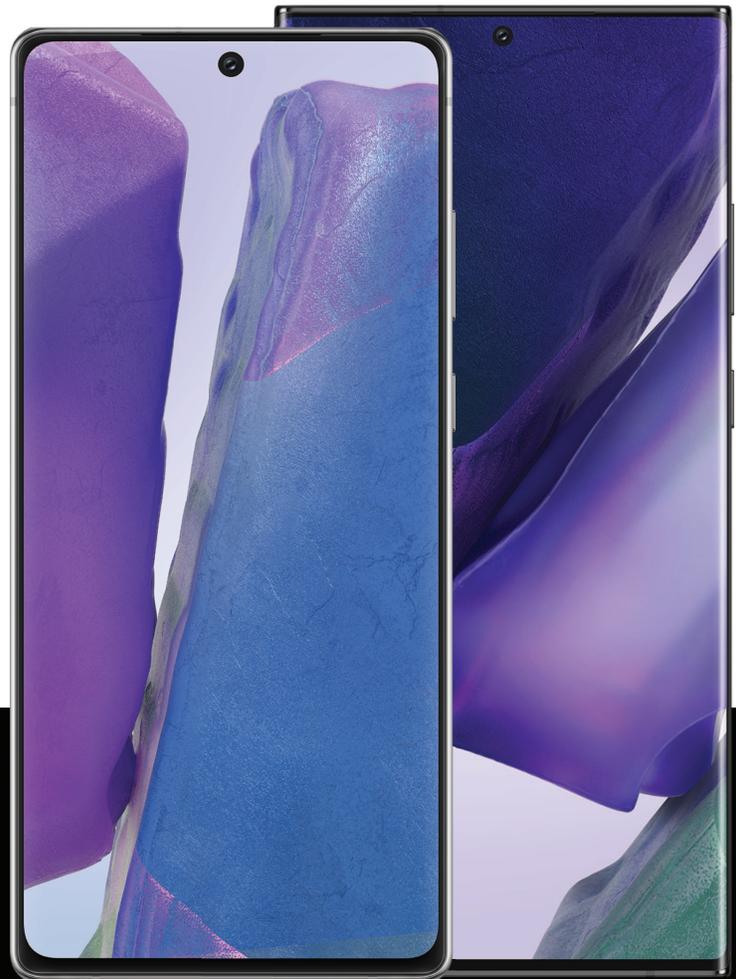


**SAMSUNG**  
**Galaxy Note20 5G | Note20 Ultra 5G**



**User manual**

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# Getting started

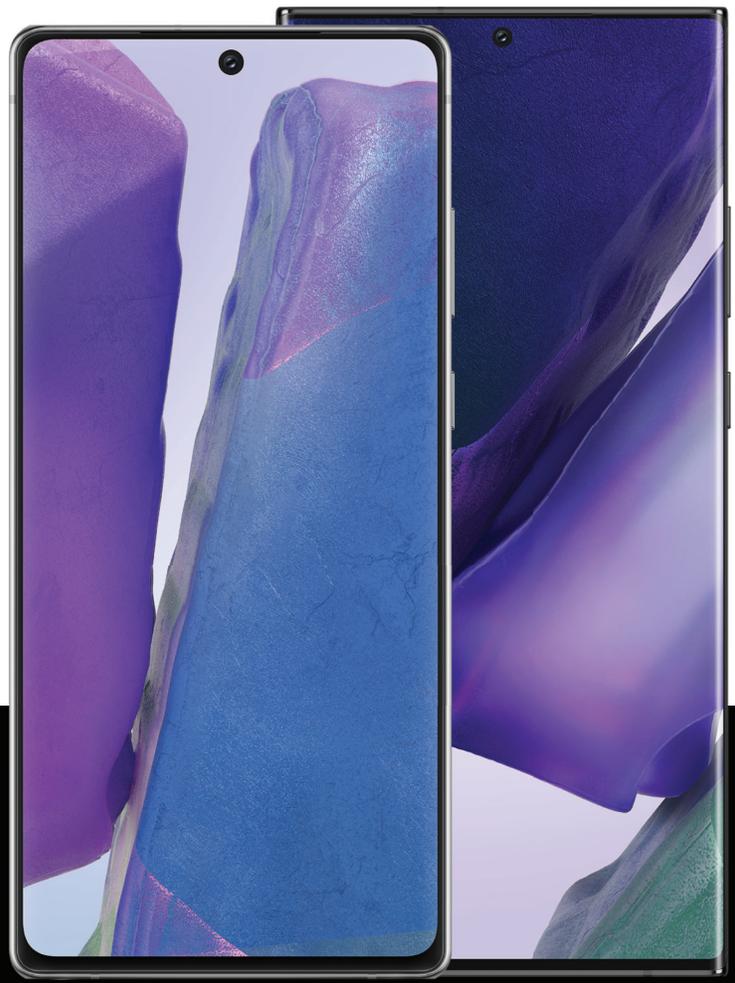
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Galaxy Note20 5G

Galaxy Note20 Ultra 5G

Set up your device

Start using your device



# Galaxy Note20 5G



# Galaxy Note20 Ultra 5G



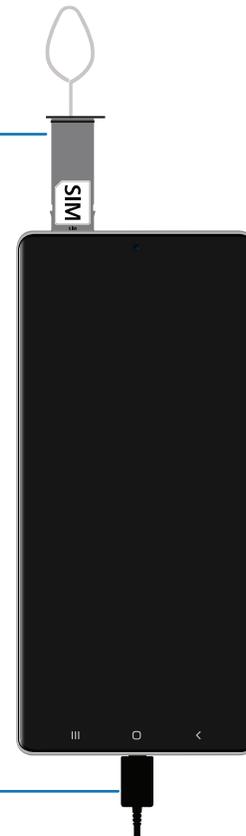
Devices and software are constantly evolving — the illustrations you see here are for reference only.

# Set up your device

[Charge the battery](#) | [Wireless power sharing](#)

## Install SIM/microSD card

Place the SIM card and optional microSD card (Galaxy Note20 Ultra 5G only; sold separately) into the tray with the gold contacts facing down.



## Charge your device

Before turning on your device, charge it fully.

 **NOTE** The use of mobile devices on an aircraft or a ship may be subject to federal and local guidelines and restrictions. Check with appropriate authorities and always follow crew instructions regarding when and how you may use your device.

 **NOTE** Use only charging devices and batteries (if applicable) that are approved by Samsung. Samsung charging devices and batteries are designed for your device to maximize battery life. Using other charging devices and batteries may void your warranty and may cause damage.

 **NOTE** Your device is IP68 rated for dust and water resistance. To maintain the water-resistant and dust-resistant features of your device, make sure that the SIM card/Memory card tray openings are maintained free of dust and water, and the tray is securely inserted prior to any exposure to liquids. For more information, see [Maintaining water and dust resistance](#).

## Charge the battery

Your device is powered by a rechargeable battery. A charger (charging head and USB Type-C cable) is included with the device for charging the battery from a power outlet.

 **TIP** While charging, the device and the charger may become hot and stop charging. This usually does not affect the device's lifespan or performance and is in the device's normal range of operation. Disconnect the charger from the device and wait for the device to cool down. For more information, visit [samsung.com/us/support/answer/ANS00076952](https://samsung.com/us/support/answer/ANS00076952).

## Wireless power sharing

Wirelessly charge your compatible Samsung devices using your phone. Some features are not available while sharing power.



1. From Settings, tap  **Battery and device care** > **Battery** > **Wireless power sharing**.
2. Tap **Battery limit** and choose a percentage. Once the device you are charging has reached this level of charge, wireless power sharing automatically turns off.
3. Tap  to turn on the charging feature.
4. With the phone face down, place the compatible device on the back of the phone to charge. A notification sound or vibration occurs when charging begins.

 **NOTE** Wireless power sharing works with most Qi-Certified devices. Requires minimum 30% battery to share. Speed and power efficiency of charge varies by device. May not work with some accessories, covers, or other manufacturer's devices. If you have trouble connecting or charging is slow, remove any cover from each device.

For best results when using Wireless power sharing, please note:

- Remove any accessories or cover before using the feature. Depending on the type of accessory or cover, Wireless power sharing may not work properly.
- The location of the wireless charging coil may vary by device, so you may need to adjust the placement to make a connection. When charging starts, a notification or vibration will occur, so the notification will help you know you've made a connection.
- Call reception or data services may be affected, depending on your network environment.
- Charging speed or efficiency can vary depending on device condition or surrounding environment.
- Do not use headphones while charging with Wireless power sharing.

## Start using your device

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## Turn on your device

Use the Side key to turn your device on. Do not use the device if the body is cracked or broken. Use the device only after it has been repaired.

- Press and hold the **Side** key to turn the device on.
  - To turn the device off, press and hold the **Side** and **Volume down** keys at the same time, and tap  **Power off**. Confirm when prompted.
  - To restart your device, press and hold the **Side** and **Volume down** keys at the same time, and tap  **Restart**. Confirm when prompted.



**TIP** To learn more about powering off your device from Settings, tap  **Advanced features** > **Side key** > **How to power off your phone**.

## Use the Setup Wizard

The first time you turn your device on, the Setup Wizard guides you through the basics of setting up your device.

Follow the prompts to choose a default language, connect to a Wi-Fi® network, set up accounts, choose location services, learn about your device's features, and more.

## Transfer data from an old device

Use Smart Switch™ to transfer contacts, photos, music, videos, messages, notes, calendars, and more from your old device. Smart Switch can transfer your data via USB cable, Wi-Fi, or computer.

Visit [samsung.com/us/support/owners/app/smart-switch](https://samsung.com/us/support/owners/app/smart-switch) to learn more.

1. From Settings, tap  Accounts and backup > Bring data from old device.
2. Follow the prompts and select the content to transfer.



Visit [samsung.com/smartswitch](https://samsung.com/smartswitch) for more information.

## Lock or unlock your device

Use your device's screen lock features to secure your device. By default, the device locks automatically when the screen times out. For more information about screen locks, see [Lock screen and security](#).



### Side key

Press to lock.

Press to turn on the screen, and then swipe the screen to unlock it.

## Side key settings

You can customize the shortcuts assigned to the Side key.

### Double press

Choose which feature is launched when the Side key is pressed twice.

1. From Settings, tap  **Advanced features** > **Side key**.
2. Tap **Double press** to enable this feature, and tap an option:
  - Quick launch camera (default)
  - Open Bixby
  - Open app

### Press and hold

Choose which feature is launched when you press and hold the Side key.

1. From Settings, tap  **Advanced features** > **Side key**.
2. Under the Press and hold heading, tap an option:
  - Wake Bixby (default)
  - Power off menu

## Accounts

Set up and manage your accounts.

 **TIP** Accounts may support email, calendars, contacts, and other features. See your carrier for more information.

### Add a Google Account

Sign in to your Google Account to access your Google Cloud Storage, apps installed from your account, and make full use of your device's Android™ features.

1. From Settings, tap  **Accounts and backup** > **Manage accounts**.
2. Tap  **Add account** > **Google**.

 **NOTE** When you sign in to a Google Account, Factory Reset Protection (FRP) is activated. FRP requires your Google Account information when resetting to factory settings. For more information, see [Factory Reset Protection](#).

## Add a Samsung account

Sign in to your Samsung account to access exclusive Samsung content and make full use of Samsung apps.

- From Settings, tap **Samsung account**.

## Add an Outlook account

Sign in to your Outlook® account to view and manage email messages.

1. From Settings, tap  **Accounts and backup** > **Manage accounts**.
2. Tap  **Add account** > **Outlook**.

## Set up voicemail

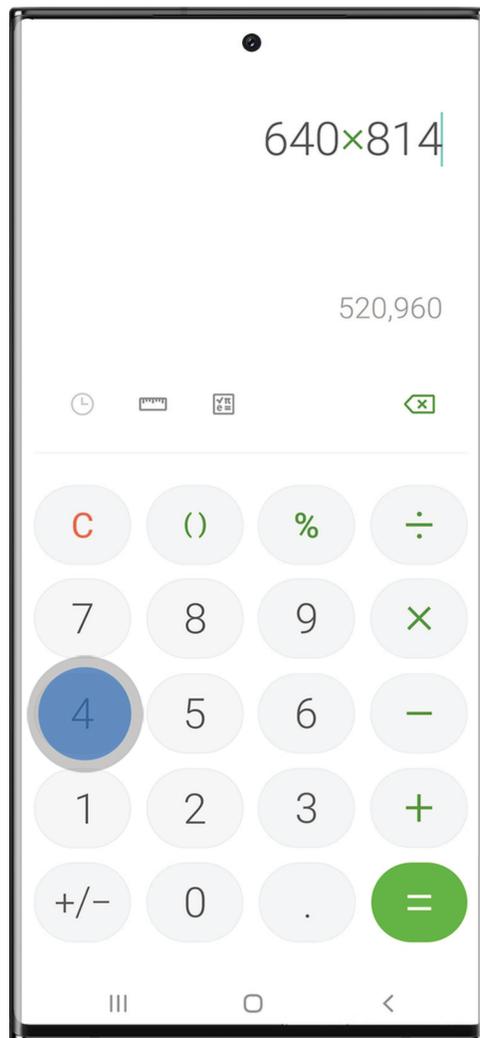
You can set up your voicemail service when you access it for the first time. You can access voicemail through the Phone app.

1. From  **Phone**, touch and hold the  **1** key.
2. Follow the tutorial to create a password, record a greeting, and record your name.

## Navigation

A touch screen responds best to a light touch from the pad of your finger or a capacitive stylus. Using excessive force or a metallic object on the touch screen may damage the surface of the screen and the damage will not be covered by the warranty.

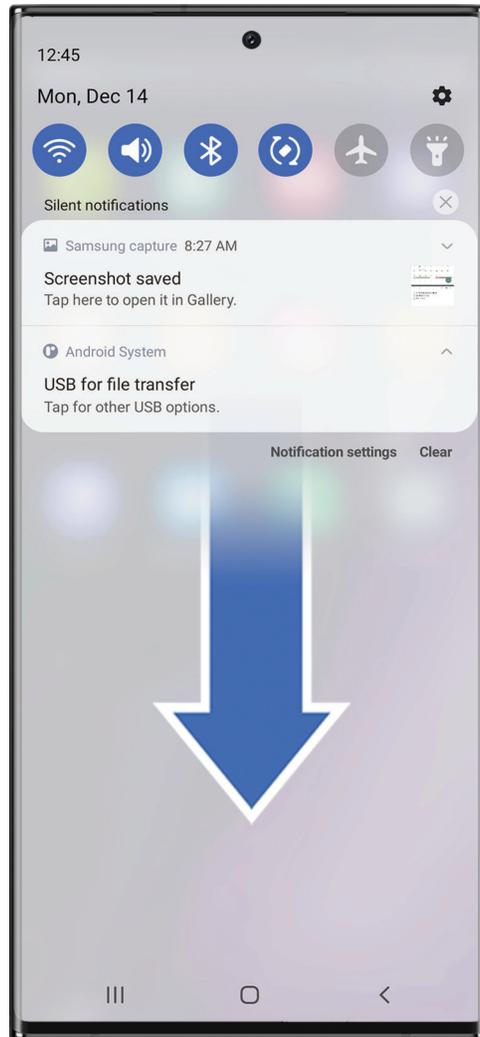
### Tap



Lightly touch items to select or launch them.

- Tap an item to select it.
- Double-tap an image to zoom in or out.

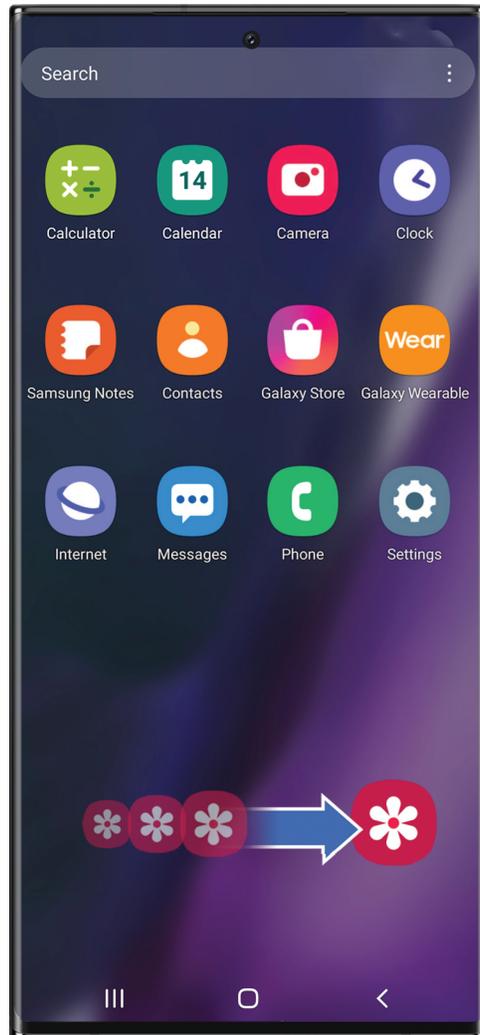
## Swipe



Lightly drag your finger across the screen.

- Swipe the screen to unlock the device.
- Swipe the screen to scroll through the Home screens or menu options.

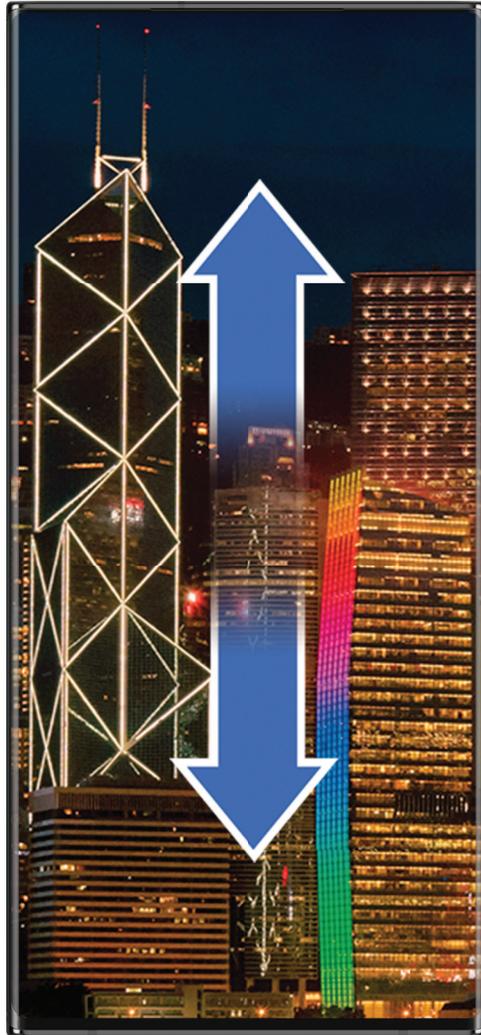
## Drag and drop



Touch and hold an item, and then move it to a new location.

- Drag an app shortcut to add it to a Home screen.
- Drag a widget to place it in a new location.

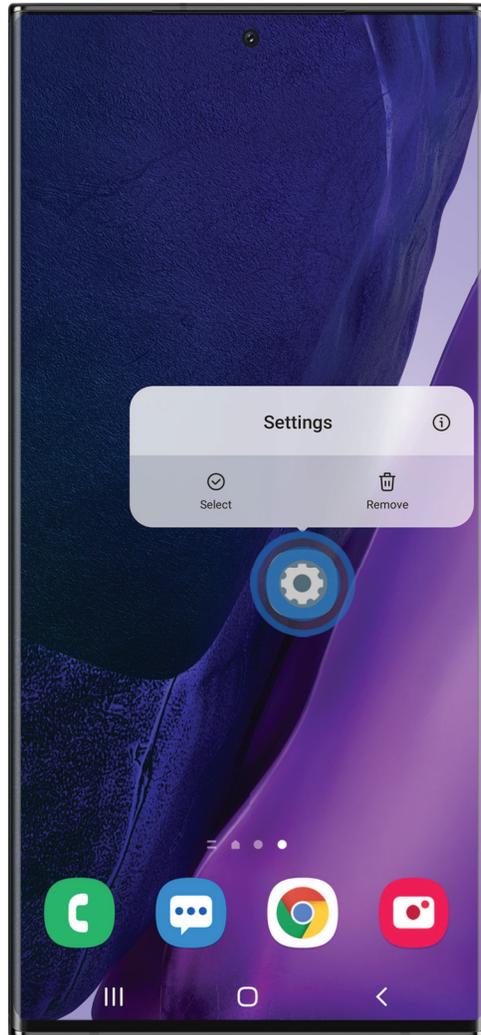
## Zoom in and out



Bring your thumb and forefinger together or apart on the screen to zoom in and out.

- Move your thumb and forefinger together on the screen to zoom out.
- Move your thumb and forefinger apart on the screen to zoom in.

## Touch and hold



Touch and hold items to activate them.

- Touch and hold a field to display a pop-up menu of options.
- Touch and hold a Home screen to customize the Home screen.

## Navigation bar

You may navigate your device by using either the navigation buttons or full screen gestures.



## Navigation buttons

Use buttons along the bottom of the screen for quick navigation.

1. From Settings, tap  **Display > Navigation bar > Buttons**.
2. Tap an option under **Button order** to choose which side of the screen the Back and Recent apps icons display.

## Navigation gestures

Hide the navigation buttons at the bottom of the screen for an unobstructed screen experience. Instead swipe to navigate your device.

1. From Settings, tap  **Display > Navigation bar > Swipe gestures** to enable the feature.
2. Tap an option to customize:
  - **More options:** Choose a gesture type and sensitivity.
  - **Gesture hints:** Display lines at the bottom of the screen where each screen gesture is located.
  - **Show button to hide keyboard:** Show an icon on the bottom right corner of the screen to hide the keyboard when the device is in portrait mode.
  - **Block gestures with S Pen:** Prevent the S Pen from making navigation gestures.

## Customize your home screen

The Home screen is the starting point for navigating your device. You can place your favorite apps and widgets here, in addition to setting up additional Home screens, removing screens, changing the order of screens, and choosing a main Home screen.

[App icons](#) | [Wallpaper](#) | [Themes](#) | [Icons](#) | [Widgets](#) | [Home screen settings](#) | [Easy mode](#) | [Status bar](#) | [Notification panel](#)

### App icons

Use app icons to launch an app from any Home screen.

- From Apps, touch and hold an app icon, and tap  **Add to Home**.

To remove an icon:

- From a Home screen, touch and hold an app icon, and then tap  **Remove**.

 **NOTE** Removing an icon does not delete the app, it just removes the icon from a Home screen.

### Wallpaper

Change the look of the Home and Lock screens by choosing a favorite picture, video, or preloaded wallpaper.

1. From a Home screen, touch and hold the screen, and then tap  **Wallpapers**.
2. Tap one of the following menus for available wallpapers:
  - **My wallpapers:** Choose from featured and downloaded wallpapers.
  - **Gallery:** Choose pictures and videos saved in the Gallery app.
  - **Apply Dark mode to Wallpaper:** Enable to apply Dark mode to your wallpaper.
  - **Explore more wallpapers:** Find and download more wallpapers from Galaxy Themes.
3. Tap a picture or video to choose it.
  - If choosing a single picture, choose which screen or screens you want to apply the wallpaper to.
  - Videos and multiple pictures can only be applied to the Lock screen.

- If choosing videos or pictures from the Gallery, tap on one or more items, and then tap **Done**.
4. Tap **Set on Home screen**, **Set on Lock screen**, or **Set on Lock and Home screens** (depending on which screens are applicable).
    - If applying a wallpaper to both the Home and Lock screens, enable **Sync my edits** if you want any edits made to that wallpaper to be applied to both screens.

## Themes

Set a theme to be applied to your Home and Lock screens, wallpapers, and app icons.

1. From a Home screen, touch and hold the screen.
2. Tap  **Themes**, and tap a theme to preview and download it.
3. Tap  **Navigation drawer** > **My stuff** > **Themes** to see downloaded themes.
4. Tap a theme, and then tap **Apply** to apply the selected theme.

## Icons

Apply different icon sets to replace the default icons.

1. From a Home screen, touch and hold the screen.
2. Tap  **Themes** > **Icons**, and tap an icon set to preview and download it.
3. Tap  **Navigation drawer** > **My stuff** > **Icons** to see downloaded icons.
4. Tap an icon, and then tap **Apply** to apply the selected icon set.

## Widgets

Add widgets to your home screens for quick access to info or apps.

1. From a Home screen, touch and hold the screen.
2. Tap  **Widgets**, and then tap a widget set to open it.
3. Swipe to the widget you want to add to the Home screen, and tap **Add**.

## Customize Widgets

Once you have added a widget, you can customize where it's located and how it functions.

- From a Home screen, touch and hold a widget, and tap an option:
  -  **Remove:** Delete a widget from your screen.
  -  **Settings:** Customize the function or appearance of the widget.
  -  **App info:** Review the widget usage, permissions, and more.

## Home screen settings

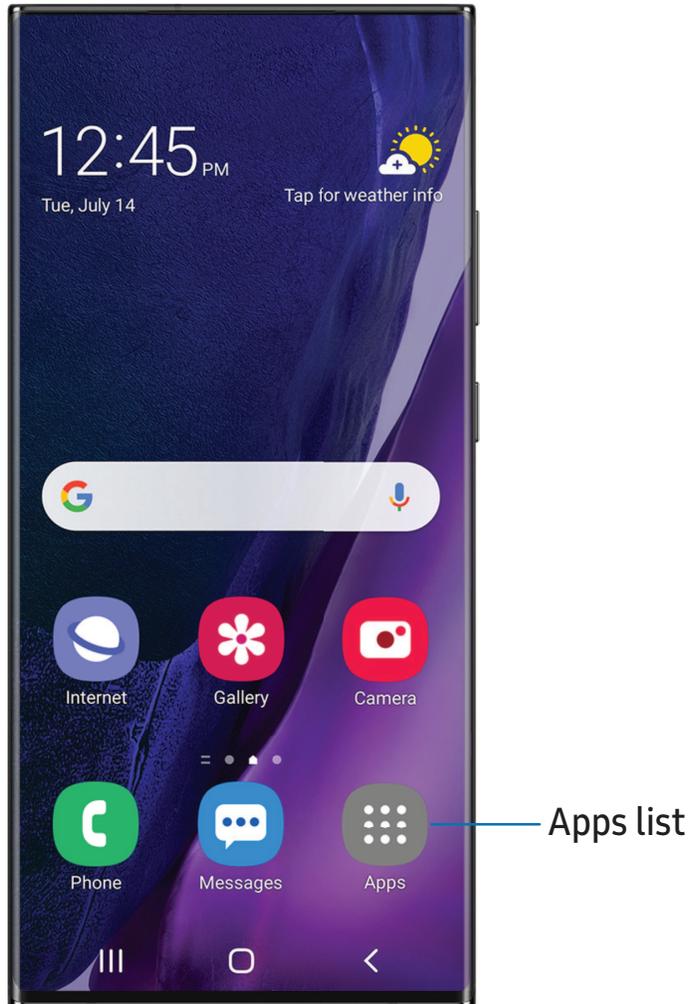
Customize your Home and Apps screens.

1. From a Home screen, touch and hold the screen.
2. Tap  **Settings** to customize:
  - **Home screen layout:** Set your device to have separate Home and Apps screens, or only a Home screen where all apps are located.
  - **Home screen grid:** Choose a layout to determine how icons are arranged on the Home screen.
  - **Apps screen grid:** Choose a layout to determine how icons are arranged on the Apps screen.
  - **Show Apps screen button on Home screen:** Add a button to the Home screen for easy access to the Apps screen.
  - **Lock Home screen layout:** Prevent items on the Home screen from being removed or repositioned.
  - **Add new apps to Home screen:** Automatically add newly-downloaded apps to the Home screen.
  - **Hide apps:** Choose apps to hide from the Home and App screens. Return to this screen to restore hidden apps. Hidden apps are still installed and can appear as results in Finder searches.
  - **App icon badges:** Enable to show badges on apps with active notifications. You can also choose the badge style.
  - **Swipe down for notification panel:** Enable this feature to open the Notification panel by swiping down anywhere on the Home screen.

- **Rotate to landscape mode:** Rotate the Home screen automatically when your device's orientation is changed from portrait to landscape.
- **About Home screen:** View version information.

## Easy mode

The Easy mode layout has larger text and icons, making for a more straightforward visual experience. Switch between the default screen layout and a simpler layout.



1. From Settings, tap  Display > Easy mode.
2. Tap  to enable this feature. The following options appear:
  - **Touch and hold delay:** Set how long it takes for a continuous touch to be recognized as a touch and hold.
  - **High contrast keyboard:** Choose a keyboard with high contrast colors.

## Status bar

The Status bar provides device information on the right side and notification alerts on the left.

