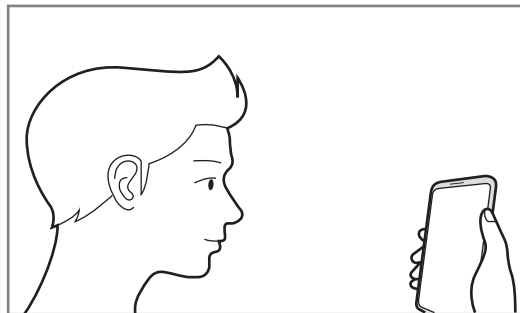
Consider the following when using face recognition:

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

Registering your face

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

- 1 On the Settings screen, tap **Biometrics and security** → **Face recognition**.
- 2 Read the on-screen instructions and tap **Continue**.
- 3 Set a screen lock method.
- 4 Select whether you are wearing glasses or not and tap **Continue**.
- 5 Hold the device with the screen facing towards you and look at the screen.



- 6 Position your face inside the frame on the screen.

The camera will scan your face.



- If unlocking the screen with your face is not working properly, tap **Remove face data** to remove your registered face and register your face again.
- To enhance the face recognition, tap **Add alternative look** and add an alternate appearance.

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** → **Remove**.

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 set the device to unlock the screen without swiping on the locked screen after recognising your face, tap the **Stay on Lock screen** switch to deactivate 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.
- If you want to increase the recognition rate in a dark place, tap the **Brighten screen** switch to activate it.

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

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

Fingerprint recognition

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

- Screen lock
- Secure Folder



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

For better fingerprint recognition

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

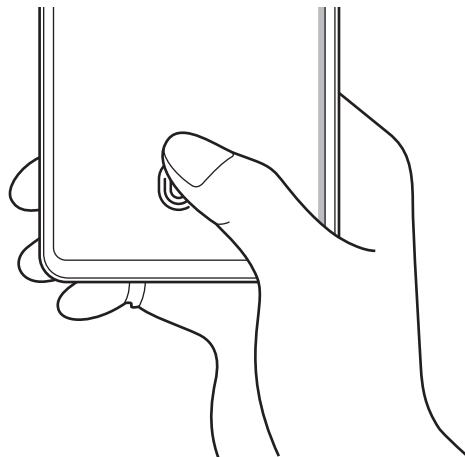
- The device may not recognise fingerprints that are affected by wrinkles or scars.
- The device may not recognise fingerprints from small or thin fingers.
- To improve recognition performance, register fingerprints of the hand used most often to perform tasks on the device.

- Your device has a built-in fingerprint recognition sensor at the bottom centre of the screen. Ensure that the screen protector or the touchscreen on the fingerprint recognition sensor area is not scratched or damaged by objects, such as coins, keys, pens, and necklaces.
- Ensure that the fingerprint recognition sensor area at the bottom centre of the screen and your fingers are clean and dry.
- If you bend your finger or use a fingertip, the device may not recognise your fingerprints. Press the screen so that your fingertip spreads over the wide surface of the fingerprint recognition area.

Registering fingerprints

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprints**.
- 2 Read the on-screen instructions and tap **Continue**.
- 3 Set a screen lock method.
- 4 Place your finger on the fingerprint recognition sensor at the bottom of the screen. After the device detects your finger, lift it up and place it on the fingerprint recognition sensor again.

Repeat this action until the fingerprint is registered.



- 5 When you are finished registering your fingerprints, tap **Done**.

Checking registered fingerprints

You can check whether your fingerprint is registered by placing your finger on the fingerprint recognition sensor.

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprints**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap **Check added fingerprints**.
- 4 Place your finger on the fingerprint recognition sensor.
The recognition result will be displayed.

Deleting registered fingerprints

You can delete registered fingerprints.

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

Unlocking the screen with your fingerprints

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

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

Changing the fingerprint recognition icon setting

Set the device to show or hide the fingerprint recognition icon when you tap the screen while the screen is turned off.