### Status icons



Battery full



Charging



Mute



Vibrate



Airplane mode



Bluetooth active



Location active



Alarm

### Notification icons



Missed calls



Call in progress



New message



Voicemail



New email



Download



Upload



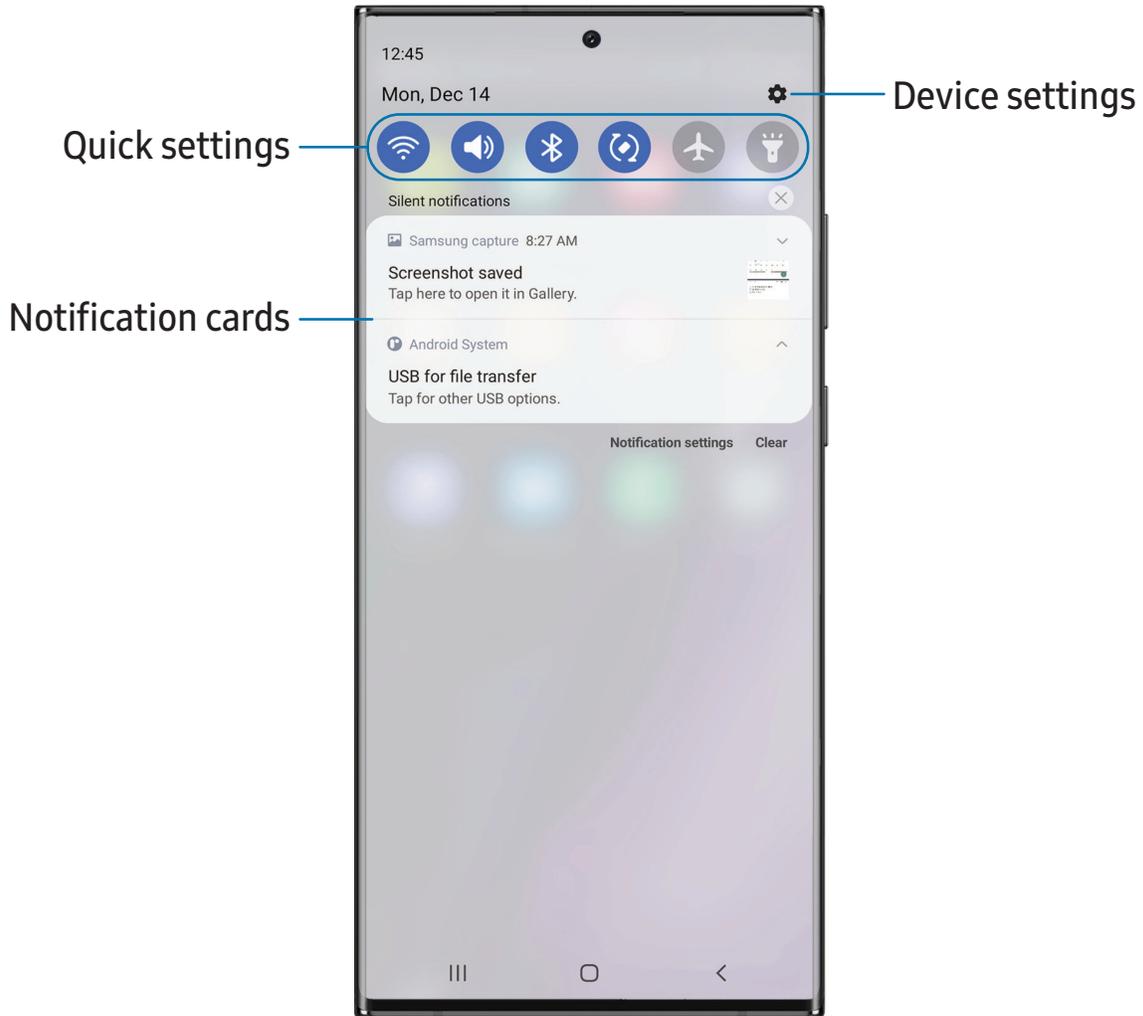
App update

Configure display options for the Status bar.

- From Quick settings, tap **More options** > **Status bar** for the following options:
  - **Show notification icons:** Choose how to display notification icons on the Status bar.
  - **Show battery percentage:** Display the battery charge percentage next to the battery icon on the Status bar.

## Notification panel

For quick access to notifications, settings, and more, simply open the Notification panel.



## View the Notification panel

You can access the Notification panel from any screen.

1. Swipe down on the screen to display the Notification panel.
  - To open an item, tap it.
  - To clear a single notification, drag the notification left or right.
  - To clear all notifications, tap **Clear**.
  - To customize notifications, tap **Notification settings**.
2. Drag upward from the bottom of the screen or tap  **Back** to close the Notification panel.

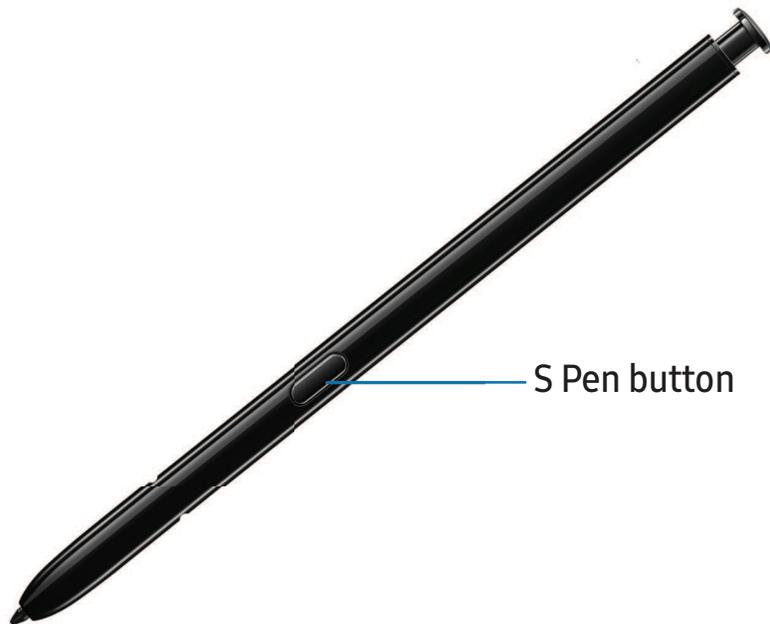
## Quick settings

The Notification panel provides quick access to device functions using Quick settings.

- Swipe down with two fingers from the top of the screen to display Quick settings.
  - Tap  **Finder search** to search the device.
  - Tap  **Power off** for Power off, Emergency mode, and Restart options.
  - Tap  **Open settings** to quickly access the device's settings menu.
  - Tap  **More options** to reorder Quick settings or to change the button layout.
  - Tap **Devices** to control other devices when supported apps like SmartThings or Google Home are installed.
  - Tap **Media** to access the Media panel and control playback of connected audio and video devices.
  - Tap a quick setting icon to turn it on or off.
  - Touch and hold a quick setting icon to open the setting.
  - Drag the **Brightness slider** to adjust the screen brightness.

## S Pen

The S Pen provides a variety of helpful functions. Use your S Pen to launch apps, take notes, or draw a picture. Some S Pen functions, such as charging or tapping the touchscreen, may not work if the device is near a magnet.



### Remove the S Pen

The S Pen stores in the bottom of your device for convenient access. It also charges the S Pen so that it can be used for remote functions.

- Push the S Pen inward to release it, and then slide it out.

 **NOTE** To maintain the water-resistant and dust-resistant features of your device, make sure the S Pen slot and opening are both kept free of dust and water, and the pen is securely inserted prior to any exposure to liquids.

## Air Actions

The S Pen can be used to perform remote functions using the button and movements or gestures. You can set up shortcuts to your favorite apps, navigate screens on your devices, complete actions, and more.

The S Pen remote feature is only supported by Samsung-approved S Pens with Bluetooth Low Energy (BLE). If the S Pen is too far from the device, or if there is interference, the S Pen disconnects from the device. The S Pen must be connected for Air actions to work.

### Hold the S Pen button shortcut

Set a shortcut when you press and hold the S Pen button. By default, this option is set to launch the Camera app.

1. From Settings, tap  **Advanced features** > **S Pen** > **Air actions**.
2. Tap **Hold down Pen button to**, and tap  to enable the feature.
3. Tap an option to set the shortcut.

## Anywhere actions

Anywhere actions are configurable shortcuts that are accessed by holding the S Pen button while making one of the following gestures: up, down, left, right, or shake. These can be accessed from any screen and can include navigation, S Pen features, or apps.

	Action	Gesture
	Back	Left to right
	Recent apps	Right to left
	Home	Up and down
	Smart select	Down and up
	Screen write	Zigzag

You can change the Anywhere actions in Settings.

1. From Settings, tap  **Advanced features** > **S Pen** > **Air actions**.
2. Tap a Gesture icon under Anywhere actions to customize the shortcut.

## App actions

You can use your S Pen to do specific actions in certain apps. These are some of the default App actions:

	Single Press	Double Press	Up/Down	Left/Right	Rotate	
	Camera	Take picture	Switch cameras	Switch cameras	Next/Previous mode	Zoom in/out
	Gallery	Next	Previous	View details	Next/Previous	
	Media	Play/Pause	Play next	Volume up/down	Play previous/next	

You can change the app actions in Settings.

1. From Settings, tap  **Advanced features** > **S Pen** > **Air actions**.
2. Tap an app to view the available shortcuts.
3. Tap  to enable the shortcuts while using that app.

## General app actions

You can customize some general actions while using camera and media apps not specified in the app action list.

1. From Settings, tap  **Advanced features** > **S Pen** > **Air actions**.
2. Under General app actions, tap an action to change it.

## Air view

Hover the S Pen over the screen to preview content or view information about an item on the screen. The following Air view features are available:

- Preview an email message before opening it.
- Preview the contents of a photo album or enlarge a picture.
- Preview a video and navigate to a specific scene by hovering over the timeline.
- View the name or description of an icon or a button.

 **NOTE** The preview function is only available when the S Pen's on-screen pointer is a solid color.

## Screen off memo

You can write memos without turning on the screen.

1. Detach the S Pen while the screen is off, and write on the screen.
2. Tap an option to customize your memo:
  -  **Color:** Change the pen color.
  -  **Pen settings:** Tap to use the pen tool. Double tap to adjust the line thickness.
  -  **Eraser:** Tap to use the eraser tool. Double tap to erase all.
3. Tap **Save** to save your memo to the Samsung Notes app.

 **NOTE** The screen off memo setting must be enabled. For more information, see [Configure S Pen settings](#).

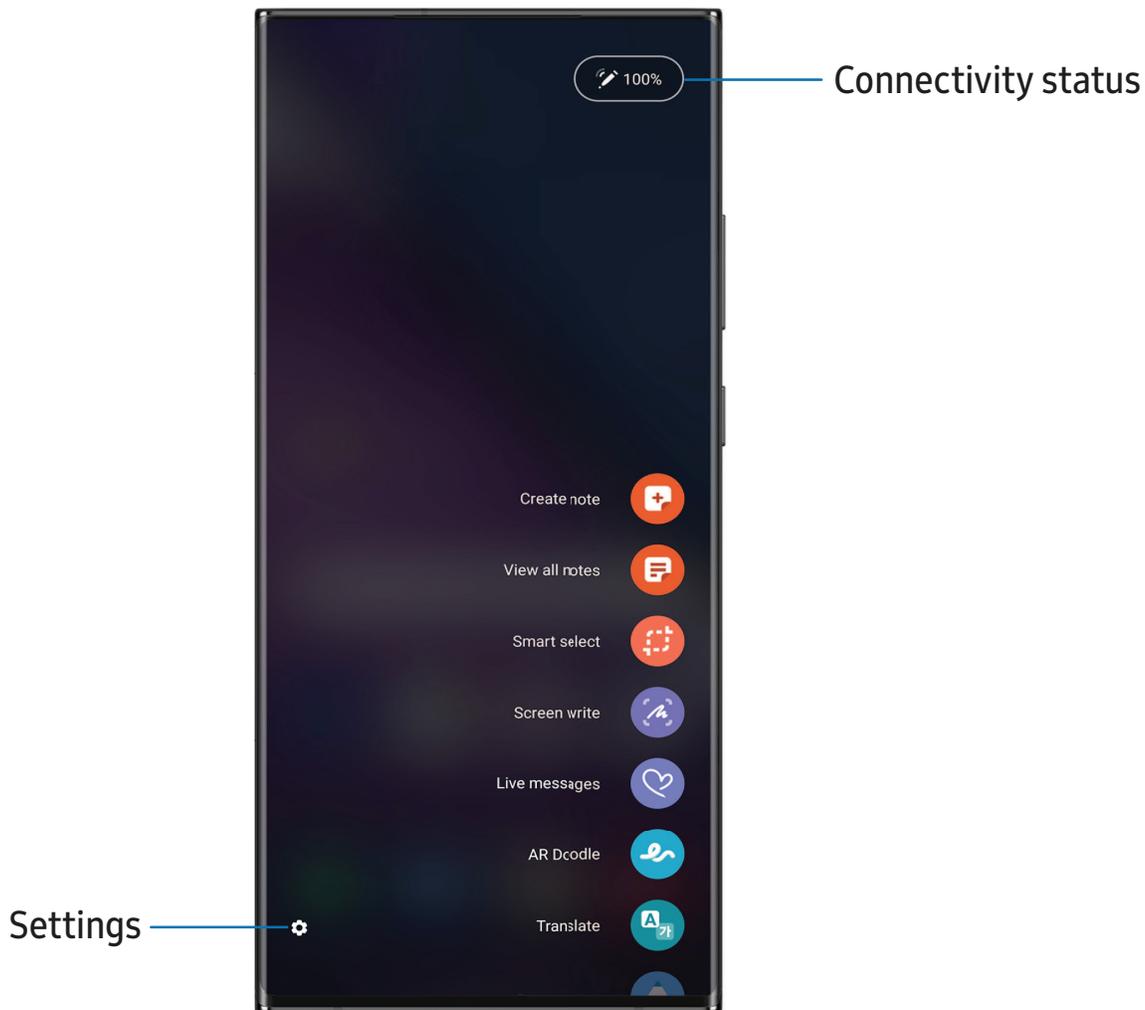
## Pin to Always On Display

You can pin or edit a memo on the Always On Display.

1. From your screen off memo, tap  **Pin to Always on Display**.
2. Tap **Pin to Always On Display**.

## Air command

Access signature S Pen features from any screen, including Smart select, Screen write, and Samsung Notes.



1. Tap  **Air command** or hold the S Pen near the screen so that the pointer appears, and then press the **S Pen** button once.
2. Tap an option:
  -  **Create note**: Launch a new note in the Samsung Notes app.
  -  **View all notes**: Launch the Samsung Notes app and view a listing of the notes you have created.

-  **Smart select:** Draw around an area of the screen to collect it in the Gallery app.
-  **Screen write:** Capture screenshots and write or draw on them.
-  **Live messages:** Create a short animated message by drawing or writing with the S Pen.
-  **AR Doodle:** Draw interactive doodles using the AR camera feature.
-  **Translate:** Hover the S Pen over a word to see it translated into another language and listen to its pronunciation.
-  **PENUP:** Use the S Pen to draw, color, edit, and share live drawings.
-  **Add shortcuts:** Add more apps or functions to the Air command menu.
-  **Settings:** Customize Air command by configuring apps and functions, and by changing how the Air command menu appears.

### Create note

Launch a new note directly in the Samsung Notes app. For more information, see [Samsung Notes](#).

- Tap  Air command >  Create note.

### View all notes

Launch the Samsung Notes app and view a listing of the notes you have created.

- Tap  Air command >  View all notes.

### Smart select

The Smart select feature allows you to copy content from any screen. You can then add it to your Gallery app or share it with your contacts.

1. Tap  Air command >  Smart select.
2. Tap a shape in the menu, and then drag the S Pen to select content. The following options appear:
  - **Extract text:** Identify and extract text from the selected content.
  - **Pin to screen:** Place a shortcut to the collected content on a Home screen.
  -  **Auto select:** Allow Smart select to automatically select content to extract.

-  **Draw:** Draw on the captured content.
  -  **Share:** Choose a sharing method to share your content.
3. Tap  **Save.**

## Screen write

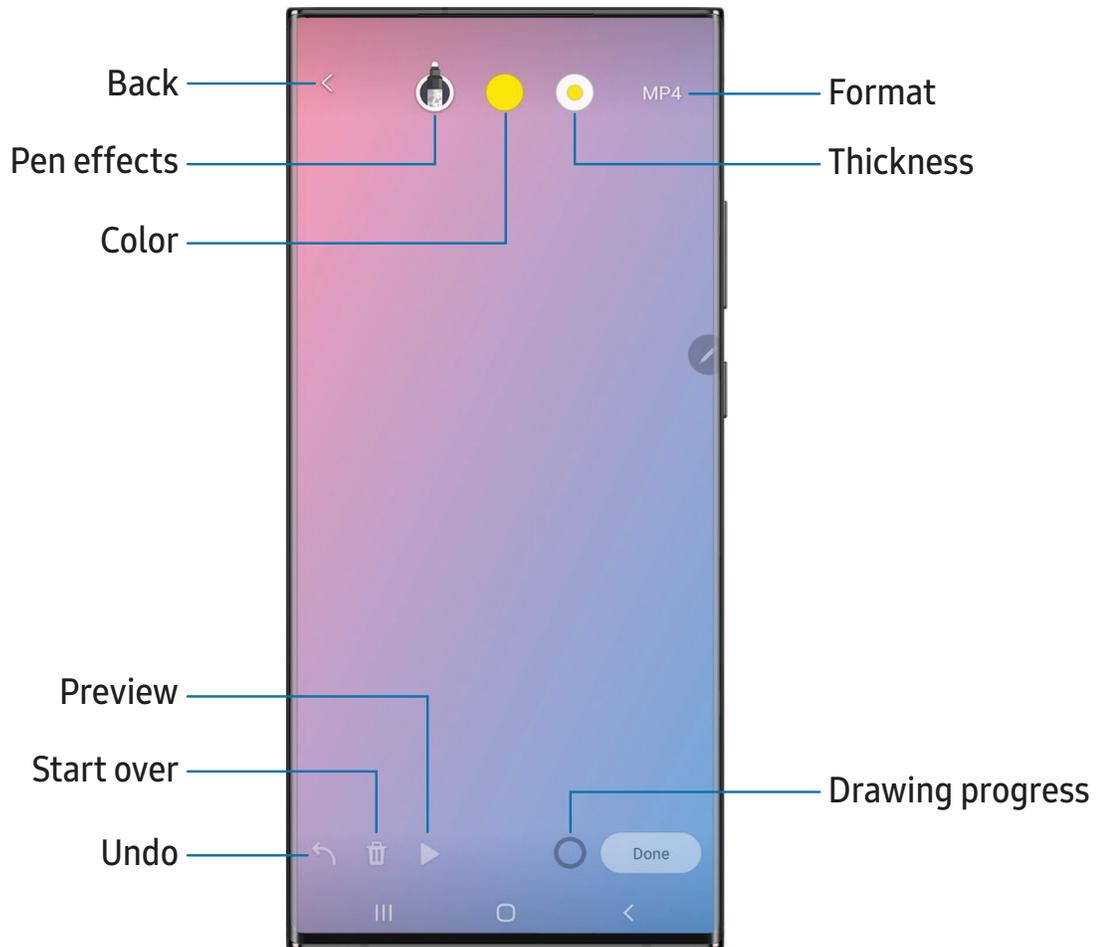
Screen write allows you to capture screenshots and write or draw on them.

1. Tap  **Air command** >  **Screen write.**
2. The current screen is captured, and a pen tool appears. The following editing tools are provided:
  - **Crop:** Drag the edges of the screen to crop the captured content.
  - **Pen type:** Draw on the screenshot. Tap the Pen icon a second time to change the pen tip, size, and color.
  - **Eraser:** Erase the writing or drawings on the screenshot.
  - **Undo:** Reverse the last action.
  - **Redo:** Repeat the last action that was undone.
  - **Share:** Choose a sharing method to share your content.
3. Tap  **Save.** The content is saved to the Gallery app.

 **TIP** Hold the **S Pen** button to erase your drawings on the screen memo.

## Live messages

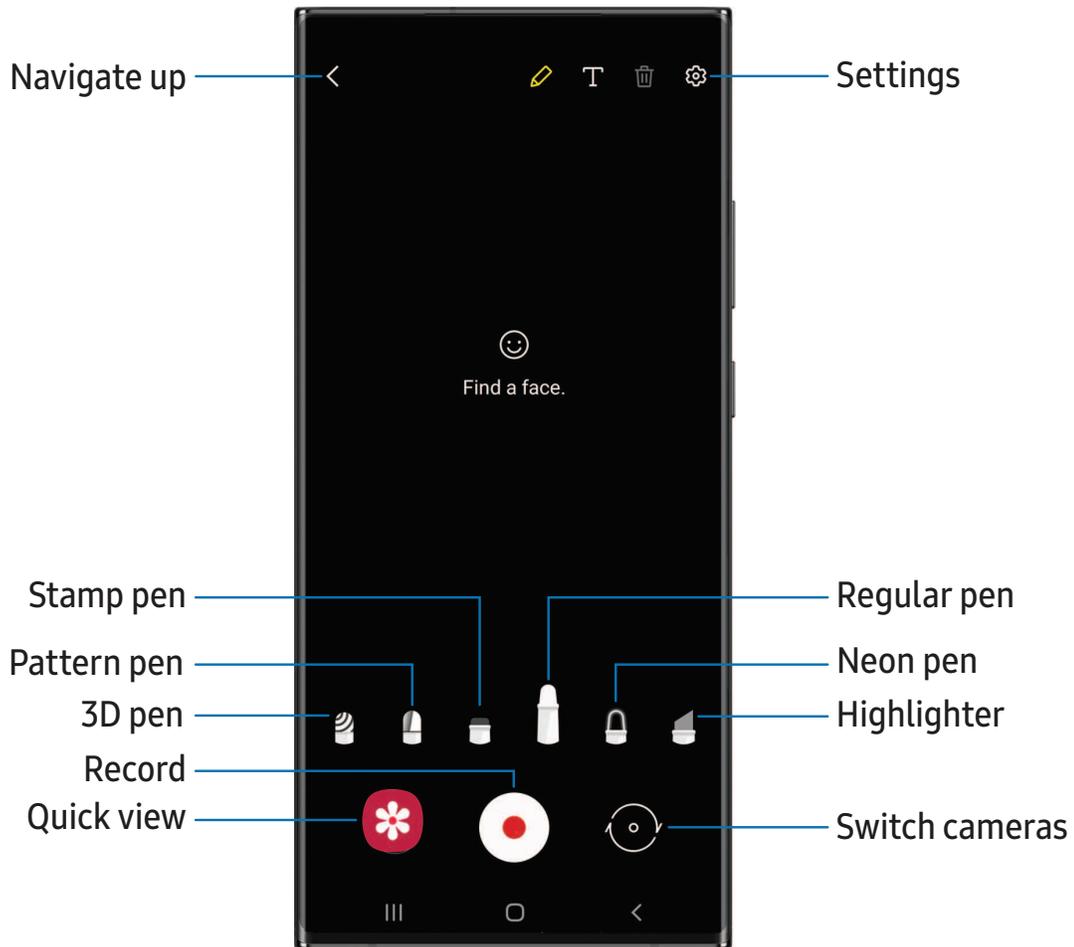
Record an animated drawing or written message.



1. Tap  Air command >  Live messages.
2. Select one of the following background options:
  - **Collection:** See all live messages you have created.
  - **Gallery:** Pick an image or video for the background.
  - **Camera:** Capture an image to use for the background.
  - **Color:** Pick a color for the background.
3. Follow the prompts to begin creating your live message.
4. Tap **Done** to save.

## AR Doodle

Draw interactive doodles on faces or other objects seen through the camera using augmented reality.



1. Tap  Air command >  AR Doodle.
2. Select either the front or rear cameras by tapping  Switch cameras.
3. Position the camera so that your target is in the center of the screen.
4. Use the S Pen to draw a doodle.
  - The doodle follows the movements of the face in real-time.
5. Tap  Record to save a video of your AR Doodle.

## Translate

Hover over words with the S Pen to translate them and listen to their pronunciation.

1. Tap  Air command >  Translate.
2. Tap the source and target languages to change them to the desired languages.
3. Hover the S Pen over a word.
  - Tap  Sound to hear the word pronounced in the source language.
  - Tap  Copy to save the selected text and the translation to your clipboard.
4. Tap  Close to close Translate.

## PENUP

Use the S Pen to draw, color, edit, and share live drawings. For more information, see [PENUP](#).

- Tap  Air command >  PENUP.

## Add shortcuts

You can customize the Air command menu by adding shortcuts to apps and functions.

1. Tap  Air command >  Add shortcuts.
2. Tap the apps or functions you would like to add to the Air command menu.
  - To remove an app shortcut, tap  Remove.
3. Tap  Navigate up to save your selection.

## Configure S Pen settings

To configure S Pen settings:

- From Settings, tap  Advanced features > S Pen to configure the following settings:
  - **Air actions:** Configure how the remote control functions while using apps.
  - **S Pen unlock:** Use the S Pen button to unlock the device. A secure screen lock must be set to use this feature.

- **Screen off memo:** Create Screen off memos by detaching the S Pen while the screen is turned off and then writing on the screen. Screen off memos are saved in Samsung Notes.
- **Create note with Pen button:** Press and hold the S Pen button, then tap the screen twice with your S Pen to start a new note.
- **Air view:** Turn Air view on or off.
- **Show pointer when hovering:** Turn the pointer on or off. The pointer appears on the screen when the tip of the S Pen is near the screen, showing available actions.
- **Allow multiple S Pens:** Let other S Pens write on the screen.

### **Air Command**

- **Shortcuts:** Configure the Air command menu with S Pen features, apps, and functions.
- **Show floating icon:** Show an Air command icon that you can move around the screen.
- **Open Air command with Pen button:** Open the Air command menu when you hover your S Pen over the screen and press the Pen button.

### **Removal**

- **When S Pen is removed:** Choose what happens when you detach the S Pen. Choose **Open Air command**, **Create note**, or **Do nothing**.
- **Pen proximity alert:** Set your device to show a warning if you leave your S Pen and walk away while the screen is off.

### **Feedback**

- **Sound:** Set your device to make sounds when the S Pen is attached and detached, and when writing on the screen.
- **Vibration:** Activate vibration feedback when the S Pen is attached and detached.

## General

- **Tips for using your S Pen:** Find out how to use S Pen features.
- **About S Pen features:** View version information for the S Pen features.
- **Contact us:** Contact Samsung support through Samsung Members.

## Bixby

Bixby is a virtual assistant that learns, evolves, and adapts to you. It learns your routines, helps you set up reminders based on time and location, and is built in to your favorite apps. Visit [samsung.com/us/support/owners/app/Bixby](https://samsung.com/us/support/owners/app/Bixby) for more information.

- From a Home screen, press and hold the **Side** key.

 **TIP** You can also access Bixby from the Apps list.

## Bixby Routines

You can use Bixby to show you information or change device settings based on where you are and what you are doing.

- From Settings, tap  **Advanced features** > **Bixby Routines**.

## Bixby Vision

Bixby is integrated with your Camera, Gallery, and Internet apps to give you a deeper understanding of what you see. It provides contextual icons for translation, QR code detection, landmark recognition, or shopping.

### Camera

Bixby Vision is available on the Camera viewfinder to help understand what you see.

- From  **Camera**, tap **More** > **Bixby Vision** and follow the prompts.

### Gallery

Bixby Vision can be used on pictures and images saved in the Gallery app.

1. From  **Gallery**, tap a picture to view it.
2. Tap  **Bixby Vision** and follow the prompts.

## Internet

Bixby Vision can help you find out more about an image you find in the Internet app.

1. From  **Internet**, touch and hold an image until a pop-up menu is displayed.
2. Tap **Search with Bixby Vision** and follow the prompts.

## Digital wellbeing and parental controls

You can monitor and manage your digital habits by getting a daily view of how frequently you use apps, how many notifications you receive, and how often you check your device. You can also set your device to help you wind down before going to bed.

- From Settings, tap  **Digital wellbeing and parental controls** for the following features:
  - Tap the Dashboard to view the following:
    - **Screen time**: View how long an app has been opened and used each day.
    - **Notifications received**: View how many notifications have been received from an app each day.
    - **Unlocks**: View how many times an app has been opened each day.

### Your goals

- **Screen time**: Set a screen time goal and view your daily average.
- **App timers**: Set a daily limit for how long you use each app.

### Ways to disconnect

- **Focus mode**: Limit app usage for set periods of time to avoid distractions from your device.
- **Bedtime mode**: Schedule when to change the screen to grayscale and mute calls, alerts, and other sounds.

### Comfort care

- **Volume monitor**: Choose a sound source to monitor the volume and keep your ears safe.

## Check on your kids

- **Parental controls:** Supervise your children's digital life with Google's Family Link app. You can choose apps, set content filters, keep an eye on screen time, and set screen time limits.

## Always On Display

View missed calls and message alerts, check the time and date, and view other customized information without unlocking your device using Always On Display (AOD).

1. From Settings, tap  **Lock screen** > **Always On Display**.
2. Tap  to enable the feature, and then set the following options:
  - Choose when to show a clock and notifications on the screen when your device is not in use: **Tap to show for 10 seconds**, **Show always**, or **Show as scheduled**.
  - **Clock style:** Change the style and color options for the clock on the Lock screen and Always on Display.
  - **Show music information:** Show music details when the FaceWidgets music controller is in use.
  - **Screen orientation:** Display the AOD in portrait or landscape mode.
  - **Auto brightness:** Automatically adjust the brightness of Always On Display.
  - **About Always On Display:** View the current software version and license information.

 **NOTE** Some display settings can appear on both the Lock screen and Always On Display. For more information, see [Clock and information](#).

## AOD themes

Apply custom themes for Always On Display.

1. From a Home screen, touch and hold the screen, and tap  **Themes** > **AODs**.
  - Tap an AOD to preview and download it to My Always On Displays.
2. Tap  **Navigation drawer** > **My stuff** > **AODs** to see downloaded themes.
3. Tap an AOD, and then tap **Apply**.

## Biometric security

Use biometrics to securely unlock your device and log in to accounts.

### Face recognition

You can enable Face Recognition to unlock your screen. To use your face to unlock your device, you must set a pattern, PIN, or password.

- Face recognition is less secure than Pattern, PIN, or Password. Your device could be unlocked by someone or something that looks like your image.
  - Some conditions may affect face recognition, including wearing glasses, hats, beards, or heavy make-up.
  - When registering your face, ensure that you are in a well-lit area and the camera lens is clean.
1. From Settings, tap  **Biometrics and security** > **Face recognition**.
  2. Follow the prompts to register your face.

### Face recognition management

Customize how face recognition works.

- From Settings, tap  **Biometrics and security** > **Face recognition**.
  - **Remove face data:** Delete existing faces.
  - **Add alternative look:** Enhance face recognition by adding an alternative appearance.
  - **Face unlock:** Enable or disable face recognition security.

- **Stay on Lock screen until swipe:** When you unlock your device with face recognition, stay on the Lock screen until you swipe the screen.
- **Faster recognition:** Turn on for faster face recognition. Turn off to increase security and make it harder to unlock using an image or video of your likeness.
- **Require open eyes:** Facial recognition will only recognize your face when your eyes are open.
- **Brighten screen:** Increase the screen brightness temporarily so that your face can be recognized in dark conditions.
- **About unlocking with biometrics:** Learn additional information about securing your device with biometrics.

### Fingerprint scanner

Use fingerprint recognition as an alternative to entering passwords in certain apps. You can also use your fingerprint to verify your identity when logging in to your Samsung account. To use your fingerprint to unlock your device, you must set a pattern, PIN, or password.

1. From Settings, tap  **Biometrics and security** > **Fingerprints**.
2. Follow the prompts to register your fingerprint.

### Fingerprint management

Add, delete, and rename fingerprints.

- From Settings, tap  **Biometrics and security** > **Fingerprints** for the following options:
  - The list of registered fingerprints is at the top of this list. You can tap a fingerprint to remove or rename it.
  - **Add fingerprint:** Simply follow the prompts to register another fingerprint.
  - **Check added fingerprints:** Scan your fingerprint to see if it has been registered.

## Fingerprint verification settings

Use fingerprint recognition to verify your identity in supported apps and actions.

- From Settings, tap  **Biometrics and security** > **Fingerprints**.
  - **Fingerprint unlock:** Use your fingerprint for identification when unlocking your device.
  - **Show icon when screen is off:** Show the fingerprint icon when the screen is off.
  - **Show animation when unlocking:** Show an animation when you use fingerprint verification.
  - **About unlocking with biometrics:** Read details on the requirements each biometric security feature has for using your pattern, PIN, or password as a backup.

## Biometrics settings

Configure your preferences for biometric security options.

- From Settings, tap  **Biometrics and security** > **More biometrics settings** for the following:
  - **Show unlock transition effect:** Show a transition effect when you use biometrics to unlock your device.
  - **Biometrics security patch:** View the software version of the biometric security features.

## Mobile continuity

Access storage and other functions of your device across compatible mobile devices and computers.

[Link to Windows](#) | [Samsung DeX](#) | [Continue apps on other devices](#)

### Link to Windows

Achieve mobile continuity between your Samsung device and Windows-based PCs. Get instant access to your device's photos, messages, and more on a PC by linking your devices.

#### Pictures

- Drag and drop pictures to Windows.
- Open and edit pictures in the Your Photos app.
- Share images with your contacts through Windows.

#### Messages (SMS/MMS)

- MMS group messaging support.
- Integration with Windows Emoji Picker.
- Get a Windows pop-up when receiving a new message.

#### Notifications

- See and manage phone notifications from your PC.
- Exclude notifications from individual phone apps.
- Get a Windows pop-up when receiving a new notification.

#### App mirroring

- Live stream your phone screen on your PC.
- Interact with your phone using the keyboard and mouse.
- Use Windows Accessibility.

## Link your device to your computer

1. From Settings, tap  **Advanced features** > **Link to Windows**.
2. Follow the prompts to connect your device to your PC.

 **TIP** You can also enable this feature from the Quick settings menu.

## Samsung DeX

Connect your device to a PC or TV for an enhanced multitasking experience.

- Send DeX to your TV and keep using your device, or turn your device into a trackpad.
- Connect to a TV or monitor either wirelessly or with an HDMI cable.
- Get DeX on your PC for quick and easy file transfers.

Visit [samsung.com/us/explore/dex](https://samsung.com/us/explore/dex) for more information.

## Enable DeX

1. From Settings, tap  **Advanced features** > **Samsung DeX**.
2. Tap  to turn on the feature.
3. Follow the instructions on your device to connect to your TV or PC.
  - If connecting to a PC, download the DeX app on to your computer at [samsungdex.com](https://samsungdex.com).

## Continue apps on other devices

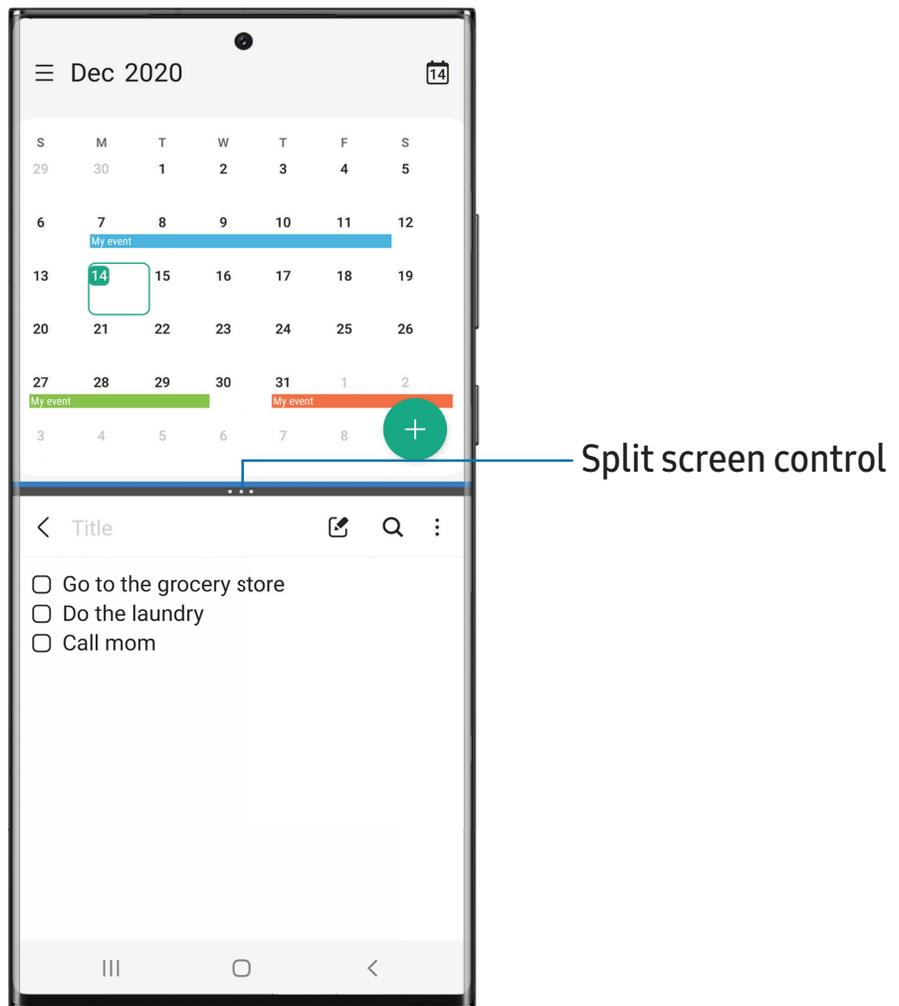
This feature allows you to make and answer calls and text messages from your Galaxy devices that are signed in to your Samsung account.

1. From Settings, tap  **Advanced features** > **Call & text on other devices**.
2. Tap  to turn on the feature. Connection occurs automatically.
3. Sign in to your Samsung account on your Galaxy devices.

 **TIP** Move your contacts from your device to your Samsung account so you can access them on all registered devices.

## Multi window

Multitask by using multiple apps at the same time. Apps that support Multi window™ can be displayed together on a split screen. You can switch between the apps and adjust the size of their windows.



1. From any screen, tap **Recent apps**.
2. Tap the app icon, and then tap **Open in split screen view**.
3. Tap an app in the other window to add it to the split screen view.
  - Drag the middle of the window border to adjust the window size.

## Window controls

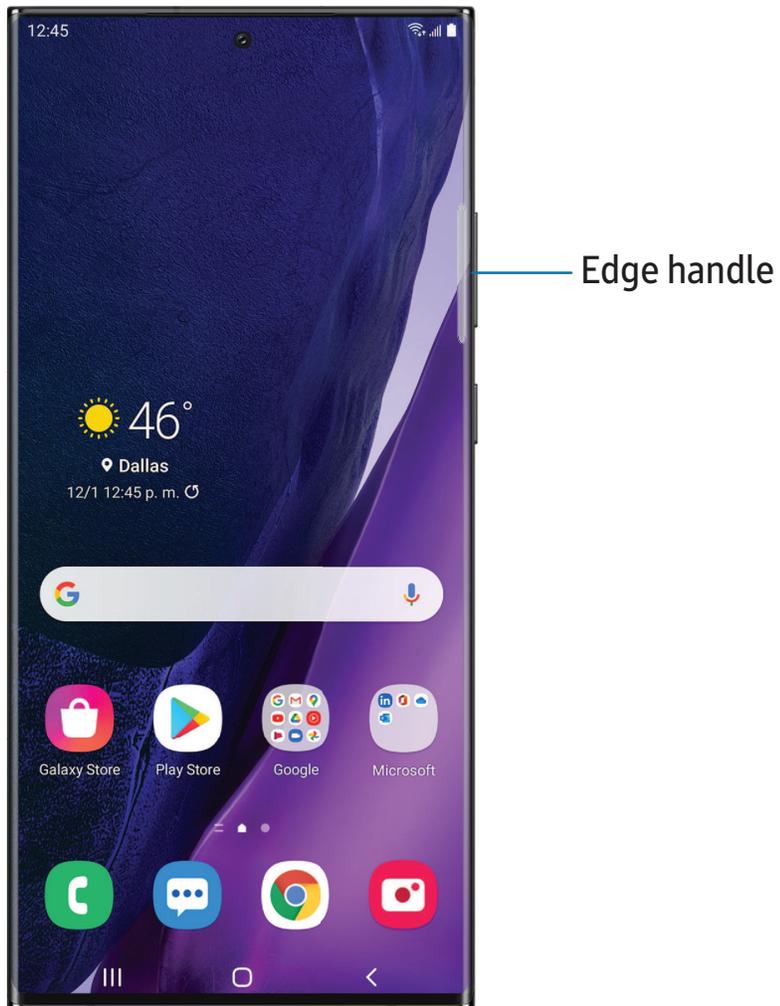
The Window controls modify the way app windows are displayed in split screen view.

1. Drag the middle of the window border to resize the windows.
2. Tap the middle of the window border for the following options:
  -  **Switch window:** Swap the two windows.
  -  **Add app combo to Edge panel:** Create and add an app pair shortcut to the Apps panel on the Edge screen.

## Edge panels

The Edge panels feature a variety of customizable panels that can be accessed from the edge of the screen. Edge panels can be used to access apps, tasks, and contacts, as well as view news, sports, and other information.

[Apps panel](#) | [Configure Edge panels](#) | [Edge panel position and style](#) | [About Edge panels](#)



## Apps panel

You can add up to ten apps in two columns to the Apps panel.

1. From any screen, drag the **Edge handle** to the center of the screen. Swipe until the Apps panel is displayed.
2. Tap an app or app pair shortcut to open it. You can also tap  **All apps** for the complete app list.
  - To open additional windows in pop-up view, drag the app icon from the Apps panel to the open screen.

To configure Apps panel:

1. From any screen, drag the **Edge handle** to the center of the screen. Swipe until the Apps panel is displayed.
2. Tap  **Edit panel** to add other apps to the Apps panel.
  - To add an app to the Apps panel, find it on the left side of the screen and tap it to add it to an available space on the right column.
  - To create a folder shortcut, drag an app from the left side of the screen on top of an app in the columns on the right.
  - To change the order of the apps on the panel, drag each app to the desired location.
  - To remove an app, tap  **Remove**.
3. Tap  **Back** to save changes.

## Configure Edge panels

You can customize the Edge panels.

1. From the Edge screen, tap  **Settings**.
2. The following options are available:
  -  **Checkbox**: Enable or disable each panel.
  - **Edit** (if available): Configure individual panels.
  -  **Search**: Find panels that are either installed or available to install.

-  **More options:**
  - **Reorder:** Change the order of the panels by dragging them to the left or right.
  - **Uninstall:** Remove a downloaded Edge panel from your device.
  - **Hide on Lock screen:** Choose panels to hide on the Lock screen when a secure screen lock is set.
- **Galaxy Store:** Search for and download more Edge panels from Galaxy Store.

3. Tap  **Back** to save changes.

## Edge panel position and style

You can change the position of the Edge handle.

- From Settings, tap  **Display** > **Edge panels** > **Handle** for the following options:
  -  **Edge handle:** Drag to change the position of the Edge handle along the edge of the screen.
  - **Position:** Choose either **Right** or **Left** to set which side the Edge screen displays on.
  - **Lock handle position:** Enable to prevent the handle position from being moved when touched and held.
  - **Color:** Choose a color for the Edge handle.
  - **Transparency:** Drag the slider to adjust the transparency of the Edge handle.
  - **Size:** Drag the slider to adjust the size of the Edge handle.

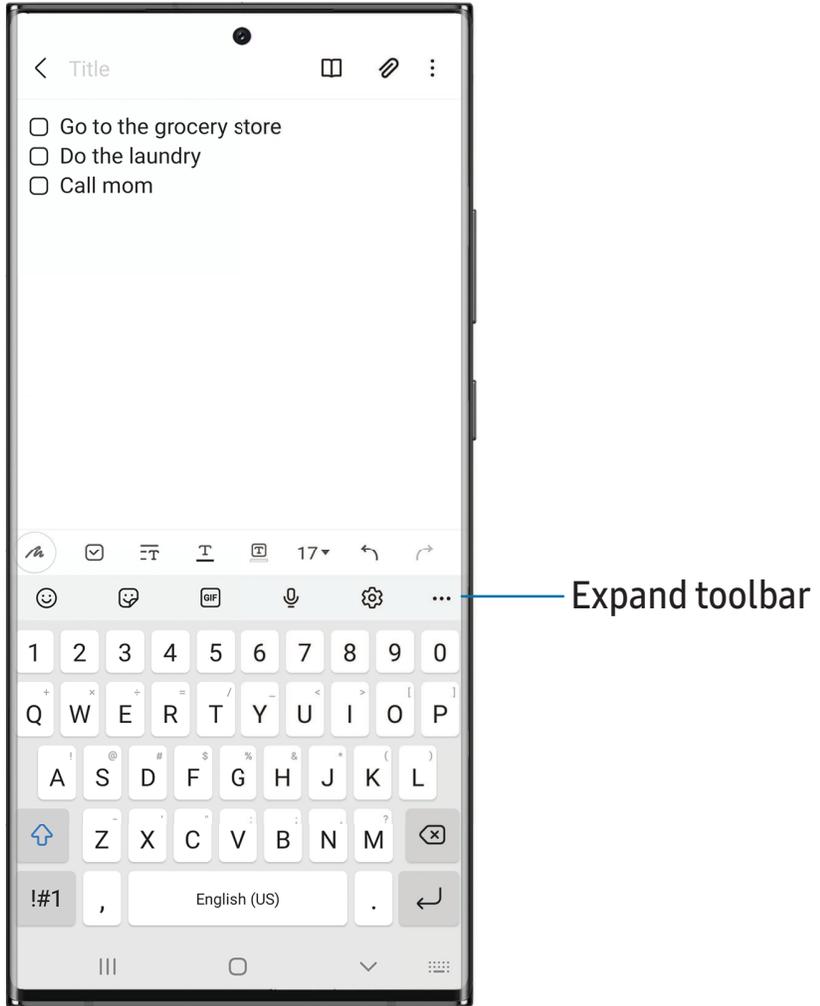
## About Edge panels

You can view the current software version and license information for the Edge panels feature.

- From Settings, tap  **Display** > **Edge panels** > **About Edge panels**.

## Enter text

Text can be entered using a keyboard or your voice.



## Toolbar

The toolbar provides quick access to features of the keyboard.

- From the Samsung keyboard, tap **••• Expand toolbar** for the following options:
  -  **Emojis:** Insert an emoji.
  -  **Stickers:** Add illustrated stickers.
  -  **GIFs:** Add animated GIFs.
  -  **Voice input:** Use Samsung voice input.
  -  **Settings:** Access keyboard settings.
  -  **Handwriting:** Use your handwriting to enter text.
  -  **Search:** Locate specific words or phrases in your conversations.
  -  **Translate:** Type words or sentences in the keyboard to translate them into another language.
  -  **Samsung Pass:** Use biometrics for secure access to apps and services.
  -  **Spotify:** Add music from Spotify™.
  -  **YouTube:** Add videos from YouTube™.
  -  **Clipboard:** Access the clipboard.
  -  **Text editing:** Use an editing panel to help pinpoint text that you want to cut, copy, and paste.
  -  **Modes:** Select a keyboard layout.
  -  **Keyboard size:** Adjust the height and width of the keyboard.
  -  **Bitmoji:** Create your own personal emoji and use it in stickers.
  -  **AR Emoji:** Create your own personal emoji and use it in stickers you can share.
  -  **Mojitok:** Create your own stickers or insert automatically suggested ones.

## Configure the Samsung keyboard

Set customized options for the Samsung keyboard.

- From the Samsung keyboard, tap  **Settings** for the following options:
  - **Languages and types:** Set the keyboard type and choose which languages are available on the keyboard.
    - To switch between languages, swipe the Space bar left or right.

### Smart typing

- **Predictive text:** As you type see suggested words and phrases.
- **Suggest emojis:** Include emojis when using predictive text.
- **Suggest stickers while typing:** View recommended stickers while you are typing.
- **Auto replace:** Automatically replace what you type with predictive text recommendations.
- **Auto spell check:** Underline misspelled words in red and suggest corrections.
- **More typing options:** Customize additional typing options.

### Style and layout

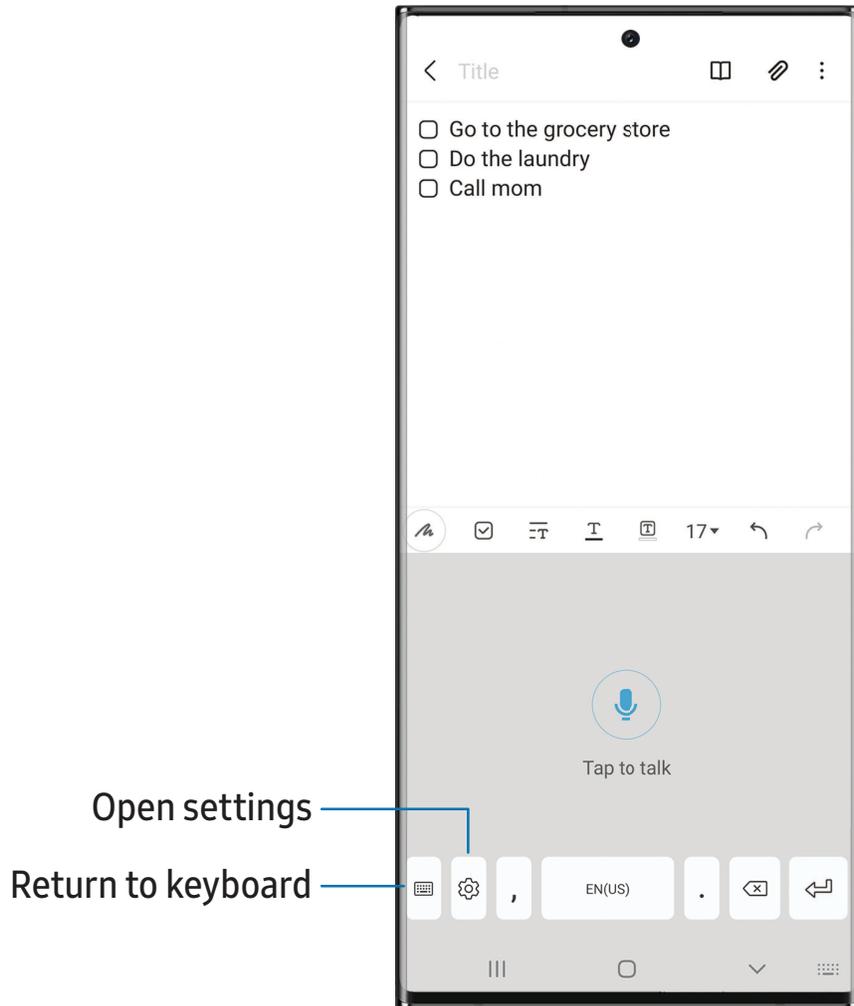
- **Keyboard toolbar:** View or hide the keyboard toolbar.
- **High contrast keyboard:** Adjust the size of the Samsung keyboard and change its colors to increase the contrast between the keys and the background.
- **Theme:** Choose a theme for your keyboard.
- **Mode:** Choose between portrait and landscape mode.
- **Size and transparency:** Adjust the size and transparency of the keyboard.
- **Layout:** Display numbers and special characters on the keyboard.
- **Font size:** Drag the slider to adjust the font size.
- **Custom symbols:** Change the symbol shortcuts on the keyboard.

## Other settings

- **Swipe, touch, and feedback:** Customize gestures and feedback.
- **Handwriting:** Customize handwriting options.
- **Select third-party content to use:** Enable third-party keyboard features.
- **Reset to default settings:** Return keyboard to original settings and clear personalized data.
- **About Samsung keyboard:** View version and legal information for the Samsung keyboard.
- **Contact us:** Contact Samsung support through Samsung Members.

## Use Samsung voice input

Instead of typing, enter text by speaking.



- From the Samsung keyboard, tap  Voice input and speak your text.

## Configure Samsung voice input

Set customized options for Samsung voice input.

1. From the Samsung keyboard, tap  **Voice input**.
2. Tap  **Settings** for options.
  - **Keyboard language:** Choose the language for the keyboard.
  - **Voice input language:** Select the language for Samsung voice input.
  - **Hide offensive words:** Hide potentially offensive words with asterisks.
  - **About Samsung voice input:** View version and legal information for Samsung voice input.

## Emergency mode

Use Emergency mode to access helpful emergency features and conserve your device's power during an emergency situation.

To save battery power, Emergency mode:

- Restricts application usage to only essential applications and those you select.
- Turns off connectivity features and Mobile data when the screen is off.

## Activate Emergency mode

To activate Emergency mode:

1. Press and hold the **Side** and **Volume down** keys at the same time.
2. Tap  **Emergency mode**.
  - When accessing for the first time, read and accept the terms and conditions.
3. Tap **Turn on**.

## Emergency mode features

While in Emergency mode, only the following apps and features are available on the Home screen:

- **Estimated battery life:** Displays estimated remaining battery charge time based on current battery charge and usage.
- **Flashlight:** Use the device's flash as a steady source of light.
- **Emergency alarm:** Sound an audible siren.
- **Phone:** Launch the call screen.
- **Share my location:** Send your location information to your emergency contacts.
- **Internet:** Launch the web browser.
- **Emergency call:** Dial the emergency telephone number (for example, 911). This kind of call can be made even without activated service.
- **More options:**
  - **Turn off Emergency mode:** Disable Emergency mode and return to standard mode.
  - **Edit:** Add or remove apps from the screen.
  - **Emergency contacts:** Manage your medical profile and ICE (In Case of Emergency) group contacts.
  - **Settings:** Configure the available settings. Only a limited number of settings are enabled in Emergency mode.

## Turn off Emergency mode

When emergency mode is turned off, the device returns to standard mode.

- Tap **More options**, and tap **Turn off Emergency mode**.

# Camera and Gallery

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You can capture high-quality pictures and videos using the Camera app. Images and videos are stored in the Gallery, where you can view and edit them.



## Camera

[Navigate the camera screen](#) | [Configure shooting mode](#) | [AR Zone](#) | [Live focus](#) | [Scene optimizer](#) | [Single take](#) | [Wide-angle lens](#) | [Record videos](#) | [Live focus video](#) | [Zoom-in mic](#) | [Camera settings](#)

## Gallery

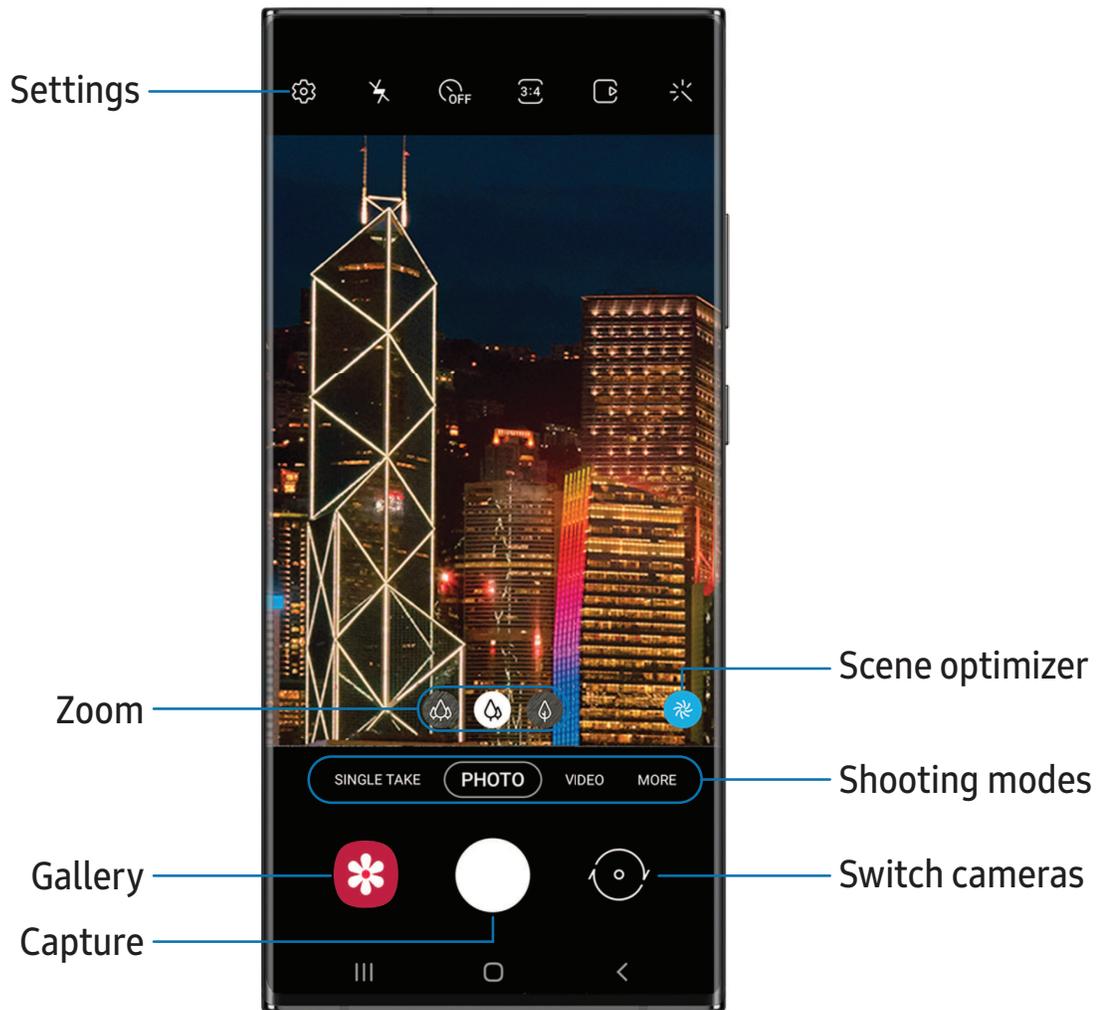
[View pictures](#) | [Edit pictures](#) | [Play video](#) | [Video enhancer](#) | [Edit video](#) | [Share pictures and videos](#) | [Delete pictures and videos](#) | [Group similar images](#) | [Take a screenshot](#) | [Screen recorder](#)

# Camera

Enjoy a full kit of pro lenses and pro-grade video modes and settings.

○ From Apps, tap  Camera.

 **TIP** If Quick launch is enabled, quickly press the **Side** key twice to open the Camera app.



## Navigate the camera screen

Take stunning pictures with your device's front and rear cameras.

1. From  **Camera**, set up your shot with the following features:
  - Tap the screen where you want the camera to focus.
    - When you tap the screen, a brightness scale appears. Drag the slider to adjust the brightness.
  - To quickly switch between the front and rear cameras, swipe the screen up or down.
  - To change to a different shooting mode, swipe the screen right or left.
  - To change camera settings, tap  **Settings**.
2. Tap  **Capture**.

## Configure shooting mode

Allow the camera to determine the ideal mode for your pictures or choose from several shooting modes.

- From  **Camera**, swipe the screen right and left to change shooting modes.
  - **Single take**: Capture multiple pictures and video clips from different angles.
  - **Photo**: Allow the camera to determine the ideal settings for pictures.
  - **Video**: Allow the camera to determine the ideal settings for videos.
  - **More**: Choose other available shooting modes. Tap  **Add** to drag modes into or out of the shooting modes tray at the bottom of the Camera screen.
    - **Pro**: Manually adjust the ISO sensitivity, exposure value, white balance, and color tone while taking pictures.
    - **Panorama**: Create a linear image by taking pictures in either a horizontal or vertical direction.
    - **Food**: Take pictures that emphasize the vivid colors of food.
    - **Night**: Use this to take photos in low-light conditions, without using the flash.
    - **Live focus**: Adjust the level of background blur in your photos so the subject stands out.

- **Live focus video:** Adjust the level of background blur in your videos so the subject stands out.
- **Pro video:** Manually adjust the ISO sensitivity, exposure value, white balance, and color tone while recording videos.
- **Super slow-mo:** Record videos at an extremely high frame rate for viewing in high quality slow motion. You can play a specific section of each video in slow motion after recording it.
- **Slow motion:** Record videos at a high frame rate for viewing in slow motion.
- **Hyperlapse:** Create a time lapse video by recording at various frame rates. The frame rate is adjusted depending on the scene being recorded and the movement of the device.

## AR Zone

Access all of your Augmented Reality (AR) features in one place.

- From  **Camera**, swipe to **More**, and then tap **AR Zone**. The following features are available:
  - **AR Emoji Camera:** Use the camera to create your My Emoji avatar.
  - **AR Doodle:** Enhance videos by adding line drawings or handwriting to your environment. AR Doodle tracks faces and space so they move with you.
  - **AR Emoji Studio:** Use AR tools to create and customize your My Emoji avatar.
  - **AR Emoji Stickers:** Add AR stickers to your My Emoji avatar.
  - **Deco Pic:** Decorate photos or videos in real time with the camera.
  - **Quick measure:** Measure items in inches or centimeters using your camera.
  - **Picture Link:** Add AR content to the things you see around you.

## Live focus

Add interactive focus effects to your pictures.

1. From  **Camera**, swipe to **More**, and then tap **Live focus**.
2. Tap  **Live focus effect** and choose an effect.
3. Tap  **Capture**.

## Scene optimizer

Automatically adjust exposure, contrast, white balance, and more based on what is detected in the camera frame to help you capture beautiful photos.

- From  **Camera**, swipe to **Photo**, and tap  **Scene optimizer**.

 **NOTE** The Scene optimizer is only available when using the rear camera. The Scene optimizer icon will change automatically based on what the camera detects, such as  when taking nature photos or  when taking photos in a dark setting.

## Single take

Capture more in each shot by taking both photos and videos at the same time. This shooting mode uses AI to create high-quality images and videos from multiple angles. The number of images and videos may vary.