- 1 On the Settings screen, tap **Biometrics and security** → **Fingerprints**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap **Show icon when screen is off** and select an option.

Samsung Pass

Register your biometric data to Samsung Pass and easily verify your identity when using services which require your login or personal information.



- To use this feature, your device must be connected to a Wi-Fi or mobile network.
- To use this feature, you must sign in to your Samsung account. Refer to [Samsung account](#) for more information.
- The website sign-in feature is only available for websites that you access via the **Internet** app. Some websites may not support this feature.
- Registered biometric data is only saved to your device and are not synced with other devices or servers.


Registering Samsung Pass

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

On the Settings screen, tap **Biometrics and security** → **Samsung Pass**. Follow the on-screen instructions to complete the setup.

Verifying the Samsung account password

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

On the Samsung Pass main screen, tap  → **Settings** → **Samsung account**, and then tap the **Verify 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 ID 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**.

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 ID 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**.


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 Samsung Pass main screen, tap **Sign-in** and select a website or app from the list.
- 2 Tap **Edit** and modify your ID, password, and the website's or app's name.
To delete your sign-in information, 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, on the Samsung Pass main screen, tap  → **Partners**. If there are no websites or apps that support Samsung Pass, **Partners** 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.

Entering your personal information automatically

You can use Samsung Pass to easily enter your address or payment card information on apps that support personal information autofill.

1 On the Samsung Pass main screen, tap **Autofill forms** and select **Add address** or **Add card**.

2 Enter the information and tap **Save**.

You can now use the biometric data you registered to Samsung Pass when entering the personal information automatically on supported apps.

Deleting your Samsung Pass data

You can delete your biometric data, sign-in information, and app data registered to Samsung Pass.



- Your agreement to the terms and conditions and your Samsung account will remain active.
- The Samsung Pass data on other devices signed in to your Samsung account will not be deleted.

1 On the Samsung Pass main screen, tap **⋮** → **Settings** → **Delete data**.

2 Enter your Samsung account password and tap **OK**.

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.



To use Secure Folder, you must sign in to your Samsung account.

Setting up Secure Folder

- 1 Launch the **Settings** app and tap **Biometrics and security** → **Secure Folder**.
- 2 Agree to the terms and conditions of Secure Folder.
- 3 Enter your Samsung account ID and password and tap **Sign in**.
- 4 Select a lock method to use for Secure Folder and follow the on-screen instructions to complete the setup.

The Secure Folder screen will appear and the **Secure Folder** app icon (🔒) will be added to the Apps screen.

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



- 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 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 and exit**.

Moving content to Secure Folder

Move content, such as photos and videos, 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 Store**, tap **Download from Play Store** or **Download from Galaxy Store**.

Removing apps from Secure Folder

Tap and hold an app to delete, and 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, open the notification panel, swipe downwards, and then 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 follow the on-screen instructions to complete signing in to your Samsung account.
- 3 Tap **Back up Secure Folder data**.
- 4 Tick items you want to back up and tap **Back up**.
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 Tap **▼** to select a device to restore the data.
- 4 Tick items you want to restore and tap **Restore**.
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 up from Secure Folder, launch the **My Files** app and tap **Internal storage** → **Secure Folder**.



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

Privacy

Change the settings for privacy.

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

- **Permission manager:** View the list of features and apps that have permission to use them. You can also edit the permission settings.
- **Send diagnostic data:** Set the device to automatically send the device's diagnostic and usage information to Samsung.
- **Receive marketing information:** Set whether to receive Samsung marketing information, such as special offers, membership benefits, and newsletters.
- **Advanced:** Configure advanced settings for privacy.

Location

Change settings for location information permissions.

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

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

Accounts and backup

Options

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

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

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



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

Samsung Cloud


Sync the data saved in your device, such as images and videos, with Samsung Cloud and view the data you have saved on Samsung Cloud. You can also back up your device's data to Samsung Cloud and restore it later.