1. From  **Camera**, swipe to **Single take**.
2. Tap  **10s** and select a timer option.
3. Tap  **Record** and pan around the scene to capture multiple angles and views. The videos and images will be saved as a single entry in the Gallery.

## Wide-angle lens

Your device features a wide-angle lens. If the rear camera is close to the subject, it applies a blur effect to the background, so the subject stands out. When the camera is farther away from the subject, both the subject and background are clear. Minor distortion may appear in wide-angle photos or videos. To correct this distortion in photos you can turn on Ultra wide shape correction.

1. From  **Camera**, tap  **Settings**.
2. Tap **Format and advanced options** > **Ultra wide shape correction**.

## Record videos

Record smooth lifelike videos using your device.

1. From  **Camera**, swipe right or left to change the shooting mode to **Video**.
2. Tap  **Record** to begin recording a video.
  - To take a picture while recording, tap  **Capture**.
  - To temporarily stop recording, tap  **Pause**. To continue recording, tap  **Resume**.
3. Tap  **Stop** when you are finished recording.

## Live focus video

Create professional-looking films by applying background blurs and other special effects to your video. This feature cannot be used with Zoom, Zoom-in mic, or Super steady.

1. From  **Camera**, swipe to **More**, then then tap **Live focus video**.
2. Tap  **Live focus effect**, choose an effect, and drag the slider to fine-tune the effect.
3. Tap  **Record** to begin recording.

## Zoom-in mic

Increase the volume of the sound being recorded and minimize background noise as you zoom in on an audio source in video mode. This feature cannot be used with other video modes or with the front camera.

1. From  **Camera**, tap  **Settings**.
2. Tap **Advanced recording options** > **Zoom-in mic**, and tap  to enable.
3. Tap  **Back** to return to the main Camera screen.
4. Swipe to change the shooting mode to **Video**.
5. Tap  **Record** to begin recording.
6. Bring your fingers together or apart on the screen to zoom in or out on the audio source. The microphone icon indicates the level of amplification being applied.

## Camera settings

Use the icons on the main camera screen and the settings menu to configure your camera's settings.

- From  **Camera**, tap  **Settings** for the following options:

### Intelligent features

- **Scene optimizer:** Automatically adjust the color settings of your pictures to match the subject matter.
- **Shot suggestions:** Get on-screen guides to help you line up great shots.
- **Scan QR codes:** Automatically detect QR codes when using the camera.

### Pictures

- **Swipe Shutter button to:** Choose to either take a burst shot or create a GIF when you swipe the shutter to the nearest edge.
- **Format and advanced options:** Choose file formats and other saving options.
  - **HEIF pictures:** Save pictures as high efficiency images to save space. Some sharing sites may not support this format.
  - **RAW copies:** Save JPEG and RAW copies of pictures taken in Pro mode.
  - **Ultra wide shape correction:** Automatically correct distortion in pictures taken with the ultra wide lens.

## Selfies

- **Use wide angle for group selfies:** Automatically switch to wide-angle when there are two or more people in the selfie.
- **Save selfies as previewed:** Save selfies as they appear in the preview without flipping them.
- **Selfie color tone:** Set the color tone for your selfies to Cool, Warm, or Original.

## Videos

- **Rear video size:** Choose an aspect ratio and resolution for videos captured with the rear cameras.
- **Front video size:** Choose an aspect ratio and resolution for videos captured with the front camera.
- **Pro video size:** Choose an aspect ratio, resolution, and frame rate for cinematic-quality video.
- **Advanced recording options:** Enhance your videos with advanced recording formats.
  - **High efficiency videos:** Record videos in HEVC format to save space. Other devices or sharing sites may not support playback of this format.
  - **HDR10+ video:** Optimize videos by recording in HDR10+. Playback devices must support HDR10+ video.
  - **Zoom-in mic:** Match the mic zoom to the camera zoom while recording videos.
- **Video stabilization:** Activate anti-shake to keep the focus steady when the camera is moving.

## Useful features

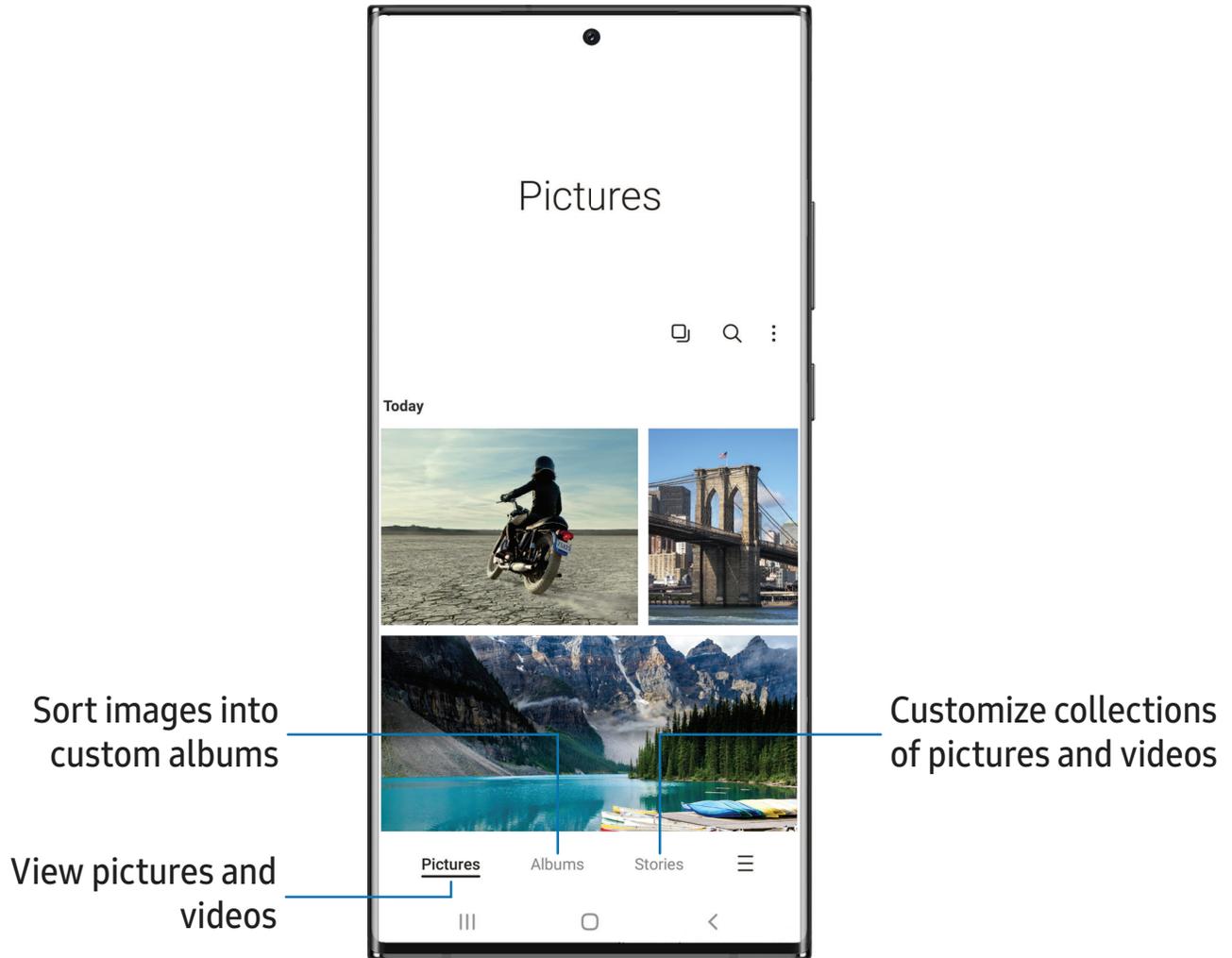
- **Auto HDR:** Capture more detail in the bright and dark areas of your shots.
- **Tracking auto-focus:** Keep a moving subject in focus.
- **Grid lines:** Display viewfinder grid lines to help compose a picture or video.
- **Location tags:** Attach a GPS location tag to your pictures and videos.

- **Shooting methods:**
  - **Press Volume keys to:** Use the Volume keys to take pictures, record video, zoom, or control system volume.
  - **Voice commands:** Take pictures speaking key words.
  - **Floating shutter button:** Add an extra shutter button that you can move anywhere on the screen.
  - **Show palm:** Hold your hand out with your palm facing the camera to have your picture taken in a few seconds.
- **Settings to keep:** Choose whether to launch Camera with the same shooting mode, selfie angle, and filters as the last time.
- **Storage location:** Select a memory location (Galaxy Note20 Ultra 5G only).
  - A memory card (not included) must be installed to view Storage location.
- **Shutter sound:** Play a tone when taking a picture.
- **Vibration feedback:** Enable vibrations when tapping the screen in the Camera app.
- **Reset settings:** Reset the Camera settings.
- **Contact us:** Contact Samsung support through Samsung Members.
- **About Camera:** View app and software information.

# Gallery

Go to the Gallery to look at the all the visual media stored on your device. You can view, edit, and manage pictures and videos.

- From Apps, tap  Gallery.



## View pictures

Pictures stored on your device are viewable in the Gallery app.

1. From  **Gallery**, tap **Pictures**.
2. Tap a picture to view it. Swipe left or right to view other pictures or videos.
  - To use Bixby Vision on the current picture, tap **Bixby Vision**. For more information, see [Bixby](#).
  - To mark the picture as a favorite, tap  **Add to Favorites**.
  - To access the following features, tap  **More options**:
    - **Details**: View and edit information about the picture.
    - **Set as wallpaper**: Set the picture as wallpaper.
    - **Copy to clipboard**: Copy the image to paste in another app.
    - **Move to Secure Folder**: Move the picture to a Secure Folder.
    - **Print**: Send the picture to a connected printer.

## Edit pictures

Enhance your pictures using the Gallery's editing tools.

1. From  **Gallery**, tap **Pictures**.
2. Tap a picture to view it, and then tap  **Edit** for the following options:
  -  **Transform**: Rotate, flip, crop, or make other changes to the overall appearance of the picture.
  -  **Filters**: Add color effects.
  -  **Tone**: Adjust the brightness, exposure, contrast, and more.
  -  **Stickers**: Overlay illustrated or animated stickers.
  -  **Draw**: Add handwritten text or hand drawn content.
  -  **Text**: Add text to the picture.
  -  **Portrait**: Enhance skin tones, eyes, and other facial features.
  -  **Auto adjust**: Apply automatic adjustments to improve the picture.
  - **Revert**: Undo the changes applied to restore the original picture.
3. Tap **Save** when finished.

## Play video

View the videos stored on your device. You can save videos as favorites, and view video details.

1. From  **Gallery**, tap **Pictures**.
2. Tap a video to view it. Swipe left or right to view other pictures or videos.
  - To mark the video as a favorite, tap  **Add to Favorites**. The video is added to Favorites under the Albums tab.
  - To access the following features, tap  **More options**:
    - **Details**: View and edit information about the video.
    - **Set as wallpaper**: Set the video as wallpaper on the Lock screen.
    - **Move to Secure Folder**: Add this video to your Secure Folder.
3. Tap  **Play video** to play the video.

## Video enhancer

Enhance the image quality of your videos to enjoy brighter and more vivid colors.

1. From Settings, tap  **Advanced features** > **Video enhancer**.
2. Tap  to enable this feature.

## Edit video

Edit videos stored on your device.

1. From  **Gallery**, tap **Pictures**.
2. Tap a video to view it.
3. Tap  **Edit** to use the following tools:
  -  **Play**: Preview the edited video.
  -  **Trim**: Cut segments of the video.
  -  **Transform**: Rotate, flip, crop, or make other changes to the overall appearance of the video.
  -  **Filters**: Add visual effects to the video.
  -  **Sticker**: Overlay illustrated or animated stickers.

-  **Draw:** Draw on your video.
-  **Text:** Add text to your videos.
-  **Portrait:** Enhance skin tones, eyes, and other facial features.
-  **Speed:** Adjust the play speed.
-  **Audio:** Adjust the volume levels and add background music to the video.

4. Tap **Save**, and then confirm when prompted.

## Share pictures and videos

Share pictures and videos from the Gallery app.

1. From  **Gallery**, tap **Pictures**.
2. Tap  **More options** > **Edit** and select the pictures or videos you want to share.
3. Tap  **Share**, and then choose an app or connection to use for sharing your selection. Follow the prompts.

## Delete pictures and videos

Delete pictures and videos stored on your device.

1. From  **Gallery**, tap  **More options** > **Edit**.
2. Tap pictures and videos to select them.
3. Tap  **Delete**, and confirm when prompted.

## Group similar images

Organize pictures and videos in the Gallery by similarity.

1. From  **Gallery**, tap  **Group similar images**.
2. Tap  **Ungroup similar images** to return to the default Gallery view.

## Take a screenshot

Capture an image of your screen. Your device will automatically create a Screenshots album in the Gallery app.

- From any screen, press and release the **Side** and **Volume down** keys.

## Palm swipe to capture a screenshot

Capture an image of the screen by swiping the edge of your hand across it, from side to side, keeping in contact with the screen.

1. From Settings, tap  **Advanced features** > **Motions and gestures** > **Palm swipe to capture**.
2. Tap  to enable this feature.

## Screenshot Settings

Modify screenshot settings.

- From Settings, tap  **Advanced features** > **Screenshots and screen recorder**.
  - **Screenshot toolbar**: Show additional options after you take a screenshot.
  - **Hide status and navigation bars**: Do not display the status bar or navigation bars on screenshots.
  - **Delete shared screenshots**: Automatically delete screenshots after they are shared through the screenshot toolbar.
  - **Screenshot format**: Choose if you would like your screenshots to be saved as JPG or PNG files.

## Screen recorder

Record activities on your device, write notes, and use the camera to record a video overlay of yourself to share with friends or family.

1. From Quick Settings, tap  **Screen recorder** > **Start recording**.
2. A three-second countdown runs before it starts recording. You can tap **Skip countdown** to begin recording immediately.
  - Tap  **Draw** to draw on the screen.
  - Tap  **Pointer** to show an icon on the screen when using your S Pen.
  - Tap  **Selfie video** to include a recording from your front camera.
3. Tap  **Stop** to finish recording. These are automatically saved to the Screen recordings album in the Gallery.

## Screen recorder settings

Control the sound and quality settings for the screen recorder.

- From Settings, tap  **Advanced features** > **Screenshots and screen recorder**.
  - **Sound:** Choose what sounds to record while using the screen recorder.
  - **Video quality:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
  - **Selfie video size:** Drag the slider to set the size of the video overlay.

# Apps

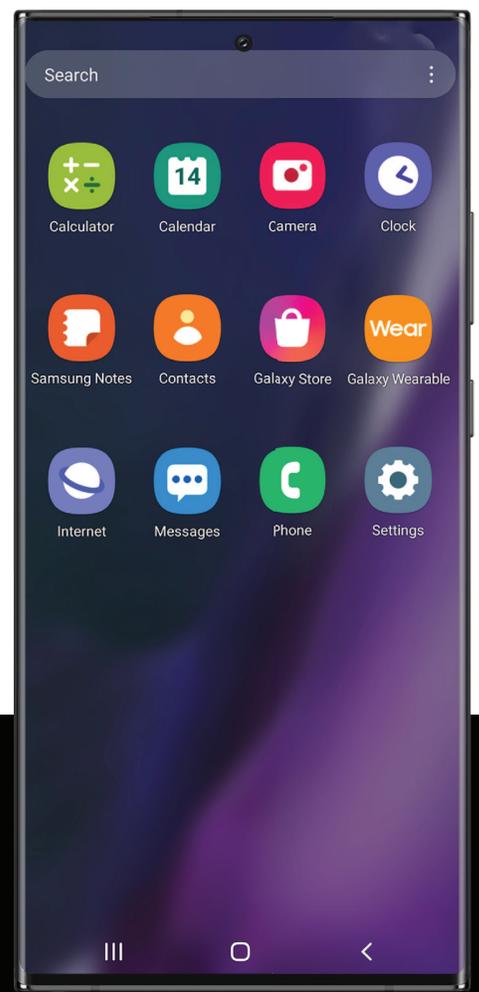
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Using apps

Samsung apps

Google apps

Microsoft apps



# Using apps

[Uninstall or disable apps](#) | [Search for apps](#) | [Sort apps](#) | [Create and use folders](#) | [App settings](#)

The Apps list displays all preloaded and downloaded apps. Apps can be downloaded from Galaxy Store and the Google Play™ store.

- From a Home screen, swipe the screen upward to access the Apps list.

## Uninstall or disable apps

Installed apps can be removed from your device. Some apps that are preloaded (available on your device by default) can only be disabled. Disabled apps are turned off and hidden from the Apps list.

- From Apps, touch and hold an app, and tap **Uninstall/Disable**.

## Search for apps

If you are not sure where to find an app or a setting, you can use the Search feature.

1. From Apps, tap **Search**, and enter a word or words. As you type, matching apps and settings appear as results on the screen.
2. Tap a result to go to that app.

 **TIP** You can customize the search settings by tapping  **More options** > **Settings**.

## Sort apps

App shortcuts can be listed alphabetically or in your own custom order.

- From Apps, tap  **More options** > **Sort** for the following sorting options:
  - **Custom order**: Arrange apps manually.
  - **Alphabetical order**: Sort apps alphabetically.

 **TIP** When apps are arranged manually (Custom order), empty icon spaces can be removed by tapping  **More options** > **Clean up pages**.

## Create and use folders

You can make folders to organize App shortcuts on the Apps list.

1. From Apps, touch and hold an app shortcut, and then drag it on top of another app shortcut until it is highlighted.
2. Release the app shortcut to create the folder.
  - **Folder name:** Name the folder.
  -  **Palette:** Change the folder color.
  -  **Add apps:** Place more apps in the folder. Tap apps to select them, and then tap **Done**.
3. Tap  **Back** to close the folder.

## Copy a folder to a Home screen

You can copy a folder to a Home screen.

- From Apps, touch and hold a folder, and tap  **Add to Home**.

## Delete a folder

When you delete a folder, the app shortcuts return to the Apps list.

1. From Apps, touch and hold a folder to delete.
2. Tap  **Delete folder**, and confirm when prompted.

## App settings

Manage your downloaded and preloaded apps.

- From Settings, tap  **Apps**. Tap an option to customize:
  - **Choose default apps:** Choose which apps to use for making calls, sending messages, going to websites, and more.
  - **Samsung app settings:** View a list of Samsung apps and customize their settings.
  - **Your apps:** Tap an app to view and update information about its privacy and usage settings. Options vary by app.

 **TIP** To reset app options that have been changed, tap  **More options** > **Reset app preferences**.

# Samsung apps

The following apps may be preloaded or downloaded over-the-air to your device during setup. Apps can be downloaded from Galaxy Store and the Google Play store.

[Galaxy Essentials](#) | [AR Zone](#) | [Bixby](#) | [Galaxy Store](#) | [Galaxy Wearable](#) | [Game Launcher](#) | [PENUP](#) | [Samsung Free](#) | [Samsung Global Goals](#) | [Samsung Members](#) | [SmartThings](#) | [Tips](#) | [Calculator](#) | [Calendar](#) | [Clock](#) | [Contacts](#) | [Internet](#) | [Messages](#) | [My Files](#) | [Phone](#) | [Samsung Health](#) | [Samsung Notes](#) | [Samsung Pay](#)

## Galaxy Essentials

Galaxy Essentials is a collection of specially chosen applications available through Samsung apps. You can access and download a collection of premium content.

- From Apps, tap  **More options** > **Galaxy Essentials**.

### **AR Zone**

Access all of your Augmented Reality (AR) features in one place.

For more information, see [AR Zone](#).

### **Bixby**

Bixby displays customized content based on your interactions. Bixby learns from your usage patterns and suggests content you may like.

For more information, see [Bixby](#).

### **Galaxy Store**

Find and download premium apps that are exclusive to Galaxy devices. A Samsung account is required to download from Galaxy Store.

## Galaxy Wearable

Connect your device to your Samsung Watch using this application.

For more information, visit [samsung.com/us/support/owners/app/galaxy-wearable-watch](https://samsung.com/us/support/owners/app/galaxy-wearable-watch).

## Game Launcher

Automatically arrange all your games in one place. For more information on Game Launcher, visit [samsung.com/us/support/owners/app/game-launcher](https://samsung.com/us/support/owners/app/game-launcher).

 **TIP** If Game Launcher is not seen in the Apps list, then from Settings, tap  **Advanced features** > **Game Launcher**, and then tap .

## PENUP

Share photos, comment on other creations, or just browse through the pages for something to add to your personal collection. This community brings together anyone that uses the S Pen to draw, sketch, scribble or paint.

## Samsung Free

Access live TV shows, news and articles from numerous sources, and interactive games entirely free of charge.

## Samsung Global Goals

Learn more about the Global Goals initiative and contribute towards donations that support these causes with ads from this app.

## Samsung Members

Get more and do more from your Galaxy device. Enjoy DIY support tools and exclusive experiences and content — for Samsung members only. Samsung Members may be preloaded on your device, or you can download and install it from Galaxy Store or the Google Play store.

## SmartThings

SmartThings allows you to control, automate, and monitor your home environment through a mobile device to fit your specific needs. You can use the app to connect multiple devices at once or one device at a time. Check the status of your devices by looking at the dashboard.

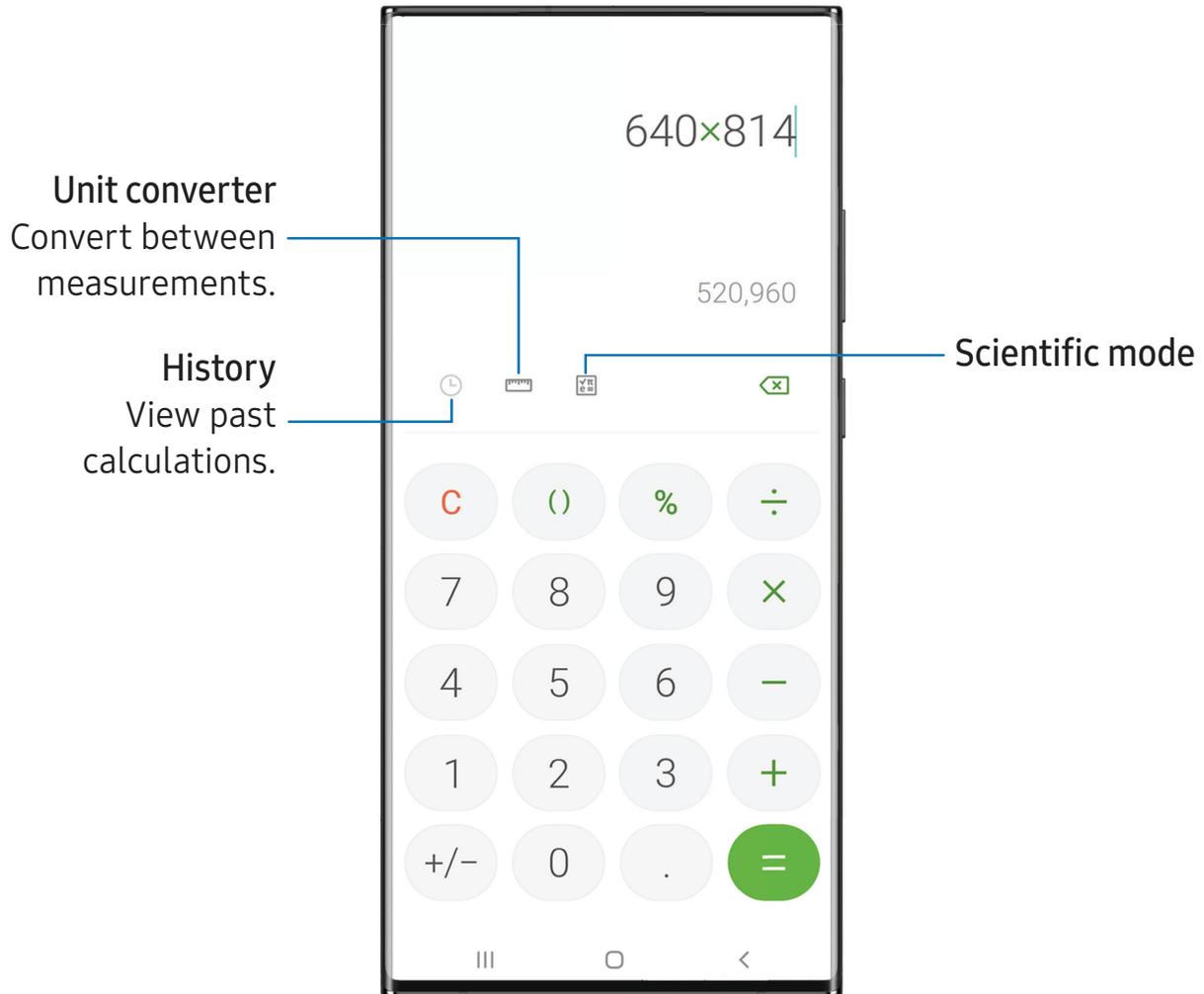
 **NOTE** Non-Samsung connected device errors or defects are not covered by the Samsung warranty; contact the non-Samsung device manufacturer for support.

## Tips

View tips and techniques as well as the user manual for your device.

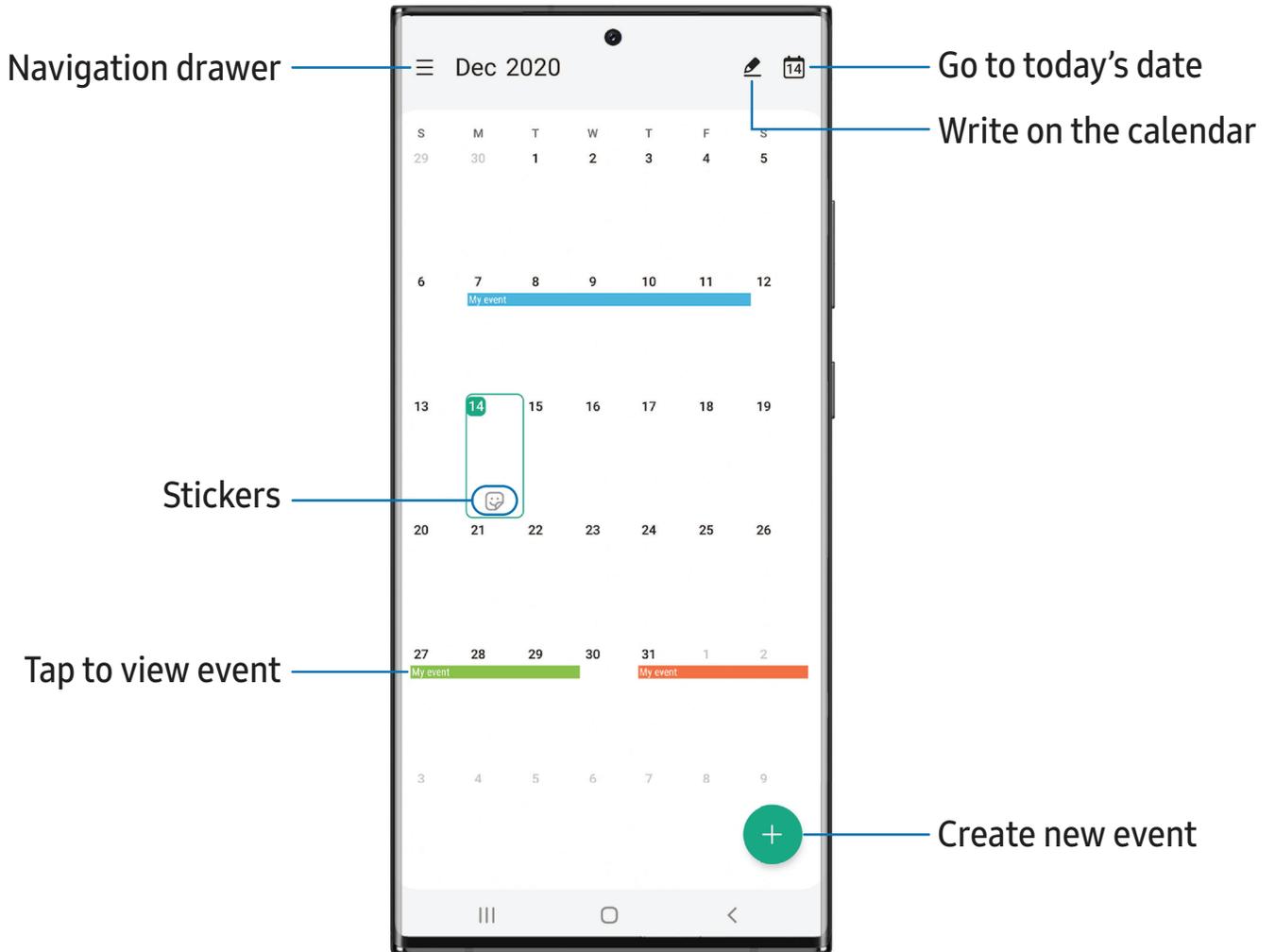
# Calculator

The Calculator app features both basic and scientific math functions, as well as a unit converter.



# Calendar

The Calendar app can be connected to your various online accounts to consolidate all your calendars in one place.



## Add calendars

Add your accounts to the Calendar app.

1. From  Calendar, tap  Navigation drawer.
2. Tap  Calendar settings > Add new account and select an account type.
3. Enter your account information and follow the prompts.

 **TIP** Accounts may also support email, contacts, and other features.

## Subscription calendars

Subscribe to calendars that match your interests, you can easily find a variety of upcoming events and add them to your schedule.

1. From  Calendar, tap  Navigation drawer.
2. Tap Add your interests and follow the prompts.

## Calendar alert style

Alerts from the Calendar app can be set to different styles.

1. From  Calendar, tap  Navigation drawer >  Calendar settings > Alert style. The following options are available:
  - **Light:** Receive a notification and hear a short sound.
  - **Medium:** Get a full screen alert and hear a short sound.
  - **Strong:** Get a full-screen alert and ring sound that persist until dismissed.
2. Depending on the alert style selected above, the following sound options are available:
  - **Ring once sound:** Choose the alert sound for Light or Medium alert styles.
  - **Keep ringing sound:** Choose the alert sound for the Strong alert style.

## Create an event

Use your Calendar to create events.

1. From  **Calendar**, tap  **Add event** to add an event.
2. Enter details for the event, and then tap **Save**.

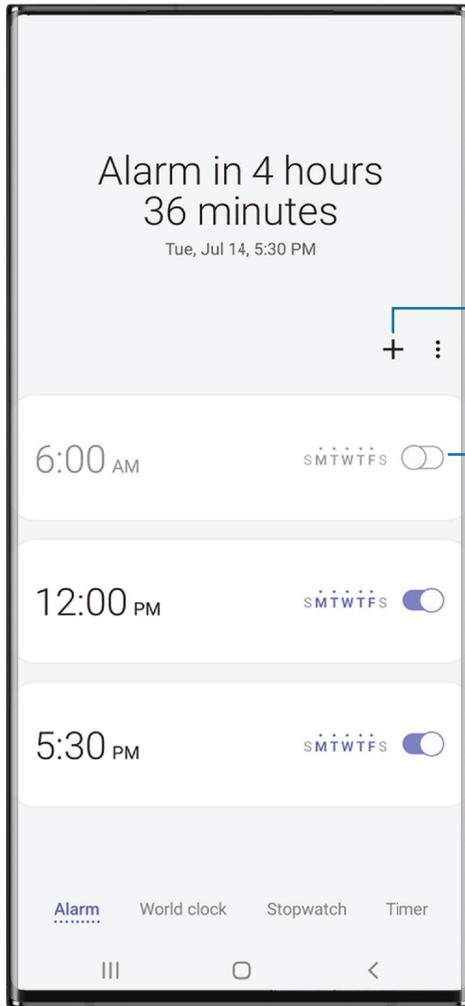
## Delete an event

Delete events from your Calendar.

1. From  **Calendar**, tap an event, and tap it again to edit it.
2. Tap  **Delete**, and confirm when prompted.

# 1 Clock

The Clock app offers features for keeping track of time and setting alarms.



+ : Create new alarm

Turn alarm on or off

## Alarm

Use the Alarm tab to set one-time or recurring alarms and choose options for how to be notified.

1. From  **Clock**, tap  **Add alarm**.
2. Tap the following items to configure an alarm:
  - **Time**: Set a time for the alarm.
  - **Day**: Choose the days for this alarm.
  - **Alarm name**: Enter a name for the alarm.
  - **Alarm sound**: Choose a sound to play for the alarm and drag the slider to set the volume of the alarm.
  - **Vibration**: Choose whether the alarm uses vibration alert.
  - **Snooze**: Allow snoozing. Set interval and repeat values for the alarm while snoozing.
3. Tap **Save** to save the alarm.

## Delete an alarm

You can delete an alarm that you created.

1. From  **Clock**, touch and hold an alarm.
2. Tap  **Delete**.

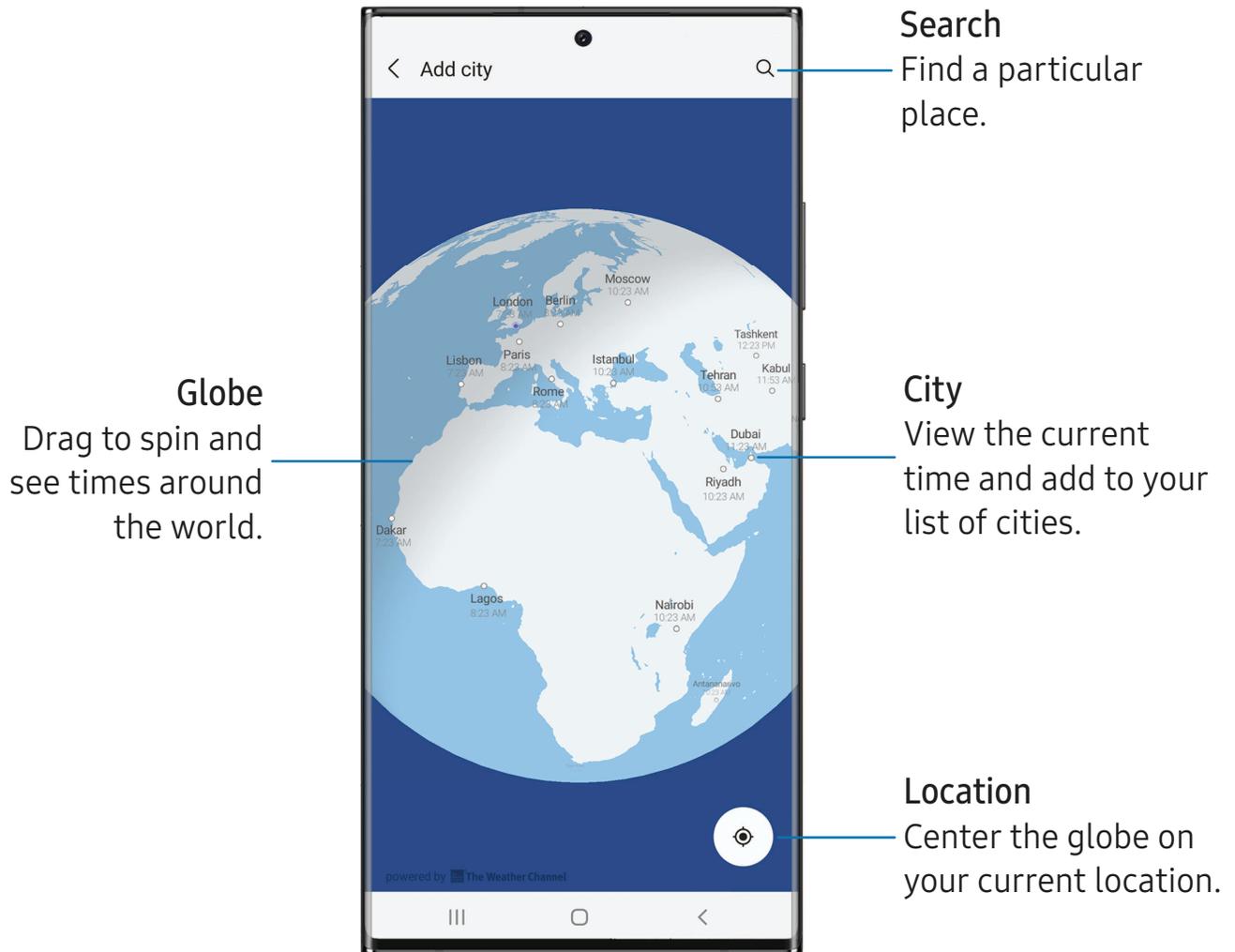
## Alert settings

You can set the device to vibrate for alarms and timers whether the Sound mode is set to Mute or Vibrate.

1. From  **Clock**, tap  **More options** > **Settings**.
2. Tap **Vibrate for alarms and timers** to enable the feature.

## World clock

The World clock lets you keep track of the current time in multiple cities around the globe.



1. From  Clock, tap World clock.
2. Tap  Add city.
3. Touch and hold the globe to spin it, tap the city you want, and then tap Add.
  - To remove a city, touch and hold it, and tap  Delete.

## Time zone converter

Set a time in a city on your World clock list to see what the local times would be in the other listed cities.

1. From  **Clock**, tap **World clock**.
2. Tap  **More options** > **Time zone converter**.
3. Tap  **Menu** to choose a different city.
  - To add a city to the list, tap  **Add city**.
4. Swipe the hours, minutes, and period (**AM** or **PM**) on the clock to set a time. Local times for the other cities listed are automatically updated.
  - To return the clock to the current time, tap **Reset**.

## Weather settings

Show weather information on your World clock.

1. From  **Clock**, tap **World clock**.
2. Tap  **More options** > **Settings** > **Show weather information** to enable or disable weather information.
3. Tap **Unit** to change from Fahrenheit to Celsius.

## Stopwatch

The Stopwatch lets you time events down to a hundredth of a second.

1. From  **Clock**, tap **Stopwatch**.
2. Tap **Start** to begin timing.
  - To keep track of lap times, tap **Lap**.
3. Tap **Stop** to end timing.
  - To continue timing after stopping the clock, tap **Resume**.
  - To reset the Stopwatch to zero, tap **Reset**.

## Timer

Set a countdown timer for up to 99 hours, 59 minutes, and 59 seconds.

1. From  **Clock**, tap **Timer**.
2. Use the keypad and tap **Hours**, **Minutes**, and **Seconds** to set the Timer.
3. Tap **Start** to begin the Timer.
  - To temporarily stop the Timer, tap **Pause**. To continue, tap **Resume**.
  - To stop and reset the Timer, tap **Cancel**.

## Preset timer

Name and save preset timers.

1. From  **Clock**, tap **Timer** >  **Add preset timer**.
2. Configure the countdown time and timer name.
3. Tap **Add** to save the timer.
  - To edit a saved preset timer, tap  **More options** > **Edit preset timers**.

## Timer options

You can customize the Timer options.

1. From  **Clock**, tap **Timer**.
2. Tap  **More options** > **Settings**.
  - **Sound**: Choose a preloaded timer sound or add your own.
  - **Vibration**: Enable to disable vibration for the timer.

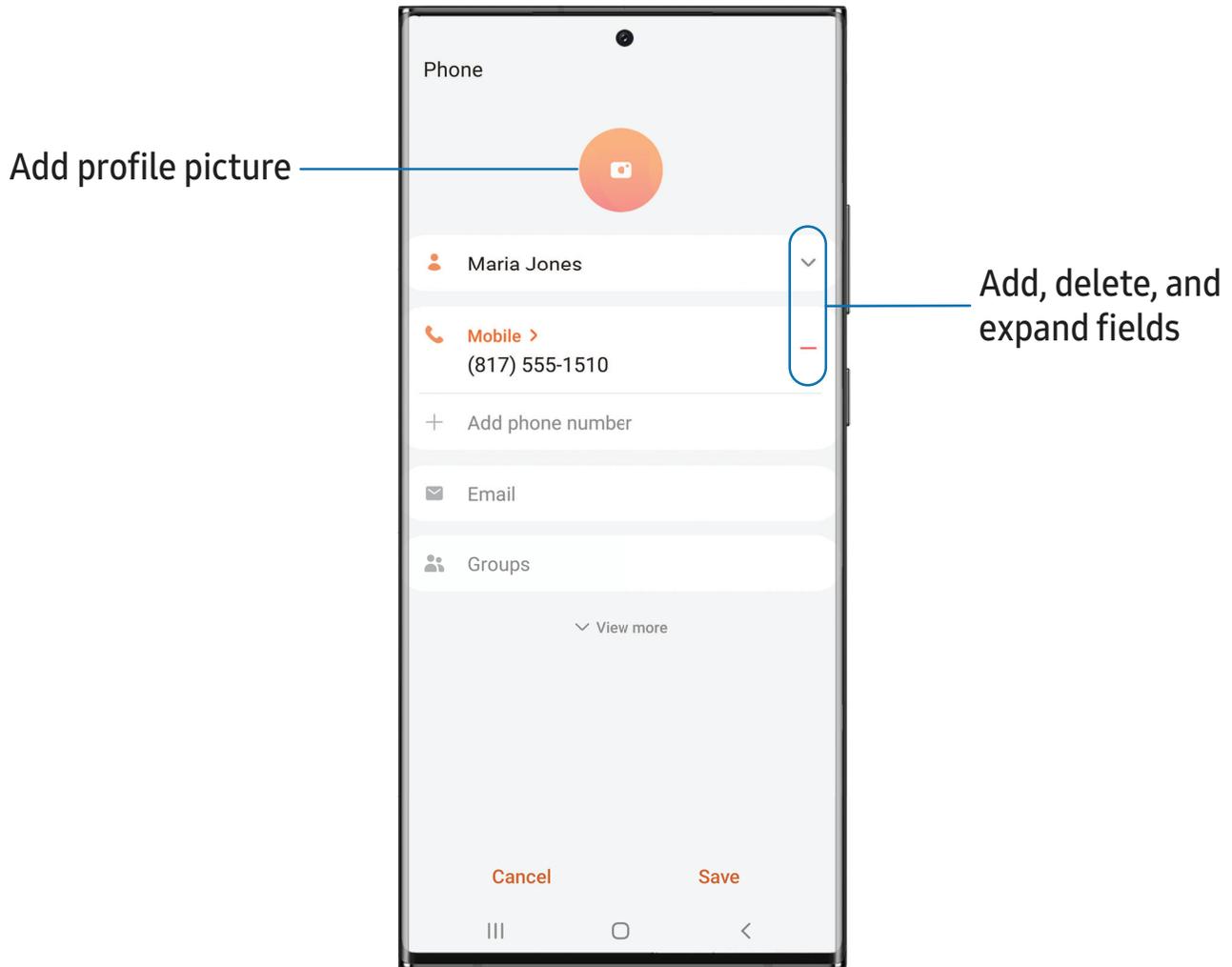
## General settings

View and configure settings for all Clock tools.

- From  **Clock**, tap  **More options** > **Settings**.
  - **Customization Service**: Sign in to your Samsung account to customize personal content in supported apps.
  - **About Clock**: View the current software version and check for updates.

## Contacts

Store and manage your contacts. You can synchronize with personal accounts added to your device. Accounts may also support email, calendars, and other features.



## Create a contact

1. From  **Contacts**, tap  **Create contact**.
2. Enter details for the contact, and then tap **Save**.

## Edit a contact

When editing a contact, you can tap a field and change or delete information, or you can add more fields to the contact's list of information.

1. From  **Contacts**, tap a contact.
2. Tap  **Edit**.
3. Tap any of the fields to add, change, or delete information.
4. Tap **Save**.

## Favorites

When you mark contacts as favorites, they are grouped at the top of your contact list and easily accessible from other apps.

1. From  **Contacts**, tap a contact.
2. Tap  **Favorites** to mark the contact as a favorite.
  - To remove the contact from Favorites, tap  **Favorites**.

## Share a contact

Share a contact with others by using various sharing methods and services.

1. From  **Contacts**, tap a contact.
2. Tap  **Share**.
3. Tap either **File** or **Text**.
4. Choose a sharing method and follow the prompts.

 **TIP** When viewing a contact, tap  **More options** > **QR code** to quickly share the information with friends or family. The QR code automatically updates when you change the contact information fields.

## Show contacts when sharing content

Share content directly with your contacts from within any app. Once enabled, your frequent contacts are displayed in the Share window.

- From Settings, tap  **Advanced features** > **Show contacts when sharing content**, and tap  to enable the feature.

## Groups

You can use groups to organize your contacts.

### Create a group

Create your own contact groups.

1. From , tap  **Open drawer** > **Groups**.
2. Tap **Create group**, and then tap fields to enter information about the group:
  - **Group name:** Enter a name for the new group.
  - **Group ringtone:** Customize the sounds for the group.
  - **Add member:** Select contacts to add to the new group, and then tap **Done**.
3. Tap **Save**.

### Add or remove group contacts

Add more contacts to a group, or remove contacts.

- From , tap  **Open drawer** > **Groups**, and then tap a group.
  - To remove a contact, touch and hold a contact to select it, and then tap  **Remove**.
  - To add a contact, tap  **Edit** > **Add member**, and then tap the contacts you want to add. When finished, tap **Done** > **Save**.

### Send a message to a group

Send a text message to members of a group.

1. From , tap  **Open drawer** > **Groups**, and then tap a group.
2. Tap  **More options** > **Send message**.

## Send an email to a group

Send an email to members of a group.

1. From  **Contacts**, tap  **Open drawer** > **Groups**, and then tap a group.
2. Tap  **More options** > **Send email**.
3. Tap contacts to select them, or tap the **All** checkbox at the top of the screen to select all, and then tap **Done**.
  - Only group members that have an email address in their records are displayed.
4. Choose an email account and follow the prompts.

## Delete a group

Delete a group you have created.

1. From  **Contacts**, tap  **Open drawer** > **Groups**, and then tap a group.
2. Tap  **More options** > **Delete**.
  - To only delete the group, tap **Group only**.
  - To delete the group and the contacts in the group, tap **Group and members**.

## Manage contacts

You can import or export contacts, as well as link multiple contacts into one contact entry.

### Merge contacts

Consolidate contact information from multiple sources into one contact by linking entries into a single contact.

1. From  **Contacts**, tap  **Open drawer** > **Manage contacts**.
2. Tap **Merge contacts**. Contacts with duplicate phone numbers, email addresses, and names will be listed together.
3. Tap the contacts to select them, and tap **Merge**.

To unlink contacts:

1. From  **Contacts**, tap the contact to select it.
2. Tap **Linked contacts**.
3. Tap **Unlink** beside contacts or **Unlink all** to unlink them from the main contact.

## Delete duplicate contacts

Quickly remove duplicated contacts.

1. From  **Contacts**, tap  **Open drawer** > **Manage contacts**.
2. Tap **Delete duplicate contacts**. Contacts that are duplicated are listed.
3. Tap the contacts to select them, and tap **Delete**.

## Import contacts

Import contacts to your device as vCard files (VCF).

1. From  **Contacts**, tap  **Open drawer** > **Manage contacts**.
2. Tap **Import or export contacts**.
3. Tap **Import** and follow the prompts.

## Export contacts

Export contacts from your device as vCard files (VCF).

1. From  **Contacts** tap  **Open drawer** > **Manage contacts**.
2. Tap **Import or export contacts**.
3. Tap **Export** and follow the prompts.

## Sync contacts

Keep all of your contacts up to date in all of your accounts.

1. From  **Contacts** tap  **Open drawer** > **Manage contacts**.
2. Tap **Sync contacts**.

## Set default storage location

Automatically save new contacts to your device, SIM card, or an account.

1. From  **Contacts**, tap  **Open drawer** > **Manage contacts**.
2. Tap **Set default storage location**.
3. Tap an option or add an account to set the default.

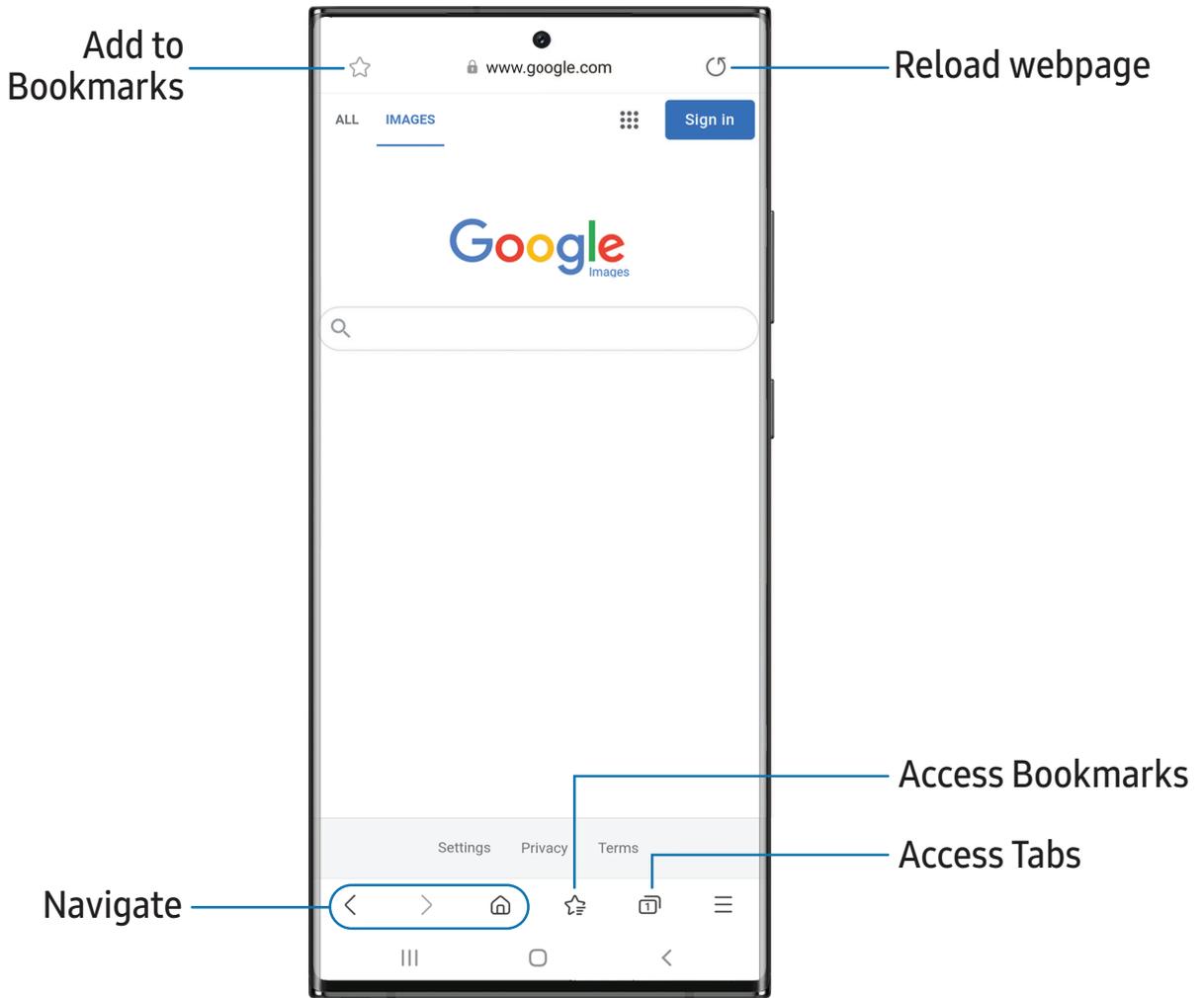
## Delete contacts

Delete a single contact or multiple contacts.

1. From  **Contacts**, touch and hold a contact to select it.
  - You can also tap other contacts to select them for deletion.
2. Tap  **Delete**, and confirm when prompted.

# Internet

Samsung Internet is a simple, fast, and reliable web browser for your device. Experience more secure Web browsing features with Secret Mode, Biometric Web Login, and Contents Blocker.



 **TIP** Visit [samsung.com/us/support/owners/app/samsung-internet](https://samsung.com/us/support/owners/app/samsung-internet) for more information.

## Browser tabs

Use tabs to view multiple web pages at the same time.

- From  Internet, tap  Tabs > New tab.
  - To close a tab, tap  Tabs >  Close tab.

## Create a Bookmark

Bookmark your favorite webpages to quickly access them.

- From  Internet, tap  Bookmark to save the open webpage.

## Open a Bookmark

Quickly launch a web page from the Bookmarks page.

1. From  Internet, tap  Bookmarks.
2. Tap a bookmark entry.

## Save a web page

There are several options to save a webpage in the Samsung Internet app.

- From  Internet, tap  Tools > Add page to for the following options:
  - **Bookmarks:** Add the webpage to your Bookmark list.
  - **Quick access:** View a list of commonly accessed or saved webpages.
  - **Home screen:** Create a shortcut to the webpage on your Home screen.
  - **Saved pages:** Save the webpage content on your device so that you can access it offline.

## View history

To view a list of recently visited web pages:

- From  Internet, tap  Tools > History.

 **TIP** To clear your browsing history, tap  More options > Clear history.

## Share pages

Web pages can be shared with your contacts.

- From  **Internet**, tap  **Tools** > **Share**, and follow the prompts.

## Secret mode

Pages viewed in secret mode are not listed in your browser history or search history, and leave no traces (such as cookies) on your device. Secret tabs are a darker shade than the normal tab windows.

Any downloaded files remain on your device after you close the secret tab.

1. From  **Internet**, tap  **1** **Tabs** > **Turn on secret mode**.
2. Tap **Start** to begin browsing in secret mode.

## Secret mode settings

Require a password or biometric lock to use secret mode.

1. From  **Internet**, tap  **1** **Tabs**.
2. Tap  **More options** > **Secret mode settings** for the following options:
  - **Use password**: Create a password to enable secret mode.
  - **Face**: Use Face recognition to keep Secret mode private.
  - **Fingerprints**: Use Fingerprint scanner to keep Secret mode private.
  - **Reset Secret mode**: Erase your secret mode data and restore defaults.

## Turn off secret mode

Disable secret mode and return to normal browsing.

- From  **Internet**, tap  **1** **Tabs** > **Turn off secret mode**.

## Internet settings

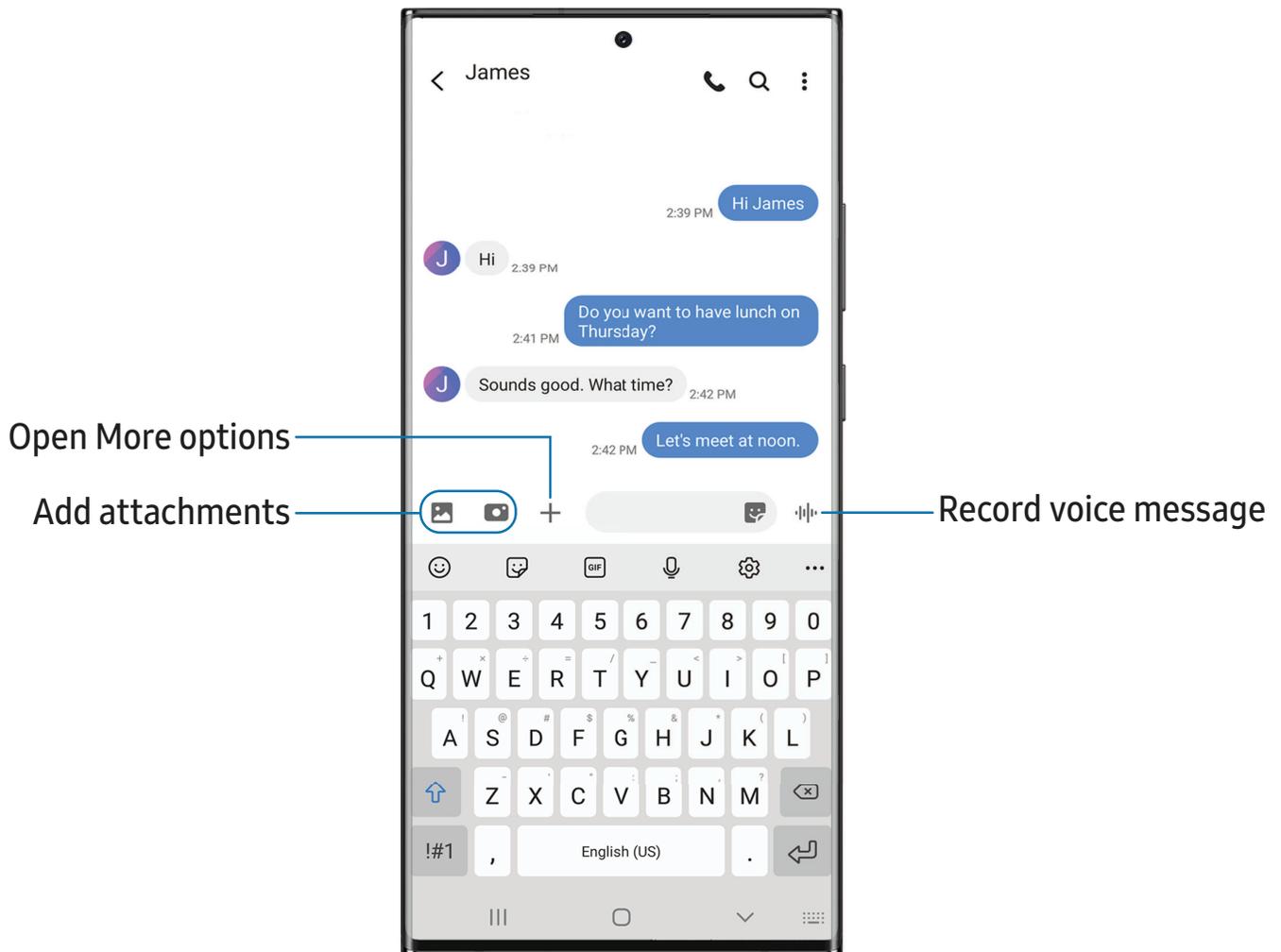
Modify settings associated with using the Internet app.

- From  **Internet**, tap  **Tools** > **Settings**.

## Messages

Keep in touch with your contacts by using the Messages app to share photos, send emojis, or just say a quick hello.

- From  Messages, tap  Compose new message.



### Message search

To quickly locate a message, use the search feature.

1. From  Messages, tap  Search.
2. Enter keywords in the Search field, and then tap  Search on the keyboard.

## Delete conversations

You can remove your conversation history by deleting conversations.

1. From  **Messages**, tap  **More options** > **Delete**.
2. Tap each conversation you want to delete.
3. Tap  **Delete all**, and confirm when prompted.

## Send SOS messages

Send a message with your location to designated contacts when you are in an emergency situation.

1. From Settings, tap  **Advanced features** > **Send SOS messages**, and then tap  to enable this feature.
  - To choose the number of times to press the Side key to send an SOS message, tap either **3 times** or **4 times**.
  - To choose a contact to automatically call after you send an SOS message, tap **Auto call someone**.
  - To include a picture from your front and rear cameras, tap **Attach pictures**.
  - To include a five-second audio recording in your SOS message, tap **Attach audio recording**.
  - To add recipients by creating new contacts or selecting from Contacts, tap **Send messages to**.
2. Press the **Side** key quickly three or four times to send an SOS message.

## Message settings

Configure the settings for text and multimedia messages.

- From  **Messages**, tap  **More options** > **Settings**.