To use Samsung Cloud, you must sign in to your Samsung account.

Syncing data

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

- 1 On the Settings screen, tap **Accounts and backup** → **Samsung Cloud**.
- 2 Tap  → **Settings** → **Sync and auto backup settings** → **Sync**.
- 3 Tap the switches next to the items you want to sync with.




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

Backing up data

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


- 1 On the Settings screen, tap **Accounts and backup** → **Samsung Cloud** → **Back up this phone**.
- 2 Tick items you want to back up and tap **Back up**.
- 3 Tap **Done**.



- Some data will not be backed up. To check which data will be backed up, on the Settings screen, tap **Accounts and backup** → **Samsung Cloud** → **Back up this phone**.
- To view the backup data for other devices in your Samsung Cloud, on the Settings screen, tap **Accounts and backup** → **Samsung Cloud** → **Restore data** → , and then select a device you want.

Restoring data

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

- 1 On the Settings screen, tap **Accounts and backup** → **Samsung Cloud**.
- 2 Tap **Restore data** →  and select a device you want.
- 3 Tick items you want to restore and tap **Restore**.

Google

Configure settings for some features provided by Google.

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

Advanced features

Options

Activate advanced features and change the settings that control them.

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



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

- **Side key:** Select an app or feature to launch using the Side key. Refer to [Setting the Side key](#) for more information.
- **Bixby Routines:** Add routines to automate settings that you use repeatedly. The device also suggests useful routines according to your frequent situations. Refer to [Bixby Routines](#) for more information.
- **Call & text on other devices:** Use your device's calling and messaging features on other devices signed in to your Samsung account.



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

- **Link to Windows:** Instantly access data saved in your device on your computer. Refer to [Link to Windows](#) for more information.
- **Smart pop-up view:** Select apps to view their notifications via pop-up windows. When using this feature, you can quickly view the contents via pop-up windows by tapping the icon on the screen.



This feature is only available in apps that support the Multi window feature.

- **Screenshots and screen recorder:** Change the settings for screenshots and screen recorder.
- **Direct share:** Set the device to display the people you contacted on the sharing options panel to allow you to share content directly.
- **Reduce animations:** Set the device to reduce the screen effects of certain actions, such as opening or closing apps.
- **Motions and gestures:** Activate the motion feature and configure settings. Refer to [Motions and gestures](#) for more information.
- **One-handed mode:** Activate one-handed operation mode for your convenience when using the device with one hand.



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

- **Game Launcher:** Activate the Game Launcher. Refer to [Game Launcher](#) for more information.
- **Dual Messenger:** Install the second app and use two separate accounts for the same messenger app. Refer to [Dual Messenger](#) for more information.
- **Send SOS messages:** Set the device to send help messages by pressing the Side key three times.

Link to Windows

Instantly access data saved in your device, such as photos and messages, on your computer by using the same Microsoft account on your computer as your device.



This feature is only available on Windows 10 version 1803 or higher, and it is recommended to use version 1903 or higher.

- 1 On the Settings screen, tap **Advanced features** → **Link to Windows**.
- 2 Tap **Sign in with Microsoft**, sign in to your Microsoft account, and then tap **Continue**.
- 3 Tap **Show me** to view the computer setup procedures, follow the on-screen instructions to sign in on your computer, and then download the **Your Phone** app.
- 4 Tap **Continue** to complete the setup.

Motions and gestures

Activate the motion feature and configure settings.

On the Settings screen, tap **Advanced features** → **Motions and gestures**.

- **Lift to wake:** Set the device to turn on the screen when you pick it up.
- **Double tap to wake:** Set the device to turn on the screen by double-tapping anywhere on the screen while the screen is turned off.
- **Smart stay:** Set the device to prevent the display from turning off while you are looking at it.
- **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.
- **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.

- **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.