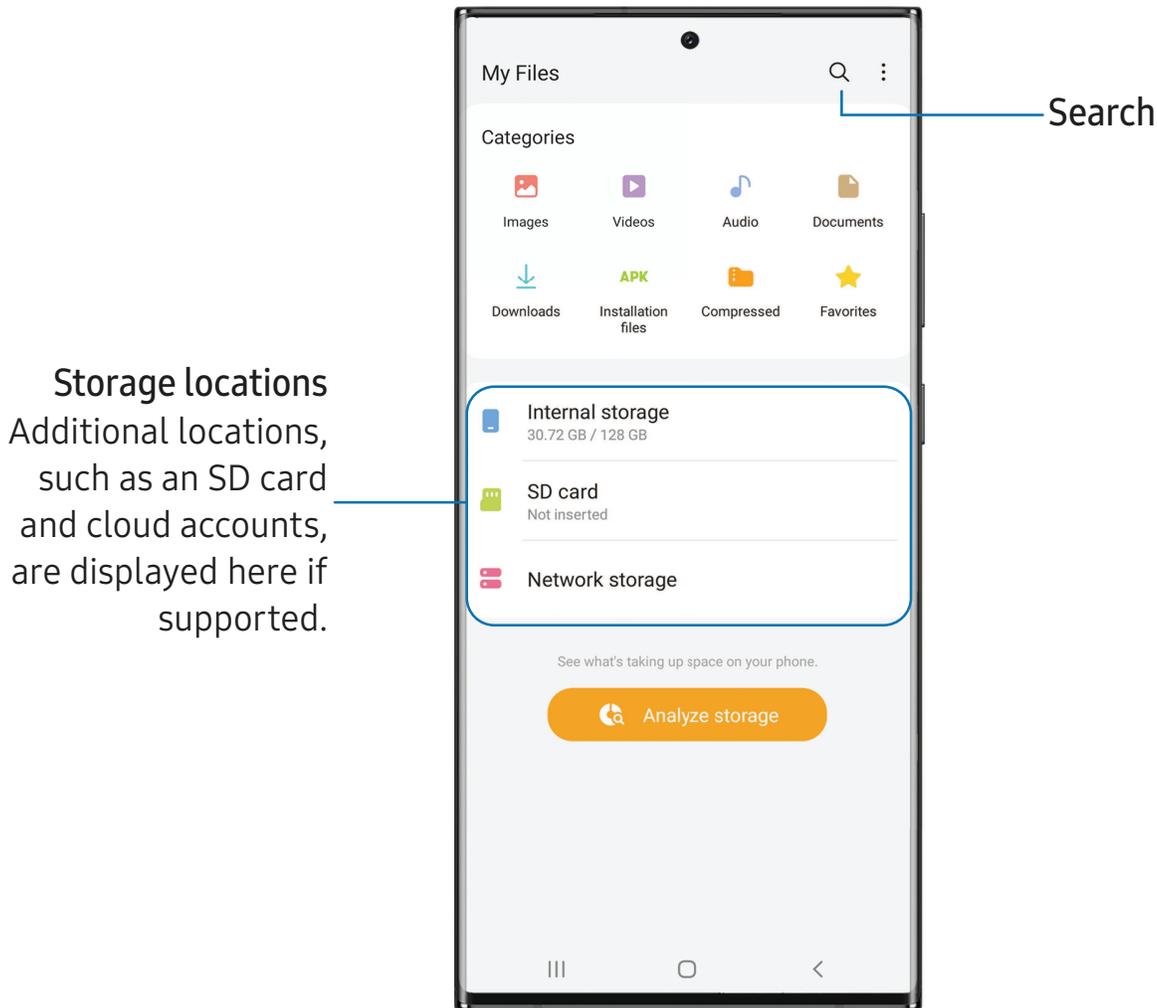
## Emergency alerts

Emergency alerts notify you of imminent threats and other situations. There is no charge for receiving an Emergency alert message.

1. From Settings, tap  **Notifications** > **Advanced settings**.
2. Tap **Wireless Emergency Alerts** to customize notifications for emergency alerts.

## My Files

View and manage files stored on your device, including images, videos, music, and sound clips. You can also access and manage files saved to your cloud accounts and SD card, if supported.



## File groups

Files stored in the device are organized into the following groups:

- **Recent files:** View recently accessed files.
  - This option is displayed if one or more files have been accessed recently.
- **Categories:** View your files based on the file type.
- **Storage:** View files saved on your device, optional SD card, and cloud accounts.
  - Cloud accounts vary depending on the services you sign in to.
- **Analyze storage:** See what's taking up space in your storage.

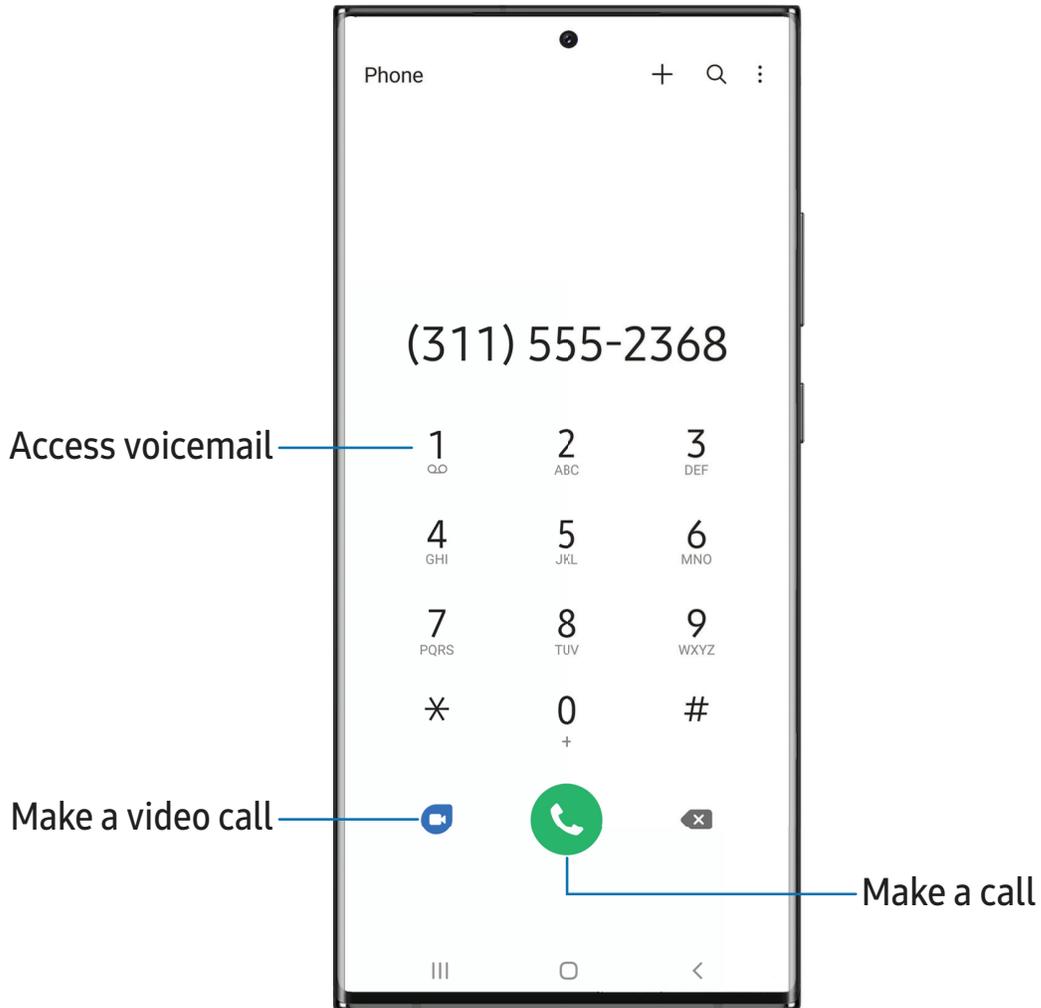
## My Files options

Use My Files options to search, edit, clear file history, and more.

- From  **My Files**, the following options are available:
  -  **Search:** Search for a file or folder.
  -  **More options:**
    - **Clear Recent files list:** Remove the list of recently accessed files. This option is only available after a file has been opened through My Files.
    - **Analyze storage:** See what's taking up space in your storage.
    - **Trash:** Choose to restore or permanently remove files that you delete.
    - **Settings:** View settings for the app.
    - **Contact us:** Get connected with Samsung Members.

# Phone

The Phone app does more than just make telephone calls. Explore the advanced calling features. See your carrier for more information.



## Calls

The Phone app allows you to make and answer calls from the Home screen, Recents tab, Contacts and more.

### Make a call

Use your phone to make and answer calls from a Home screen.

- From  **Phone**, enter a number on the keypad and tap  **Call**.
  - Tap **Keypad** if the keypad is not displayed.

Make a call from Recents

All incoming, outgoing, and missed calls are recorded in the Call log.

1. From  **Phone**, tap **Recents** to display a list of recent calls.
2. Tap a contact, and then tap  **Call**.

Make a call from Contacts

Call a contact from the Contacts app.

- From  **Contacts**, swipe your finger across a contact to the right to call the contact.

### Answer a call

When a call is received, the phone rings and the caller's phone number or name is displayed. If you are using an app, a pop-up screen is displayed for the incoming call.

- On the incoming call screen, drag  **Answer** to the right to answer the call.

 **TIP** On the incoming call pop-up screen, tap  **Answer** to answer the call.

## Decline a call

You can choose to decline an incoming call. If you are using an app, a pop-up screen is displayed for the incoming call.

- On the incoming call screen, drag  **Decline** to the left to reject the call and send it to your voicemail.

 **TIP** On the incoming pop-up screen, tap  **Decline** to reject the call and send it to your voicemail.

## Decline with a message

You can choose to decline an incoming call with a text message response.

- On the incoming call screen, drag **Send message** upward and select a message.

 **TIP** On the incoming call pop-up screen, tap **Send message** and select a message.

## End a call

- Tap  **End call** when you are ready to end your call.

## Actions while on a call

You can adjust call volume, switch to a headset or speaker, and even multitask while on a call.

- Press the **Volume** keys to increase or decrease the volume.

## Switch to headset or speaker

Listen to the call using the speaker or through a Bluetooth® headset (not included).

- Tap  **Speaker** to hear the caller using the speaker or tap  **Bluetooth** to hear the caller using a Bluetooth headset.

## Multitask

If you exit the call screen to use another app, your active call is indicated in the Status bar.

To return to the call screen:

- Drag the Status bar down to display the Notification panel and tap the call.

To end a call while multitasking:

- Drag the Status bar down to display the Notification panel, and then tap  **End call**.

## Call background

Select a picture or video to show when you make or receive a call.

- From  **Phone**, tap  **More options** > **Settings** > **Call background** for the following options:
  - **Layout**: Choose how to show caller info when the person has a profile picture.
  - **Background**: Choose a photo to display during a call.

## Call pop-up settings

When calls are received while using other apps, they can be displayed as pop-ups.

- From  **Phone**, tap  **More options** > **Settings** > **Call display while using apps**. The following options are available:
  - **Full screen**: Display an incoming call in the full screen Phone app.
  - **Pop-up**: Display an incoming call as a pop-up at the top of the screen.
  - **Mini pop-up**: Display an incoming call as a smaller pop-up.
  - **Keep calls in pop-up**: Enable this option to keep calls in the pop-up after they are answered.

## Manage calls

Your calls are recorded in a call log. You can set up speed dials, block numbers, and use voicemail.

### Call log

The numbers of the calls you have dialed, received, or missed are stored in the Call log.

- From  Phone, tap **Recents**. A list of recent calls is displayed. If the caller is in your Contacts list, the caller's name is displayed.

### Save a contact from a recent call

Use recent call information to create a contact or update your Contacts list.

1. From  Phone, tap **Recents**.
2. Tap the call that contains the information that you want to save to your Contacts list, and tap **Add to contacts**.
3. Tap **Create new contact** or **Update existing contact**.

### Delete call records

To delete Call log entries:

1. From  Phone, tap **Recents**.
2. Touch and hold the call you want to delete from the Call log.
3. Tap  **Delete**.

### Block a number

By adding a caller to your Block list, future calls from this number are sent directly to your voicemail, and messages are not received.

1. From  Phone, tap **Recents**.
2. Tap the caller you want to add to the Block list.
3. Tap  **Details** >  **Block**, and confirm when prompted.

 **TIP** You can also modify your Block list in Settings. From  Phone, tap **More options** > **Settings** > **Block numbers**.

## Speed dial

You can assign a shortcut number to a contact for speed dialing their default number.

1. From  **Phone**, tap **Keypad** >  **More options** > **Speed dial numbers**. The Speed dial numbers screen displays the reserved speed dial numbers.
2. Tap an unassigned number.
  - Tap  **Menu** to select a different Speed dial number than the next one in sequence.
  - Number 1 is reserved for Voicemail.
3. Type in a name or number, or tap  **Add from Contacts** to assign a contact to the number.
  - The selected contact is displayed in the Speed dial number box.

### Make a call with Speed dial

You can make a call using Speed dial.

- From  **Phone**, touch and hold the Speed dial number.
  - If the Speed dial number is more than one digit long, enter the first digits, and then hold the last digit.

### Remove a Speed dial number

You can remove an assigned Speed dial number.

1. From  **Phone**, tap  **More options** > **Speed dial numbers**.
2. Tap  **Delete** by the contact you want to remove from Speed dial.

## Emergency calls

You can dial the emergency telephone number in your region regardless of the phone's service status. If your phone is not activated, you can only make an emergency call.

1. From  **Phone**, enter the emergency telephone number (911 in North America) and tap **Call**.
2. Complete your call. During this type of call, you have access to most in-call features.

 **TIP** The emergency telephone number can be dialed even if the phone is locked, allowing anyone to use your phone to call for help in an emergency. When accessed from a locked screen, only the emergency calling feature is accessible to the caller. The rest of the phone remains secured.

## Phone settings

These settings allow you to modify settings associated with the Phone app.

○ From  Phone, tap  More options > Settings.

## Samsung Health

Use Samsung Health™ to plan, track various aspects of daily life contributing to well-being such as physical activity, diet, and sleep. For more information, visit [samsung.com/us/support/owners/app/samsung-health](https://samsung.com/us/support/owners/app/samsung-health).

 **NOTE** The information gathered from this device, Samsung Health, or related software is not intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of disease.

The accuracy of the information and data provided by this device and its related software, may be affected by factors such as environmental conditions, specific activity performed while using/wearing the device, settings of the device, user configuration/user-provided information, and other end-user interactions.

## Before you start exercising

Although the Samsung Health application is a great companion to your exercise routine, it is always best to make sure you consult with your physician before beginning any exercise regimen. While moderate physical activity, such as brisk walking, is safe for most people, health experts suggest that you talk with your doctor before you start an exercise program, particularly if you have any of the following conditions:

- Heart disease; Asthma or lung disease; Diabetes, or liver or kidney disease; and Arthritis.

Before beginning your exercise regimen check with your doctor if you have symptoms suggestive of heart, lung, or other serious disease, such as:

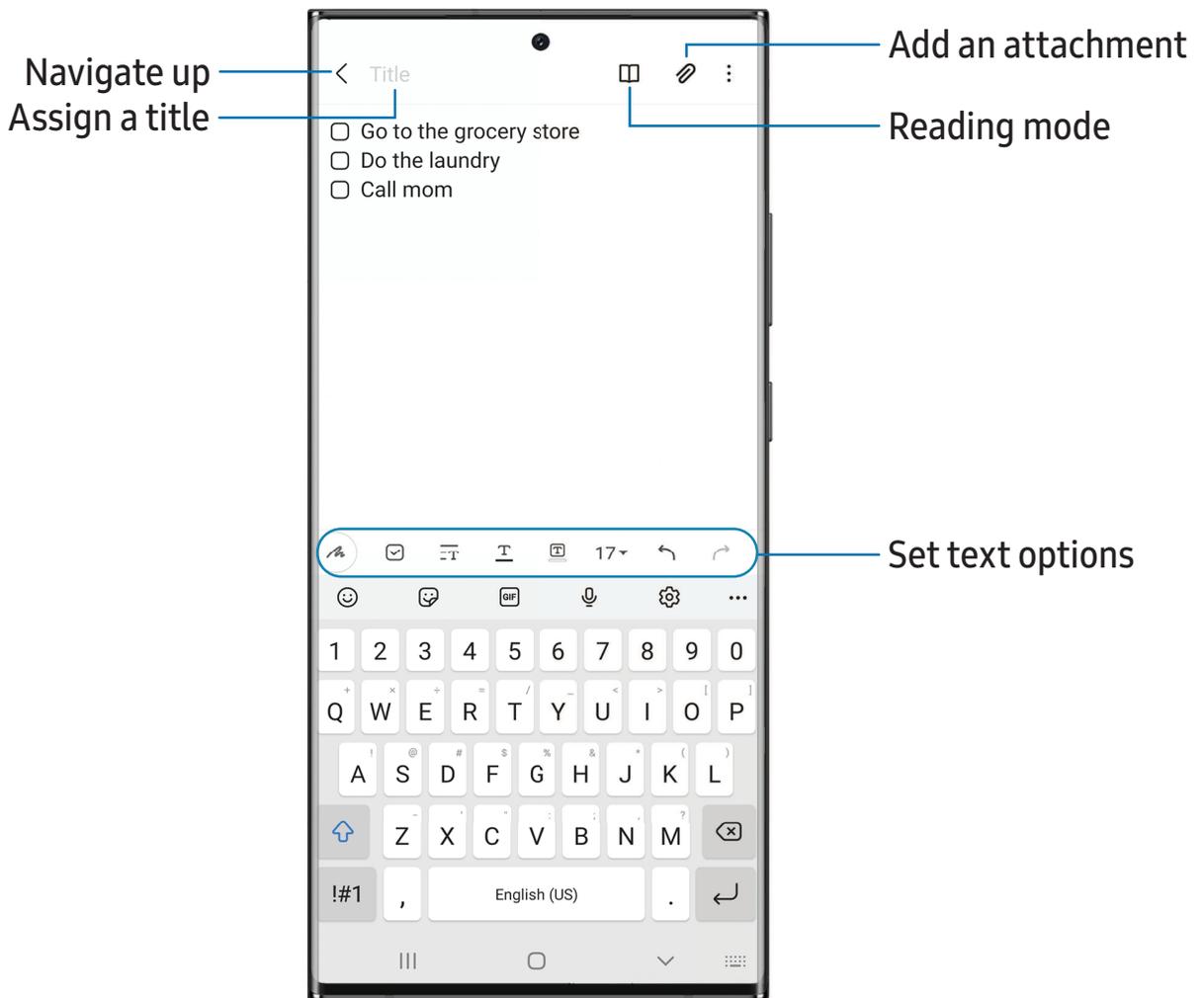
- Pain or discomfort in your chest, neck, jaw, or arms during physical activity;
- Dizziness or loss of consciousness;
- Shortness of breath with mild exertion or at rest, or when lying down or going to bed;
- Ankle swelling, especially at night;
- A heart murmur or a rapid or pronounced heartbeat;
- Muscle pain when walking upstairs or up a hill that goes away when you rest.

It is recommended that before engaging in an exercise routine, you consult with your doctor or medical practitioner. If you are unsure of your health status, have several health problems, or are pregnant, you should speak with your doctor before starting a new exercise program.

# Samsung Notes

Use Samsung Notes to create notes containing text, images with footnotes, voice recordings, and music. You can share your notes easily using social networking services.

Visit [samsung.com/us/support/owners/app/samsung-notes](https://samsung.com/us/support/owners/app/samsung-notes) to learn more.



## Create notes

Add text, images, voice recordings and more.

1. From  **Samsung Notes**, tap  **Add**.
2. Use the text options to create content.

## Voice recordings

Create annotated voice recordings perfect for lectures or meetings. Take notes while recording audio. Playback is synced to scroll to the corresponding text.

1. From  **Samsung Notes**, tap  **Add**.
2. Tap  **Insert** > **Voice recordings**.
3. Use the text options to create content while audio is being recorded.

## Edit notes

Make edits to notes you create.

1. From  **Samsung Notes**, tap a note to view it.
2. Tap  **Edit** and make changes.
3. Tap  **More options** for the following:
  - **Share**: Choose a file type, and share the note.
  - **Save as file**: Choose to save the note as another file format.
  - **Sort pages**: Add, copy, cut, and delete pages.
  - **Page template**: Apply a template to some or all pages.
  - **Background color**: Apply a color to the page.
  - **Add to favorites/Remove from favorites**: These notes are saved to a favorites folder in the notes menu.
  - **Add tags/Edit tags**: Use tags to easily search your notes.
  - **Finger drawing on/Finger drawing off**: Enable drawing with your fingers. When disabled only the S Pen can be used to draw.
4. When you are finished, tap  **Back**.

## Notes options

You can edit, sort, or manage notes.

- From  **Samsung Notes**, the following options are available:
  -  **Import PDFs:** Open a PDF in Samsung Notes.
  -  **Search:** Search for a keyword.
  -  **More options:**
    - **Edit:** Select notes to share, delete, save as file, lock, or move.
    - **Sort:** Change the way notes are organized.
    - **View:** Switch between Grid, List, or Simple list.

## Notes menu

You can view your notes by category.

- From  **Samsung Notes**, tap  **Navigation drawer** for the following options:
  -  **Samsung Notes settings:** View settings for the Samsung Notes app.
  - **All notes:** View all notes.
  - **Frequently used:** Quick access to commonly used notes.
  - **Shared notebooks:** View notebooks shared with your contacts through your Samsung account.
  - **Trash:** View deleted notes for up to 15 days.
  - **Folders:** View notes by groups.
  - **Manage folders:** Add, remove, and organize groups.

## **Samsung Pay**

Samsung Pay™ lets you make payments with your device. It is accepted almost anywhere you can swipe or tap your credit card. A Samsung account is required.

For support, visit [samsung.com/us/support/owners/app/samsung-pay](https://samsung.com/us/support/owners/app/samsung-pay).

- Tap **Get started** and follow the prompts.

 **NOTE** For added security, your credit and debit card information is not stored on a cloud service. If you are using the Samsung Pay app on multiple devices, you must sign in to the app and confirm all payment cards on each device. Some card issuers may limit the number of devices.

## Use Samsung Pay

Use Samsung Pay by opening the app and holding your device over the store's card reader.

1. From  **Samsung Pay**, select a card to pay with and authorize payments by scanning your finger or by entering your Samsung Pay PIN.
2. Hold your phone over the store's card reader.
  - When your payment is complete, a receipt is sent to your registered email.

 **NOTE** Make sure the NFC feature is enabled on your device. For more information, see [NFC and payment](#).

## Quick access

Use Quick access to open Samsung Pay from the Lock Screen, Home screen, or Screen off.

1. From  **Samsung Pay**, tap  **Menu** > **Settings** > **Quick access**.
2. Tap  to enable each screen option.

To use Quick access:

1. From any screen, swipe up from the bottom of the screen.
  - Your payment card and Quick access are displayed.
2. Drag the card down to close Quick access.

## **Use gift cards with Samsung Pay**

Purchase, send, and redeem gift cards from an expanding selection of your favorite retailers.

To view the list of supported banks and gift card merchants, visit [samsung.com/us/samsung-pay/compatible-cards/#bank](https://samsung.com/us/samsung-pay/compatible-cards/#bank).

## **Secure your information**

Samsung Pay is designed with the latest security technology and works on most recent Samsung Galaxy devices. Payments are authorized with your fingerprint or PIN, and each transaction uses a unique token each time, so your device only allows payments with your consent.

# Google apps

The following Google apps may be preloaded on your device. Apps can be downloaded from the Google Play store.

[Chrome](#) | [Drive](#) | [Duo](#) | [Gmail](#) | [Google](#) | [Google Pay](#) | [Maps](#) | [Photos](#) | [Play Movies & TV](#) | [Play Store](#) | [YouTube](#) | [YT Music](#)



Browse the Internet with Chrome™ and bring your open tabs, bookmarks, and address bar data from your computer to your mobile device.

Visit [support.google.com/chrome](https://support.google.com/chrome) to learn more.



Open, view, rename, and share files saved to your Google Drive™ cloud account.

Visit [support.google.com/drive](https://support.google.com/drive) to learn more.



Make video calls.

Visit [support.google.com/duo](https://support.google.com/duo) to learn more.



Send and receive email with Google's web-based email service.

Visit [support.google.com/mail](https://support.google.com/mail) to learn more.



Find online content with tools that learn what interests you. Turn on your personalized feed to receive customized content.

Visit [support.google.com/websearch](https://support.google.com/websearch) to learn more.



Pay with your Android phone at participating stores and within mobile apps with Google Pay™.

Visit [support.google.com/pay](https://support.google.com/pay) to learn more.



Get directions and other location-based information. You must enable location services to use Google Maps. For more information, see [Location](#).

Visit [support.google.com/maps](https://support.google.com/maps) to learn more.



Store and back up your photos and videos automatically to your Google Account with Google Photos™.

Visit [support.google.com/photos](https://support.google.com/photos) to learn more.



Watch movies and TV shows purchased from Google Play. You can also view videos saved on your device.

Visit [play.google.com/store/movies](https://play.google.com/store/movies) to learn more.



Find new apps, movies and TV shows, music, books, magazines, and games in the Google Play store.

Visit [support.google.com/play](https://support.google.com/play) to learn more.



Watch and upload YouTube™ videos right from your device.

Visit [support.google.com/youtube](https://support.google.com/youtube) to learn more.



Stream and browse playlists, albums, and artists from YouTube Music.

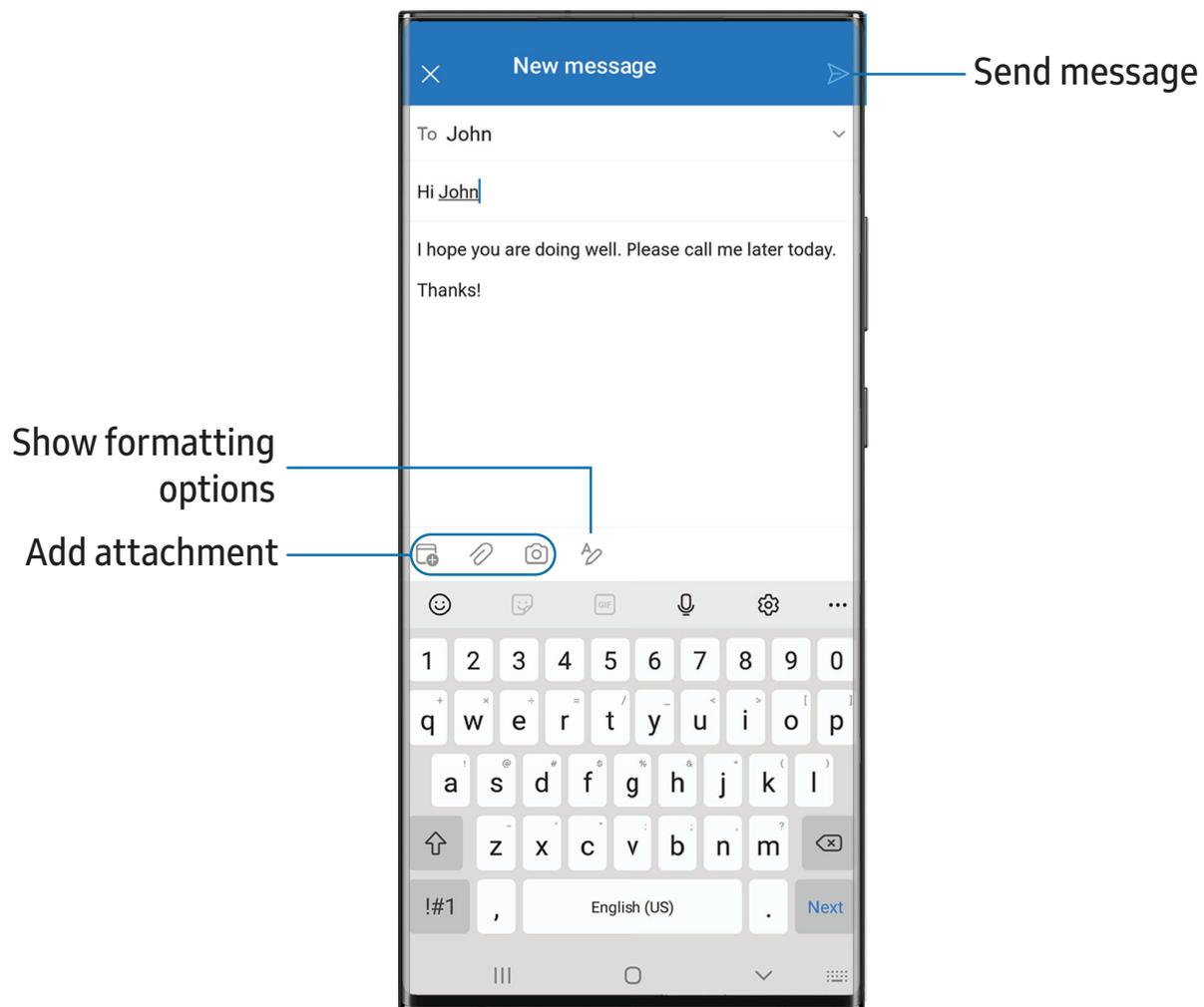
# Microsoft apps

The following Microsoft® apps may be preloaded on your device. Apps can be downloaded from Galaxy Store and the Google Play store.

[Outlook](#) | [LinkedIn](#) | [Office](#) | [OneDrive](#)



Access email, calendar, contacts, tasks, and more in Outlook. See [Add an Outlook account](#). Visit [support.office.com/en-us/article/outlook-for-ios-and-android-help-cd84214e-a5ac-4e95-9ea3-e07f78d0cde6](https://support.office.com/en-us/article/outlook-for-ios-and-android-help-cd84214e-a5ac-4e95-9ea3-e07f78d0cde6) to learn more.





Connect and network with other professionals around the world.



Enjoy the Word, Excel<sup>®</sup>, and PowerPoint<sup>®</sup> apps on your mobile device with the Microsoft Office mobile app.



Store and share photos, videos, documents, and more in your free online OneDrive<sup>®</sup> account—accessible from your personal computer, tablet, or phone.

# Settings

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Access Settings

Connections

Sounds and vibration

Notifications

Display

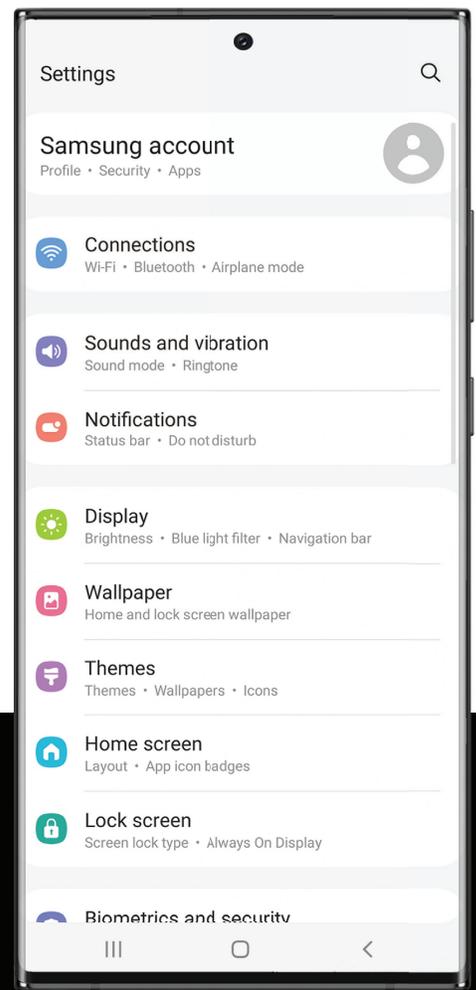
Lock screen and security

Accounts

Device maintenance

Accessibility

Other settings



# Access Settings

There are a couple of ways to access your device settings.

- From a Home screen, swipe down and tap  **Settings**.
- From Apps, tap  **Settings**.

## Search for Settings

If you are not sure exactly where to find a certain setting, you can search for it.

1. From Settings, tap  **Search**, and enter keywords.
2. Tap an entry to go to that setting.

# Connections

Manage connections between your device and a variety of networks and other devices.

[Wi-Fi](#) | [Bluetooth](#) | [NFC and payment](#) | [Airplane mode](#) | [Data usage](#) | [Mobile hotspot](#) | [Tethering](#) | [Nearby device scanning](#) | [Connect to a printer](#) | [Virtual Private Networks](#) | [Private DNS](#) | [Ethernet](#)

## Wi-Fi

You can connect your device to a Wi-Fi network to access the Internet without using your mobile data.

1. From Settings, tap  **Connections** > **Wi-Fi**, and then tap  to turn on Wi-Fi and scan for available networks.
2. Tap a network, and enter a password if required.

## Connect to a hidden Wi-Fi network

If the Wi-Fi network you want is not listed after a scan, you can still connect to it by entering the information manually. Ask the Wi-Fi network administrator for the name and password before you begin.

1. From Settings, tap  **Connections** > **Wi-Fi**, and then tap  to turn on Wi-Fi.
2. Tap  **Add network** at the bottom of the list.
3. Enter information about the Wi-Fi network:
  - **Network name:** Type the exact name of the network.
  - **Security:** Select a security option from the list, and enter the password if required.
  - **Advanced:** Define other advanced options, such as IP and Proxy settings.
4. Tap **Save**.

 **TIP** Tap  **Scan QR code** to connect to a Wi-Fi network by using your device's camera to scan a QR code.

## Advanced Wi-Fi settings

You can configure connections to various types of Wi-Fi networks and hotspots, manage saved networks and look up your device's network addresses.

1. From Settings, tap  **Connections** > **Wi-Fi**, and then tap  to turn on Wi-Fi.
2. Tap  **More options** > **Advanced**.
  - **Switch to mobile data:** When enabled, your device will switch to mobile data whenever the Wi-Fi connection is unstable. When the Wi-Fi signal is strong, it switches back to Wi-Fi.
  - **Turn on Wi-Fi automatically:** Turn on Wi-Fi in frequently-used locations.
  - **Detect suspicious networks:** Get notified when suspicious activity is detected on the current Wi-Fi network.
  - **Show network quality info:** Display network information (such as speed and stability) in the list of available Wi-Fi networks.
  - **Wi-Fi power saving mode:** Enable Wi-Fi traffic analysis to reduce battery usage.

- **Network notification:** Receive notifications when open networks in range are detected.
- **Manage networks:** View saved Wi-Fi networks and configure whether to auto reconnect to or forget individual networks.
- **Wi-Fi control history:** View apps that have recently turned your Wi-Fi on or off.
- **Hotspot 2.0:** Connect automatically to Wi-Fi networks that support Hotspot 2.0.
- **Install network certificates:** Install authentication certificates.

## Wi-Fi Direct

Wi-Fi Direct uses Wi-Fi to share data between devices.

1. From Settings, tap  **Connections** > **Wi-Fi**, and then tap  to turn on Wi-Fi.
2. Tap  **More options** > **Wi-Fi Direct**.
3. Tap a device, and then follow the prompts to connect.

 **TIP** When sharing a file, tap  **Wi-Fi Direct** to use this feature.

## Disconnect from Wi-Fi Direct

Disconnect your device from a Wi-Fi Direct device.

- From Settings, tap  **Connections** > **Wi-Fi** >  **More options** > **Wi-Fi Direct**. Tap a device to disconnect it.

## Bluetooth

You can pair your device to other Bluetooth-enabled devices, like Bluetooth headphones or a Bluetooth-enabled vehicle infotainment system. Once a pairing is created, the devices remember each other and can exchange information without having to enter the passkey again.

1. From Settings, tap  **Connections** > **Bluetooth**, and then tap  to turn on Bluetooth.
2. Tap a device and follow the prompts to connect.

 **TIP** When sharing a file, tap  **Bluetooth** to use this feature.

### Rename a paired device

You can rename a paired device to make it easier to recognize.

1. From Settings, tap  **Connections** > **Bluetooth**, and then tap  to turn on Bluetooth.
2. Tap  **Settings** next to the device name, and then tap **Rename**.
3. Enter a new name, and tap **Rename**.

### Unpair from a Bluetooth device

When you unpair from a Bluetooth device, the two devices no longer recognize each other and you will need to pair with the device again in order to connect to it.

1. From Settings, tap  **Connections** > **Bluetooth**, and then tap  to turn on Bluetooth.
2. Tap  **Settings** next to the device, and then tap **Unpair**.

## Advanced options

Additional Bluetooth features are available in the Advanced menu.

1. From Settings, tap  **Connections** > **Bluetooth**.
2. Tap  **More options** > **Advanced** for the following options:
  - **Music Share**: Let friends play music on your Bluetooth speaker or headphones.
  - **Ringtone sync**: Use the ringtone set on your device when you receive calls through a connected Bluetooth device.
  - **Bluetooth control history**: View apps that have used Bluetooth recently.

## Dual audio

You can play audio from your device to two connected Bluetooth audio devices.

1. Connect Bluetooth audio devices to your device.
2. From the Notification panel, tap **Media**.
3. Under Audio output, tap  next to each audio device to play audio to them (up to two devices).

## NFC and payment

Near Field Communication (NFC) allows you to communicate with another device without connecting to a network. This technology is used by Android Beam and certain payment apps. The device that you are transferring to needs to support NFC, and it needs to be within four centimeters of your device.

- From Settings, tap  **Connections** > **NFC and contactless payments**, and then tap  to turn on this feature.

## Tap and pay

Use an NFC payment app to make payments by touching your device to a compatible credit card reader.

1. From Settings, tap  **Connections** > **NFC and contactless payments**, and then tap  to turn on NFC.
2. Tap **Contactless payments** to see the default payment app.
  - To use another payment app, tap an available app to choose it.
  - To use a payment app that is open, tap **Pay with currently open app**.
  - To set another payment service as the default, tap **Others**, and then tap the service you prefer.

 **TIP** NFC technology is used with  **Samsung Pay**. Turn on this feature to see how easy and secure it is to use your device to make payments.

## Airplane mode

Airplane mode turns off all network connections including calling, texting, mobile data, Wi-Fi, and Bluetooth. While Airplane mode is enabled, you can turn on Wi-Fi and Bluetooth in Settings or from the Quick settings panel.

- From Settings, tap  **Connections** > **Airplane mode**, and then tap  to enable this feature.

## Data usage

Check your current mobile and Wi-Fi data usage. You can also customize warnings and limits.

- From Settings, tap  **Connections** > **Data usage**.

## Monitor Wi-Fi data

You can restrict Wi-Fi data access by customizing usage limits and networks.

1. From Settings, tap  **Connections** > **Data usage**.
2. Tap **Wi-Fi data usage** to view data usage over Wi-Fi connections over a period of time. You can view total usage as well as usage by app.

## Mobile hotspot

Mobile hotspot uses your data plan to create a Wi-Fi network that can be used by multiple devices.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap  to turn on Mobile hotspot.
3. On the devices you want to connect, activate Wi-Fi and select your device's Mobile hotspot. Enter the Mobile hotspot password to connect.
  - Connected devices are listed under the heading **Connected devices**.

 **TIP** Tap  **QR code** to connect another device to your Mobile hotspot by scanning a QR code instead of entering a password.

## Change the Mobile hotspot password

You can customize your Mobile hotspot password to make it easier to remember.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap the password, enter a new password, and then tap **Save**.

## Configure mobile hotspot settings

You can customize your mobile hotspot's security and connection settings.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap **Configure** for the following settings:
  - **Network name:** View and change the name of your Mobile hotspot.
  - **Security:** Choose the security level for your Mobile hotspot.
  - **Password:** If you choose a security level that uses a password, you can view or change it.
  - **Band:** Select one of the available bandwidth options.
  - **Advanced:** Configure additional Mobile hotspot settings like Wi-Fi sharing and timeout settings.

## Auto hotspot

Share your hotspot connection automatically with other devices signed in to your Samsung account.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap **Auto hotspot**, and tap  to enable the feature.

## Tethering

You can use tethering to share your device's Internet connection with another device.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering**.
2. Tap an option:
  - Tap **Bluetooth tethering** to share your device's Internet connection using Bluetooth.
  - Connect the computer to the device using a USB cable, and then tap **USB tethering**.
  - Connect the computer to the device using an Ethernet adapter, and then tap **Ethernet tethering**.

## Nearby device scanning

Easily set up connections to other available devices by turning on Nearby device scanning. This feature sends you a notification when there are available devices to connect to.

1. From Settings, tap  **Connections** > **More connection settings** > **Nearby device scanning**.
2. Tap  to turn on the feature.

## Connect to a printer

Connect your device to a printer on the same Wi-Fi network to easily print documents and images from your device.

1. From Settings, tap  **Connections** > **More connection settings** > **Printing**.
2. Tap **Default print service**, and then tap  **More options** > **Add printer**.
  - If your printer requires a plugin, tap  **Download plugin** and follow the prompts to add a print service.

 **NOTE** Not all apps support printing.

## Virtual Private Networks

A Virtual Private Network (VPN) allows you to connect to a private secured network from your device. You will need the connection information from your VPN administrator.

1. From Settings, tap  **Connections** > **More connection settings** > **VPN**.
2. Tap  **More options** > **Add VPN profile**.
3. Enter the VPN network information provided by your network administrator, and tap **Save**.

## Manage a VPN

Use the VPN settings menu to edit or delete a VPN connection.

1. From Settings, tap  **Connections** > **More connection settings** > **VPN**.
2. Tap  **Settings** next to a VPN.
3. Edit the VPN and tap **Save**, or tap **Delete** to remove the VPN.

## Connect to a VPN

Once you have set up a VPN, connecting to and disconnecting from a VPN is easy.

1. From Settings, tap  **Connections** > **More connection settings** > **VPN**.
2. Tap a **VPN**, enter your log in information, and tap **Connect**.
  - To disconnect, tap the VPN, and then tap **Disconnect**.

## Private DNS

You can configure your device to connect to a private DNS host.

1. From Settings, tap  **Connections** > **More connection settings** > **Private DNS**.
2. Tap one of the available options to configure a private DNS connection.
3. Tap **Save**.

## Ethernet

If wireless network connection is not available, you can use an Ethernet cable to connect your device to a local network.

1. Connect an Ethernet cable to your device.
2. From Settings, tap  **Connections** > **More connection settings** > **Ethernet**, and follow the prompts.

 **TIP** You need an adapter (not included) to connect an Ethernet cable to your device.

# Sounds and vibration

You can control the sounds and vibrations used to indicate notifications, screen touches, and other interactions.

[Sound mode](#) | [Vibrations](#) | [Volume](#) | [Ringtone](#) | [Notification sound](#) | [System sound](#) | [System sounds and vibration](#) | [Dolby Atmos](#) | [Equalizer](#) | [UHQ upscaler](#) | [Adapt sound](#) | [Separate app sound](#)

## Sound mode

You can change the sound mode on your device without using the volume keys.

- From Settings, tap  **Sounds and vibration**, and then choose a mode:
  - **Sound:** Use the sounds, vibrations, and volume levels you have chosen in Sound settings for notifications and alerts.
    - **Vibrate while ringing:** Set your device to vibrate in addition to ringing when you receive a call.
  - **Vibrate:** Use vibration only for notifications and alerts.
  - **Mute:** Set your device to make no sounds.
    - **Temporary mute:** Set a time limit for muting the device.

 **TIP** Use the sound mode setting instead of the volume keys to change the sound mode without losing your customized sound levels.

## Mute with gestures

Quickly mute sounds by covering the screen or turning the device over.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Mute with gestures**, and tap  to enable.

## Vibrations

You can control how and when your device vibrates.

1. From Settings, tap  **Sounds and vibration**.
2. Tap options to customize:
  - **Vibration pattern:** Choose from preset vibration patterns for notifications.
  - **Vibration intensity:** Set vibration intensity levels for calls, notifications, and touch interactions by dragging the sliders.

## Volume

Set the volume level for call ringtones, notifications, media, and system sounds.

- From Settings, tap  **Sounds and vibration** > **Volume**, and drag the sliders for each sound type.

 **TIP** You can also use the **Volume** keys to adjust the volume. When pressed, a pop-up menu shows the volume level and current sound type. You can tap the menu to expand it, and then adjust the volume of the other sound types by dragging their sliders.

### Use Volume keys for media

Set the default action of the Volume keys to control the media sound volume rather than whichever sound type is in use.

1. From Settings, tap  **Sounds and vibration** > **Volume**.
2. Tap **Use Volume keys for media** to enable this feature.

## Media volume limit

Limit the maximum output of the device's volume while using Bluetooth speakers or headphones (not included).

1. From Settings, tap  **Sounds and vibration** > **Volume**.
2. Tap  **More options** > **Media volume limit**.
3. Tap  to enable this feature.
  - To set the maximum output volume, drag the **Custom volume limit** slider.
  - To require a PIN to make changes to the volume setting, tap **Set volume limit PIN**.

## Ringtone

Customize your call ringtone by choosing from preset sounds or adding your own.

1. From Settings, tap  **Sounds and vibration** > **Ringtone**.
2. Tap a ringtone to hear a preview and select it, or tap  **Add** to use an audio file as a ringtone.

## Notification sound

Choose a preset sound for all notification alerts.

1. From Settings, tap  **Sounds and vibration** > **Notification sound**.
2. Tap a sound to hear a preview and select it.

 **TIP** You can also customize notifications sounds to be unique for each app using the App settings menu.

## System sound

Choose a sound theme to use for touch interactions, charging, changing the sound mode, and Samsung Keyboard, and more.

- From Settings, tap  **Sounds and vibration** > **System sound** and choose an available option.

## System sounds and vibration

Customize your device's sounds and vibrations for actions like tapping the screen and charging the device.

- From Settings, tap  **Sounds and vibration** > **System sound/vibration control** for the following options:

### Sound

- **Touch interactions:** Play tones when you touch or tap the screen to make selections.
- **Screen lock/unlock:** Play a sound when you lock or unlock the screen.
- **Emergency tone:** Set the emergency tone to alert, vibrate, or silent.
- **Charging:** Play a sound when a charger is connected.
- **Dialing keypad:** Play a tone when dialing numbers on the Phone keypad.
- **Samsung keyboard:** Play a sound when typing with the Samsung keyboard.

### Vibration

- **Touch interactions:** Vibrate when you tap navigation buttons or touch and hold items on the screen.
- **Dialing keypad:** Vibrate when dialing numbers on the Phone keypad.
- **Navigation gestures:** Vibrate when using gestures.
- **Samsung keyboard:** Vibrate when typing with the Samsung keyboard.
- **Camera feedback:** Vibrate when taking pictures, zooming, changing shooting modes, and more.

## Dolby Atmos

Enjoy Dolby Atmos quality when playing content that was specifically mixed for Atmos. This feature may only be available with a headset connected.

- From Settings, tap  **Sounds and vibration** > **Sound quality and effects** for the following options:
  - **Dolby Atmos:** Experience breakthrough audio that flows above and around you.
  - **Dolby Atmos for gaming:** Apply Dolby Atmos optimized for gaming.

## Equalizer

Choose an audio preset that is customized to different genres of music, or manually change your audio settings.

1. From Settings, tap  **Sounds and vibration** > **Sound quality and effects**.
2. Tap **Equalizer** to choose a music genre.

## UHQ upscaler

Enhance the sound resolution of music and videos for a clearer listening experience. This feature is only available with a headset connected.

1. From Settings, tap  **Sounds and vibration** > **Sound quality and effects**.
2. Tap **UHQ upscaler** and choose an upscaling option.

## Adapt sound

Customize the sound for each ear and enhance your listening experience.

1. From Settings, tap  **Sounds and vibration** > **Sound quality and effects** > **Adapt sound**.
2. Tap **Adapt sound for** to select when to change the sound settings.
3. Tap the sound profile that fits you best, and tap  **Settings** to customize.

 **TIP** Tap **Personalize your sound** to let your device identify the best sound for you.

## Separate app sound

You can choose to have an app play only media sound on a Bluetooth speaker or headset separate from the other sounds (like notifications). Connect to a Bluetooth device to make this option available in the Audio device menu.

1. From Settings, tap  **Sounds and vibration** > **Separate app sound**.
2. Tap **Turn on now** to enable Separate app sound, and then set the following options:
  - **App**: Choose an app to play its sound on a separate audio device.
  - **Audio device**: Choose the audio device that you want the app's sound to be played on.

# Notifications

You can prioritize and streamline app alerts by changing which apps send notifications and how notifications alert you.

[Notification pop-up style](#) | [Recently sent notifications](#) | [Do not disturb](#) | [Advanced settings](#) | [Alert when phone picked up](#)

## Notification pop-up style

You can change the style and additional settings for your notifications.

- From Settings, tap  **Notifications**, and then choose a pop-up style:
  - **Brief:** Enable customization of your notification colors, lighting style, and included apps.
    - **Included apps:** View brief notifications for your apps.
    - **Brief pop-up settings:** Customize the Edge lighting style, colors, and enable notifications to show even while the screen is off.
  - **Detailed:** Enable the default Samsung Notification settings.

## Recently sent notifications

You can view a list of apps that have sent notifications under Recently sent notifications.

1. From Settings, tap  **Notifications**.
2. Tap an entry under **Recently sent** to customize the notification settings.
3. Tap **More** to see the expanded list.

## Do not disturb

Do not disturb allows you to block sounds and notifications while this mode is turned on. You can also specify exceptions for people, apps, and alarms. You can also set a schedule for recurring events like sleep or meetings.

- From Settings, tap  **Notifications** > **Do not disturb** and configure the following:
  - **Do not disturb:** Enable Do not disturb to block sounds and notifications.
  - **For how long?:** Choose a default duration for Do not disturb mode when you enable it manually.
  - **Sleeping:** Customize a schedule for Do not disturb mode while you are sleeping.
  - **Add schedule:** Create a new schedule to configure the days and times to regularly put your device in Do not disturb mode.
  - **Calls, messages, and conversations:** Tap to allow Do not disturb exceptions.
  - **Alarms and sounds:** Enable sounds and vibrations for alarms, events, and reminders while Do not disturb mode is active.
  - **Apps:** Add apps that you would like to receive notifications from in Do not disturb mode. Call, message, and conversation notifications will still reach you even if you don't allow the associated apps.
  - **Hide notifications:** View customization options to hide notifications.

## Advanced settings

You can configure notifications from apps and services.

- From Settings, tap  **Notifications** > **Advanced settings**.
  - **Show notification icons:** Modify how many notifications appear on the Status bar.
  - **Show battery percentage:** Display the current battery life of your device on the Status bar.
  - **Notification history:** Display recent and snoozed notifications.
  - **Conversations:** View conversation notifications. Touch and hold a conversation notification to mark it as priority, set it as alerting, or silent.

- **Floating notifications:** Enable floating notifications in either Bubbles or Smart pop-up view.
- **Suggest actions and replies for notifications:** Get applicable suggestions for actions to notifications and replies to messages.
- **Notification reminders:** Enable and customize periodic reminders about notifications from selected apps and services. Clear notifications to stop the reminders.
- **App icon badges:** Identify which apps have active notifications with badges that appear on their icons. Tap to choose whether or not badges indicate the number of unread notifications.
- **Wireless Emergency Alerts:** Customize notifications for emergency alerts.

## Alert when phone picked up

You can set the device to notify you about missed calls and messages by vibrating when you pick it up.

1. From Settings, tap  **Advanced features** > **Motions and gestures**.
2. Tap **Alert when phone picked up** to enable the feature.

# Display

You can configure the screen brightness, timeout delay, font size, and many other display settings.

[Dark mode](#) | [Screen brightness](#) | [Motion smoothness](#) | [Blue light filter](#) | [Screen mode](#) | [Font size and style](#) | [Screen zoom](#) | [Screen resolution](#) | [Screen timeout](#) | [Accidental touch protection](#) | [Touch sensitivity](#) | [Show charging information](#) | [Screen saver](#) | [Lift to wake](#) | [Double tap to turn on screen](#) | [Double tap to turn off screen](#) | [Keep screen on while viewing](#) | [One-handed mode](#)

## Dark mode

Dark mode allows you to switch to a darker theme to keep your eyes more comfortable at night, darkening white or bright screens and notifications.

- From Settings, tap  **Display** for the following options:
  - **Light:** Apply a light color theme to your device (default).
  - **Dark:** Apply a dark color theme to your device.
  - **Dark mode settings:** Customize when and where Dark mode is applied.
    - **Turn on as scheduled:** Configure Dark mode for either **Sunset to sunrise** or **Custom schedule**.
    - **Adaptive color filter:** Turn on Blue light filter automatically between sunset and sunrise to reduce eye strain.

## Screen brightness

Adjust the screen brightness according to lighting conditions or personal preference.

1. From Settings, tap  **Display**.
2. Customize options under Brightness:
  - Drag the **Brightness** slider to set a custom brightness level.
  - Tap **Adaptive brightness** to automatically adjust the screen brightness based on the lighting conditions.

 **TIP** You can also adjust screen brightness from the Quick settings panel.

## Motion smoothness

Get smoother scrolling and more realistic animations by increasing the screen's refresh rate (Galaxy Note20 Ultra 5G only).

1. From Settings, tap  **Display** > **Motion smoothness**.
2. Tap an option, and then tap **Apply**.

## Blue light filter

The Blue light filter may help you sleep better and reduce eye strain. You can set a schedule to automatically turn this feature on and off.

- From Settings, tap  **Display** > **Blue light filter**, and then choose one of the following options:
  - Drag the **Opacity** slider to set the opacity of the filter.
  - Tap **Turn on now** to enable this feature.
  - Tap **Turn on as scheduled** to set a schedule for when Blue light filter should be enabled. You can choose **Sunset to sunrise** or **Custom schedule**.

## Screen mode

Your device has several screen mode options which adjust the screen quality for different situations. You can select the mode according to your preference.

1. From Settings, tap  **Display** > **Screen mode**.
2. Tap an option to set a different screen mode.

## Font size and style

You can change the font size and style to customize your device.

- From Settings, tap  **Display** > **Font size and style** for the following options:
  - Tap **Font style** to choose a different font.
    - Tap a font to select it, or tap  **Download fonts** to add fonts from Galaxy Store.
  - Tap **Bold font** to make all fonts appear with bold weight.
  - Drag the **Font size** slider to adjust the size of text.

## Screen zoom

Adjust the zoom level to make content easier to see.

1. From Settings, tap  **Display** > **Screen zoom**.
2. Drag the **Screen zoom** slider to adjust the zoom level.

## Screen resolution

You can lower the screen resolution to save battery power, or increase it to sharpen the image quality (Galaxy Note20 Ultra 5G only).

1. From Settings, tap  **Display** > **Screen resolution**.
2. Tap your preferred resolution, and then tap **Apply**.

 **NOTE** Some apps may not support higher or lower screen resolution settings and may close when you change the resolution.

## Screen timeout

You can set the screen to turn off after a set amount of time.

- From Settings, tap  **Display** > **Screen timeout**, and tap a time limit to set it.

 **NOTE** Prolonged display of non-moving images, excluding Always On Display, may result in permanent ghost-like afterimages or degraded image quality. Turn off the display screen when not in use.

## Accidental touch protection

Prevent the screen from detecting touch input while the device is in a dark place, such as a pocket or a bag.

- From Settings, tap  **Display** > **Accidental touch protection** to enable the feature.

## Touch sensitivity

Increase the touch sensitivity of the screen for use with screen protectors.

- From Settings, tap  **Display** > **Touch sensitivity** to enable.

## Show charging information

Battery level and estimated time until the device is fully charged can be displayed when the screen is off.

- From Settings, tap  **Display** > **Show charging information** to enable.

## Screen saver

You can display colors or photos when the screen turns off or while charging.

1. From Settings, tap  **Display** > **Screen saver**.
2. Choose one of the following options:
  - **None**: Do not display a screen saver.
  - **Colors**: Tap the selector to display a changing screen of colors.
  - **Photo table**: Display pictures in a photo table.
  - **Photo frame**: Display pictures in a photo frame.
  - **Photos**: Display pictures from your Google Photos account.
3. Tap **Preview** for a demonstration of the selected Screen saver.

 **TIP** Tap  **Settings** next to a feature for additional options.

## Lift to wake

Turn on the screen by lifting the device.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Lift to wake** to enable this feature.

## Double tap to turn on screen

Turn on the screen by double-tapping instead of using the Side key.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Double tap to turn on screen** to enable this feature.

## Double tap to turn off screen

Turn off the screen by double-tapping instead of using the Side key.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Double tap to turn off screen** to enable this feature.

## Keep screen on while viewing

Use the front camera to detect when you're looking at the screen to keep it turned on.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Keep screen on while viewing**, and tap  to enable the feature.

## One-handed mode

You can change the screen layout to accommodate operating your device with one hand.

1. From Settings, tap  **Advanced features** > **One-handed mode**.
2. Tap  to enable the feature and select one of the following options:
  - **Gesture:** Swipe down in the center of the bottom edge of the screen.
  - **Button:** Tap  **Home** two times in quick succession to reduce the display size.

# Lock screen and security

You can secure your device and protect your data by setting a screen lock.

[Screen lock types](#) | [Google Play Protect](#) | [Security update](#) | [Samsung Pass](#) | [Secure Folder](#) | [Secure Wi-Fi](#) | [Samsung Blockchain Keystore](#) | [Install unknown apps](#) | [Encrypt or decrypt SD card](#) | [View passwords](#) | [Device administration](#) | [Credential storage](#) | [Advanced security settings](#) | [Permission manager](#) | [Samsung Privacy](#) | [Location](#)

## Screen lock types

You can choose from the following screen lock types that offer high, medium, or no security: Swipe, Pattern, PIN, Password, and None.



**NOTE** Biometric locks are also available to protect access to your device and sensitive data on your device. For more information, see [Biometric security](#).

## Set a secure screen lock

It is recommended that you secure your device using a secure screen lock (Pattern, PIN, or Password). This is necessary to set up and enable biometric locks.

1. From Settings, tap  **Lock screen** > **Screen lock type** and tap a secure screen lock (**Pattern**, **PIN**, or **Password**).
2. Tap  to enable showing notifications on the lock screen. The following options are available:
  - **Icons only:** Show only notification icons with no details on the lock screen.
  - **Details:** Display notification details on the lock screen.
  - **Hide content:** Do not show notifications in the Notification panel.
  - **Notifications to show:** Choose which notifications to show on the Lock screen.
  - **Show on Always On Display:** Display notifications on the Always on Display screen.
3. Configure the following screen lock options:
  - **Smart Lock:** Unlock your device automatically when trusted locations or other devices have been detected. A secure screen lock is required for this feature.

- **Secure lock settings:** Customize your secure lock settings. A secure screen lock is required for this feature.
- **Always On Display:** Enable the Always On Display screen. For more information, see [Always On Display](#).

### Clock and information

You can configure features that appear on the Lock screen, like the clock and other useful information.

- From Settings, tap  **Lock screen** for the following options:
  - **Clock style:** Set the type and color of the clock on the Lock screen and Always On Display screen.
  - **Roaming clock:** Show the time both where you are and at home while you are roaming.
  - **Widgets:** Enable widgets on the Lock screen and Always On Display screen to get quick access to useful information.
  - **Contact information:** Show your contact information, such as your phone number or email address.
  - **Notifications:** Select which notifications to display on the Lock screen and Always On Display screen.
  - **Shortcuts:** Select which app shortcuts to add to the Lock screen.
  - **About Lock screen:** Update the Lock screen's software.

### Google Play Protect

You can configure Google Play to regularly check your apps and device for security risks and threats.

- From Settings, tap  **Biometrics and security** > **Google Play Protect**.
  - Updates are checked for automatically.

## Security update

You can easily check the date of the last installed security software update and find out if newer updates are available.

- From Settings, tap  **Biometrics and security** > **Security update** to see the latest security update installed and check if a newer update is available.

## Samsung Pass

Use Samsung Pass to access your favorite services with biometric data. You must sign in to your Samsung account to use Samsung Pass.

Visit [samsung.com/us/support/owners/app/samsung-pass](https://samsung.com/us/support/owners/app/samsung-pass) to learn more.

1. From Settings, tap  **Biometrics and security** > **Samsung Pass**.
2. Sign in to your Samsung account and add your biometric data.

## Secure Folder

You can create a secure folder on your device to protect private content and apps from anyone who may be using your device. You must sign in to your Samsung account to set up and use Secure folder.

- From Settings, tap  **Biometrics and security** > **Secure Folder** and follow the prompts to secure content on your device.

## Secure Wi-Fi

Get extra privacy protection while using unsecured Wi-Fi networks. You must sign in to your Samsung account to set up and use Secure Wi-Fi.

- From Settings, tap  **Biometrics and security** > **Secure Wi-Fi** and follow the prompts to configure privacy protection.

## Samsung Blockchain Keystore

Manage your blockchain private key.

1. From Settings, tap  **Biometrics and security** > **Samsung Blockchain Keystore**.
2. Follow the prompts to import or set up a new cryptocurrency wallet.

## Install unknown apps

You can allow installation of unknown third-party apps from selected apps or sources.

1. From Settings, tap  **Biometrics and security** > **Install unknown apps**.
2. Tap an app or source, and then tap **Allow from this source**.

 **TIP** Installing unknown third-party apps could make your device and personal data more vulnerable to security risks.

## Encrypt or decrypt SD card

You can encrypt your optional memory card (not included) to protect its data. This only allows the SD card information to be accessed from your device with a password. This feature is only available on the Galaxy Note20 Ultra 5G.

1. From Settings, tap  **Biometrics and security** > **Encrypt or decrypt SD card**.
2. Tap **Encrypt SD card** and follow the prompts to encrypt all data on your memory card.

 **NOTE** Performing a Factory data reset on your device prevents it from accessing an encrypted SD card. Before initiating a Factory data reset, make sure to decrypt the installed SD card first.

## Decrypt SD card

You can decrypt an optional memory card (not included) if it was encrypted by this device. You may want to decrypt the memory card if you plan to use it with another device or before performing a Factory data reset.

1. From Settings, tap  **Biometrics and security** > **Encrypt or decrypt SD card**.
2. Tap **Decrypt SD card** and follow the prompts to decrypt all data on your memory card.

## View passwords

You can have characters displayed briefly in password fields as you type them.

- From Settings, tap  **Biometrics and security** > **Other security settings** > **Make passwords visible** to turn on the feature.

## Device administration

You can authorize security features and apps to have administrative access to your device.

1. From Settings, tap  **Biometrics and security** > **Other security settings** > **Device admin apps**.
2. Tap an option to turn it on as a device administrator.

## Credential storage

You can manage the trusted security certificates installed on your device, which verify the identity of servers for secure connections.

- From Settings, tap  **Biometrics and security** > **Other security settings** for the following options:
  - **Storage type:** Select a storage location for credential contents.
  - **View security certificates:** Display certificates in your device's ROM and other certificates you have installed.
  - **User certificates:** View user certificates that identify your device.
  - **Install from device storage:** Install a new certificate from storage.
  - **Clear credentials:** Erase credential contents from the device and reset the password.

## Advanced security settings

You can use these options to configure advanced security settings to better protect your device.

- From Settings, tap  **Biometrics and security** > **Other security settings** for the following options:
  - **Trust agents:** Allow trusted devices to perform selected actions when connected.
    - This option is only displayed when a lock screen is turned on. For more information, see [Set a secure screen lock](#).

- **Pin windows:** Pin an app on your device screen, which prevents access to other features of your device.
- **Security policy updates:** Keep your device secure by checking for security updates.

## Permission manager

Apps might access features of your device that you permit them to (like the camera, microphone, or location) when they are running in the background, not just when you are using the app. You can set your device to notify you when this happens.

1. From Settings, tap  **Privacy** > **Permission manager**.
2. Tap a category, then tap an app to select which permissions you want to be notified about.



**NOTE** When using an app or service for the first time that wants to access certain features of your device, a dialog box asks if you want to permit such access.

## Samsung Privacy

Send diagnostic information about your device to Samsung when you are having technical problems.

1. From Settings, tap  **Privacy**.
2. Under **Samsung** tap the following options to customize:
  - **Samsung Privacy:** View Samsung's privacy information.
  - **Customization Service:** Allow Samsung to provide customized content and recommendations.
  - **Send diagnostic data:** Send diagnostic information about your device to Samsung when you are having technical problems.

## Location

Location services use a combination of GPS, mobile network and Wi-Fi to determine the location of your device.

1. From Settings, tap  **Location**.
2. Tap  to turn on Location services.

 **TIP** Some apps require location services be turned on for full functionality.

## App permissions

Configure permissions for apps that want to access your location information.

1. From Settings, tap  **Location** > **App permissions**.
2. Tap an app and choose which location permissions to grant it. Options vary by app.

## Improve accuracy

Enable other location scanning tools.

1. From Settings, tap  **Location** > **Improve accuracy**.
2. Tap connection method to add or remove from location services:
  - **Wi-Fi scanning:** Allow apps and services to scan for Wi-Fi networks automatically, even when Wi-Fi is turned off.
  - **Bluetooth scanning:** Allow apps to scan for and connect to nearby devices automatically through Bluetooth, even when Bluetooth is turned off.

## Recent location requests

View a list of apps that have requested your location.

1. From Settings, tap  **Location**.
2. Tap  to turn on Location services.
3. Tap an entry under **Recent location requests** to view the app's settings.

## Location services

Location services store and use your device's most recent location data. Certain apps can use this data to improve your search results based on places that you have visited.

1. From Settings, tap  **Location**.
2. Tap an entry under **Location services** to see how your location information is used.

## Accounts

You can connect to and manage your accounts, including your Google Account, Samsung account, email, and social networking accounts.

[Add an account](#) | [Account settings](#) | [Remove an account](#) | [Backup and restore](#) | [Google settings](#)

### Add an account

You can add and sync all your email, social networking, and picture and video sharing accounts.

1. From Settings, tap  **Accounts and backup** > **Manage accounts** >  **Add account**.
2. Tap one of the account types.
3. Follow the prompts to enter your credentials and set up the account.

### Account settings

Each account has its own custom settings. You can configure common settings for all accounts of the same type. Account settings and available features vary between account types.

1. From Settings, tap  **Accounts and backup** > **Manage accounts**.
2. Tap an account, and tap **Auto sync data**.
3. Tap available options for the account type to sync.

## Remove an account

You can remove accounts from your device.

1. From Settings, tap  **Accounts and backup** > **Manage accounts**.
2. Tap the account and then tap **Remove account**.

## Backup and restore

You can configure your device to back up data to your personal accounts.

### Samsung account

You can enable backup of your information to your Samsung account.

- From Settings, tap  **Accounts and backup** > **Backup and restore** for the options under **Samsung Cloud**:
  - **Back up data**: Configure your Samsung account to back up your data.
  - **Restore data**: Use your Samsung account to restore your backup data.

### Google Account

You can enable backup of your information to your Google Account.

1. From Settings, tap  **Accounts and backup**.
2. Under **Google Drive**, tap **Back up data**.

### External storage transfer

You can back up your data to an SD card or a USB storage device, or restore backup data using Smart Switch. For more information, see [Transfer data from an old device](#).

- From Settings, tap  **Accounts and backup** > **External storage transfer**.

## Google settings

You can configure your device's Google settings. Available options depend on your Google Account.

- From Settings, tap  **Google**, and select an option to customize.

# Device maintenance

View the status of your device's battery, storage, and memory. You can also automatically optimize your device's system resources.

[Quick optimization](#) | [Battery](#) | [Storage](#) | [Memory](#) | [Advanced device care options](#) | [Language and input](#) | [Date and time](#) | [Troubleshooting](#)

## Quick optimization

The quick optimization feature improves device performance through the following actions:

- Identifying apps that use excessive battery power and clearing unneeded items from memory.
- Deleting unnecessary files and closing apps running in the background.
- Scanning for malware.

To use the quick optimization feature:

- From Settings, tap  **Battery and device care** > **Optimize now**.

## Battery

View how battery power is used for your various device activities.

- From Settings, tap  **Battery and device care** > **Battery** for the following options:
  - **Usage since last full charge:** View your recent battery usage by time, app, and service.
  - **Power saving mode:** Save battery life by turning off Motion smoothness and limiting background network usage, syncing, and location checking. Choose from additional power saving options to save more power when this mode is enabled.
  - **Background usage limits:** View apps that you don't use often and limit their battery usage. To disable this feature, tap **Put unused apps to sleep**.
  - **Wireless power sharing:** Enable wireless charging of supported devices with your device's battery.

- **More battery settings:**
  - **Adaptive battery:** Limit battery usage for apps that you don't use often.
  - **Enhanced processing:** Speed up data processing for the most demanding apps and games. This option uses more battery power.
  - **Show battery percentage:** Display the battery charge percentage next to the battery icon on the Status bar.
  - **Show charging information:** Show battery level and estimated time until full when Always On Display is off or not shown.
  - **Fast charging:** Enable or disable fast cable charging when connected to a supported charger.
  - **Super fast charging:** Enable or disable super fast charging when connected to a supported charger.
  - **Fast wireless charging:** Enable or disable fast wireless charging when using a supported charger. To prevent fan noise during wireless charging, disable this option.

## Storage

View your storage capacity and detailed usage by category and file type. You can also mount, unmount, or format an optional memory card (not included).

○ From Settings, tap  **Battery and device care** > **Storage**.

### Memory card

Once an optional microSD memory card (not included) has been installed in your device, the card memory is displayed in the Storage setting. This feature is only available on the Galaxy Note20 Ultra 5G.

## Mount a memory card

When you install an optional memory card, it is automatically mounted (connected to the device) and prepared for use. However, should you unmount the card without removing it from the device, you need to mount it before it can be accessed.

1. From Settings, tap  **Battery and device care** > **Storage** >  **More options** > **Advanced**.
2. Tap your SD card, and then tap **Mount**.

## Remove a memory card

To prevent damage to information stored on the memory card, unmount the card before removing it from the device.

1. From Settings, tap  **Battery and device care** > **Storage** > **Advanced**.
2. Under **Portable storage**, tap your SD card, and then tap **Unmount**.
3. Remove your memory card from the device.

## Format a memory card

When formatting an SD card, you should back up your music and photo files that are stored on the card because formatting the SD card deletes **ALL** stored files.

1. From Settings, tap  **Battery and device care** > **Storage** > **Advanced**.
2. Under **Portable storage**, tap your SD card, tap **Format**, and then follow the prompts.

## Memory

Check the amount of available memory. You can close background apps and reduce the amount of memory you are using to speed up your device.

- From Settings, tap  **Battery and device care** > **Memory**. The used and available memory are shown.
  - Tap **Clean now** to free up as much memory as possible.
  - Tap **View more** to view the full list of apps and services using memory.
    - Tap  to include or exclude these apps and services.

- Tap **Apps not used recently** to view apps and services that are included in this group. Tap  to include or exclude these apps and services.
- Tap **Excluded apps** to view a list of apps that have been excluded. Tap  **Add apps** to choose apps to exclude from memory usage checks.

## Advanced device care options

Other Device care features are available in the Advanced menu.

- From Settings, tap  **Battery and device care**. The following options are available:
  -  **Search**: Find panels that are either installed or available to install.
  -  **Care report**: View information about the restart history and charging and temperature tips.
  -  **More options**:
    - **Show icon on Apps screen**: Display the icon for Device care on the Apps screen.
    - **Automation**: Optimize your device automatically at set times based on your usage patterns.
    - **Contact us**: Contact Samsung support through Samsung members.
    - **About Device care**: View version and license information about the Device care feature.

## Language and input

Configure your device's language and input settings.

### Change the device language

You can add languages to your list and organize them according to preference. If an app does not support your default language, then it will move to the next supported language in your list.

1. From Settings, tap  **General management** > **Language**.
2. Tap  **Add language**, and select a language from the list.
3. Tap **Set as default** to change the device language.
  - To switch to another language on the list, tap the desired language, and then tap **Apply**.

### Text-to-speech

Configure your Text-to-Speech (TTS) options. TTS is used for various accessibility features, such as Voice Assistant.

- From Settings, tap  **General management** > **Text-to-speech** for options:
  - **Preferred engine:** Choose either the Samsung or Google Text-to-speech engine. Tap  **Settings** for options.
  - **Language:** Set the default speech language.
  - **Speech rate:** Set the speed at which the text is spoken.
  - **Pitch:** Set the pitch of the speech.
  - **Play:** Tap to play a short demonstration of speech synthesis.
  - **Reset:** Reset the speech rate and pitch.

## Keyboard list and default

Change your default keyboard, modify built-in keyboards, and change keyboard settings.

- From Settings, tap  **General management** > **Keyboard list and default** for the following options:
  - **Default keyboard:** Choose a default keyboard for your device's menus and keyboards.
  - **Samsung keyboard:** Modify settings for the Samsung keyboard.
  - **Google voice typing:** Modify settings for Google Voice input.
  - **Samsung voice input:** Modify settings for Samsung voice input.
  - **Keyboard button on navigation bar:** Enable a button on the Navigation bar to quickly switch between keyboards.

## Physical keyboards

Customize options when you have a physical keyboard connected to your device (sold separately).

1. From Settings, tap  **General management**.
2. Tap **Physical keyboard**, and then choose an option:
  - **Show on-screen keyboard:** Show the on-screen keyboard while a physical keyboard is also being used.
  - **Keyboard shortcuts:** Show explanations of the keyboard shortcuts on the screen.
  - **Change language shortcut:** Enable or disable language key shortcuts for your physical keyboard.

## Mouse and trackpad

Configure pointer speed and button assignments for an optional mouse or trackpad (not included).

- From Settings, tap  **General management** > **Mouse and trackpad**.
  - Under **Pointer speed**, drag the slider to the right to go faster or to the left to go slower.
  - Tap **Primary mouse button**, and choose either **Left** or **Right**.

## Autofill service

Save time entering information using autofill services.

1. From Settings, tap  **General Management**.
2. Tap **Autofill service** to view your selected service.
  - Tap  **Settings** to customize your service.
  - Tap **Autofill service** to change your default service.

## Date and time

By default, your device receives date and time information from the wireless network. Outside of network coverage, you can set the date and time manually.

- From Settings, tap  **General management** > **Date and time**. The following options are available:
  - **Automatic date and time**: Receive date and time updates from your wireless network. When Automatic date and time is disabled, the following options are available:
    - **Set date**: Enter the current date.
    - **Set time**: Enter the current time.
  - **Use 24-hour format**: Set the format for displaying time.

## Troubleshooting

You can check for software updates and, if necessary, reset services on your device.

### Reset

Reset device and network settings. You can also reset your device to its factory defaults.

#### Reset all settings

You can reset your device to its factory default settings, which resets everything except the security, language, and account settings. Personal data is not affected.

1. From Settings, tap  **General management** > **Reset** > **Reset all settings**.
2. Tap **Reset settings**, and confirm when prompted.

#### Reset network settings

You can reset Wi-Fi, mobile data, and Bluetooth settings with Reset network settings.

1. From Settings, tap  **General management** > **Reset** > **Reset network settings**.
2. Tap **Reset settings**, and confirm when prompted.

#### Reset accessibility settings

You can reset device accessibility settings. Accessibility settings in downloaded apps and your personal data are not affected.

1. From Settings, tap  **General management** > **Reset** > **Reset accessibility settings**.
2. Tap **Reset settings**, and confirm when prompted.

## Auto restart at set times

Optimize your device by restarting it automatically at set times. Any unsaved data will be lost when the device restarts.

1. From Settings, tap  **General management** > **Reset** > **Auto restart at set times**.
2. Tap  to activate Auto restart, and then set the following parameters:
  - **Days:** Select the day of the week to automatically restart your device.
  - **Time:** Set the time of day to restart your device.

## Factory Data Reset

You can reset your device to factory defaults, erasing all data from your device.

This action permanently erases ALL data from the device, including Google or other account settings, system and application data and settings, downloaded applications, as well as your music, photos, videos, and other files. Any data stored on an external SD card is not affected.

When you sign in to a Google Account on your device, Factory Reset Protection (FRP) is activated. This protects your device in the event it is lost or stolen.

If you reset your device to factory default settings with the FRP feature activated, you must enter the user name and password for a registered Google Account to regain access to the device. You will not be able to access the device without the correct credentials.

 **NOTE** If you reset your Google Account password, it can take 24 hours for the password reset to sync with all devices registered to the account.

Before resetting your device:

1. Verify that the information you want to keep has transferred to your storage area.
2. Log in to your Google Account and confirm your user name and password.

To reset your device:

1. From Settings, tap  **General management** > **Reset** > **Factory data reset**.
2. Tap **Reset** and follow the prompts to perform the reset.
3. When the device restarts, follow the prompts to set up your device.

## Factory Reset Protection

When you sign in to a Google Account on your device, Factory Reset Protection (FRP) is activated. FRP prevents other people from using your device if it is reset to factory settings without your permission. For example, if your device is lost or stolen and a factory data reset is performed, only someone with your Google Account username and password can use the device.

You will not be able to access the device after a factory data reset if you do not have your Google Account username and password.

 **CAUTION** Before sending your device to Samsung or taking it to a Samsung-authorized service center, remove your Google Account and then perform a factory data reset. For more information, visit [samsung.com/us/support/frp](https://samsung.com/us/support/frp).

## Enable Factory Reset Protection

Adding a Google Account to your device automatically activates the FRP security feature.

## Disable Factory Reset Protection

To disable FRP, remove all Google Accounts from the device.

1. From Settings, tap  **Accounts and backup** > **Manage accounts** > [Google Account].
2. Tap **Remove account**.

# Accessibility

There are accessibility settings for people who need help seeing, hearing, or otherwise operating their device. Accessibility services are special features that make using the device easier for everyone. For more information about Accessibility for Samsung products, please contact us at [accessibility@sea.samsung.com](mailto:accessibility@sea.samsung.com).

[Recommended for you](#) | [TalkBack](#) | [Visibility enhancements](#) | [Hearing enhancements](#) | [Interaction and dexterity](#) | [Advanced settings](#) | [Installed services](#) | [About Accessibility](#)

## Recommended for you

View a list of accessibility features that you are using and some recommended features you may want to enable.

- From Settings, tap  **Accessibility** > **Recommended for you** to view recommendations.

## TalkBack

Use special controls and settings that let you navigate without needing to see the screen.

1. From Settings, tap  **Accessibility** > **TalkBack**.
2. Tap  to enable the feature, and tap an option to customize:
  - **TalkBack shortcut:** Choose a shortcut to quickly turn on TalkBack.
  - **Settings:** Configure TalkBack settings to better assist you.

## Visibility enhancements

You can configure Accessibility features to assist with visual aspects of your device.

### Colors and clarity

You can adjust the colors and contrast of text and other screen elements for easier viewing.

- From Settings, tap  **Accessibility** > **Visibility enhancements** and tap an option:
  - **High contrast theme:** Adjust colors and screen fonts to increase the contrast for easier viewing.
  - **High contrast fonts:** Adjust the color and outline of fonts to increase the contrast with the background.
  - **High contrast keyboard:** Adjust the size of the Samsung keyboard and change its colors to increase the contrast between the keys and the background.
  - **Highlight buttons:** Show buttons with shaded backgrounds to make them stand out better against the wallpaper.
  - **Color inversion:** Reverse the display of colors from white text on a black background to black text on a white background.
  - **Color adjustment:** Adjust the color of the screen if you find it difficult to see some colors.
  - **Add color filter:** Adjust the screen colors if you have difficulty reading the text.
  - **Remove animations:** Remove certain screen effects if you are sensitive to motion.

## Size and zoom

You can increase the size of supported screen elements and create shortcuts for accessibility features on your device.

- From Settings, tap  **Accessibility** > **Visibility enhancements** and tap an option:
  - **Magnifier window:** Magnify content shown on the screen.
  - **Magnification:** Use exaggerated gestures such as triple-tapping, double pinching, and dragging two fingers across the screen.
  - **Large mouse/touchpad pointer:** Use a large pointer for a connected mouse or touchpad (accessories not included).
  - **Font size and style:** Configure screen fonts.
  - **Screen zoom:** Configure the screen zoom level.

## Hearing enhancements

You can configure Accessibility features to assist with audial aspects of the device.

### Sounds

You can adjust audio quality when using hearing aids or earphones.

- From Settings, tap  **Accessibility** > **Hearing enhancements** and tap an option:
  - **Real time text:** Activate real-time text (RTT) calling.
  - **Hearing aid support:** Improve the sound quality to work better with hearing aids.
  - **Amplify ambient sound:** Enable this feature and connect headphones to your device to amplify the sounds of conversations.
  - **Adapt sound:** Customize the sound for each ear and enhance your listening experience. See [Adapt sound](#).
  - **Left/right sound balance:** Use the slider to adjust the left and right balance when listening to audio in stereo.
  - **Mono audio:** Switch audio from stereo to mono when using one earphone.
  - **Mute all sounds:** Turn off all notifications and audio for privacy.

## Text display

You can convert speech to text and watch closed captions when viewing multimedia.

- From Settings, tap  **Accessibility** > **Hearing enhancements** and tap an option:
  - **Live Transcribe**: Use the microphone to record speech and convert it to text.
  - **Live Caption**: Automatically caption speech in media played on your device.
  - **Google subtitles (CC)**: Configure closed caption and subtitle services.
  - **Sound detectors**: Receive alerts when the device detects a baby crying or a doorbell.

## Interaction and dexterity

You can configure Accessibility features to assist with limited dexterity when interacting with your device.

### Alternate input

You can control your device using different kinds of inputs and controls.

- From Settings, tap  **Accessibility** > **Interaction and dexterity** and tap an option:
  - **Universal switch**: Control your device with your customized switches.
  - **Assistant menu**: Improve device accessibility for users with reduced dexterity.

## Interactions

You can simplify the motions needed to answer phone calls or respond to notifications and alarms.

- From Settings, tap  **Accessibility** > **Interaction and dexterity** and tap an option:
  - **Answering and ending calls:**
    - **Read caller names aloud:** Hear callers' names read aloud when using Bluetooth or headsets (sold separately).
    - **Answer automatically:** Answer calls after a set duration when using Bluetooth or headsets (sold separately).
    - **Press Volume up to answer:** Use the Volume keys to answer calls.
    - **Press Side key to end calls:** End calls by pressing the Side key.
  - **Interaction control:** Customize areas of screen interactions, hardkeys, and the keyboard.

## Touch settings

You can adjust your screen to be less sensitive to taps and touches.

- From Settings, tap  **Accessibility** > **Interaction and dexterity** and tap an option:
  - **Touch and hold delay:** Select a time interval for this action.
  - **Tap duration:** Set how long an interaction must be held to be recognized as a tap.
  - **Ignore repeated touches:** Set a time duration in which to ignore repeated touches.

## Mouse and physical keyboard

Configure settings for a connected mouse and physical keyboard.

- From Settings, tap  **Accessibility** > **Interaction and dexterity** and tap an option:
  - **Auto click after pointer stops:** Automatically click on an item after the pointer stops over it.
  - **Sticky keys:** When you press a modifier key like Shift, Ctrl, or Alt, the key stays pressed down, which allows you to enter keyboard shortcuts by pressing one key at a time.

- **Slow keys:** Set how long a key must be held before it is recognized as a press, which helps avoid accidental key presses.
- **Bounce keys:** Set how long to wait before accepting a second press from the same key, which helps avoid accidentally pressing the same key multiple times.

## Advanced settings

You can customize additional accessibility features and services for your device.

 **TIP** Additional accessibility apps may be downloaded from the Google Play store.

## Accessibility shortcuts

- From Settings, tap  **Accessibility** > **Advanced settings** and tap an option:
  - **Accessibility button:** Choose an accessibility shortcut for the Accessibility button.
  - **Side and Volume up keys:** Configure selected Accessibility features to open by quickly pressing the Side and Volume up keys at the same time.
  - **Volume up and down keys:** Configure selected services to turn on when you press and hold the Volume up and Volume down keys for three seconds.

## Notifications

- From Settings, tap  **Accessibility** > **Advanced settings** and tap an option:
  - **Flash notification:** Flash either the camera light or the screen when you receive notifications or when alarms sound.
  - **Time to take action:** Choose how long to show messages that ask you to take action, but are visible only temporarily (like notifications).
  - **Speak keyboard input aloud:** The device will read aloud what you type on the keyboard.
  - **Bixby Vision for accessibility:** Add modes to read text aloud, describe scenes, detect colors, and more.
  - **Voice Label:** Write voice recordings to NFC tags (not included) to provide you with information about objects or locations as you near them.

## Installed services

You can install additional assistance services for your device.

- From Settings, tap  **Accessibility** > **Installed services**.

 **NOTE** Additional accessibility services are listed and configured here after they are installed.

## About Accessibility

Legal and license information about the current Accessibility software is available in Settings.

- From Settings, tap  **Accessibility** > **About Accessibility**. The following information is available:
  - **Version:** View the current Accessibility software version.
  - **Open source licenses:** View information for the open source licenses used for Accessibility.

# Other settings

Configure features on your device that make it easier to use.

[Android Auto](#) | [Tips and help](#) | [Dual Messenger](#) | [About phone](#)

## Android Auto

Android Auto brings the most useful apps to your device screen or your compatible car display in a format that makes it easy for you to keep your main focus on driving. You can control features like navigation and maps, calls and text messages, and music.

### Connect your device

Before you connect your device for the first time, turn on your car and allow time to set up Android Auto.

1. Plug a USB cable into your vehicle's USB port and plug the other end of the cable into your device.
2. Your device may ask you to download the Android Auto app or update to the newest version of the app. Follow the prompts and complete your setup.
3. On your car's display select Android Auto and follow the prompts.

 **NOTE** Your device's Bluetooth is turned on automatically when Android Auto is connected to your car through USB.

### Connection help

View connected vehicles, connect new vehicles, and get technical support for Android Auto.

- From Settings, tap  **Advanced features** > **Android Auto** for the following features:
  - **Connect a car:** Follow the prompts to connect your device using your vehicle's compatible USB port or connect using wireless Android Auto.
  - **Connection help:** View the support page for Android Auto Help.
  - **Previously connected cars:** View accepted and rejected cars your device has connected to.

 **TIP** Tap  **More options** > **Forget all cars**, to remove all accepted and rejected cars from your device.

## General

Customize settings for Android Auto.

- From Settings, tap  **Advanced features** > **Android Auto** for the following features:
  - **Customize launcher:** Choose when apps show in Android Auto and how they appear in the car screen launcher.
  - **“Hey Google” detection:** Log in to your Google account and enable hands-free voice commands.
  - **Automatically resume media:** Enable this to automatically continue playing media when you start driving.
  - **Google Assistant:** Set your weather, home and work locations, and more for your Google Assistant.
  - **Weather:** Enable this to show weather information on your car screen, obtained using your device’s location.

## Notifications

Choose how to view incoming notifications.

- From Settings, tap  **Advanced features** > **Android Auto** for the following features:
  - **Preview incoming messages:** Enable to show the first line of an incoming notification if your car is stopped.
  - **Show message notifications:** Receive notifications for new messages while driving.
  - **Show group message notifications:** Receive notifications for new group messages while driving.
  - **No sound from notifications:** Enable this to receive notification sounds while driving.

## System

Customize system settings for Android Auto.

- From Settings, tap  **Advanced features** > **Android Auto** for the following features:
  - **Wireless Android Auto:** Allow your device to pair with cars without using a USB cable.
  - **Google Analytics:** Enable this app's use of Google Analytics for background reporting of app crashes and usage statistics (App restart required).

## About

View the latest legal, safety, privacy, and license information for Android Auto.

- From Settings, tap  **Advanced features** > **Android Auto** for the following features:
  - **Privacy Policy:** Explains how Google handles your information when you use Google's services.
  - **Safety, Data, and Legal Notices:** Important information about safety and Android Auto.
  - **Version:** View version and permissions information for Android Auto.

## Tips and help

View tips and techniques as well as the user manual for your device.

- From Settings, tap  **Tips and help**.

## Dual Messenger

Use two separate accounts for the same app.

1. From Settings, tap  **Advanced features** > **Dual Messenger**.
2. Tap  next to supported apps to enable the feature for each app.
  - To select which contacts have access to the secondary messenger app, tap **Use separate contacts list**.

## About phone

View information about your device, including current status, legal information, hardware and software versions, and more.

1. From Settings, tap  **About phone** to view your phone number, model number, serial number, and IMEI information.
2. Tap additional items to view more information about your device.

 **TIP** You can view your device's FCC ID from **About phone** > **Status information**.

# Learn more

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## Videos

[youtube.com/samsungcare](https://youtube.com/samsungcare)

## Samsung Care

[samsung.com/us/support](https://samsung.com/us/support)

## Talk to an agent

Contact us on Facebook Messenger

Find us on Facebook

Follow us on Twitter

## Tips

[samsung.com/us/support/tips](https://samsung.com/us/support/tips)

# Legal information

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READ THIS INFORMATION BEFORE USING YOUR MOBILE DEVICE.

Arbitration Agreement - This Product is subject to a binding arbitration agreement between you and SAMSUNG ELECTRONICS AMERICA, INC. ("Samsung"). You can opt out of the agreement within 30 calendar days of the first consumer purchase by emailing [optout@sea.samsung.com](mailto:optout@sea.samsung.com) or calling 1-800-SAMSUNG (726-7864) and providing the applicable information.

The full Arbitration Agreement, Standard One-year Limited Warranty, End User License Agreement (EULA), and Health & Safety Information for your device are available online:

Phone:

- English: [samsung.com/us/Legal/Phone-HSGuide](https://samsung.com/us/Legal/Phone-HSGuide)
- Spanish: [samsung.com/us/Legal/Phone-HSGuide-SP](https://samsung.com/us/Legal/Phone-HSGuide-SP)

This information can also be found on the device in the "About device" or "About phone" or "About tablet" section, for example:

- **Settings > About phone or About device or About tablet > Legal information > Samsung legal**
- Or, search "Legal"

If your device required Federal Communications Commission (FCC) approval, you can view the FCC certification by opening **Settings > About phone or About device or About tablet > Status**.

## Samsung Knox

Samsung Knox is Samsung's security platform and is a mark for a Samsung device tested for security with enterprise use in mind. Additional licensing fee may be required. For more information about Knox, please refer to: [samsung.com/us/knox](https://samsung.com/us/knox).

# Maintaining water and dust resistance

 **CAUTION** To avoid electric shock and damage to your device, do not charge device while it is wet or in an area where it could get wet. Do not handle device, charger or cords with wet hands while charging.

The device is not impervious to dust and water damage in any situation. It is important that all compartments are closed tightly.

Follow these tips carefully to prevent damage to the device and maintain dust and water resistance performance:

- Water resistant based on IP68 rating, which tests submersion in fresh water deeper than 1.5 meters or keep it submerged for more than 30 minutes. If device is exposed to fresh water, dry it thoroughly with a clean, soft cloth; if exposed to liquid other than fresh water, rinse with fresh water and dry as directed.
- Any device which uses accessible compartments or ports that can be opened should have these sealed or closed tightly to prevent liquid from entering the system.
- If the device has been immersed in water or the microphone or speaker is wet, sound may not be heard clearly during a call. After wiping the device with a dry cloth, dry it thoroughly before using it.
- Do not expose the device to water at high pressure.
- If the device is dropped or receives an impact, the water and dust resistant features of the device may be damaged.

 **NOTE** Liquid other than fresh water may enter the device faster. Failure to rinse the device in fresh water and dry it as instructed may cause the device to suffer from operability or cosmetic issues.

# Restricting children's access to your mobile device

Your device is not a toy. Do not allow children to play with it because they could hurt themselves and others, damage the device, or make calls that increase your device bill. Keep the device and all its parts and accessories out of the reach of small children.

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Some multimedia (audio/video) files contain Digital Rights Management (DRM) technology to verify you have the right to use the files. Preloaded apps on your device may not be compatible with DRM-protected files.

Screen images are simulated. Appearance of device may vary.

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

Please check with your service provider to verify qualifying services/features.