

**SAMSUNG**  
**Galaxy S8 | S8+**

**User manual**



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# Features

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## Meet Bixby

Bixby learns what you like to do and works with your favorite apps and services to help you get more done. See [Bixby](#) on page 30.



## Camera

The camera on your device has several unique features. See [Camera](#) on page 56.



## Security

Use your face, fingerprint, or iris to unlock your device. For more information, see [Flexible security](#) on page 32.



## Night mode

Use a darker theme to keep your eyes comfortable at night. See [Night mode](#) on page 117.



## Expandable storage

Expand storage with a supported microSD card. See [Memory card](#) on page 122.



## Water and dust resistance

This device is rated IP68 using the Ingress Protection rating system. See [Maintaining water and dust resistance](#) on page 151.

# Getting started

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Device layout

Assemble your device

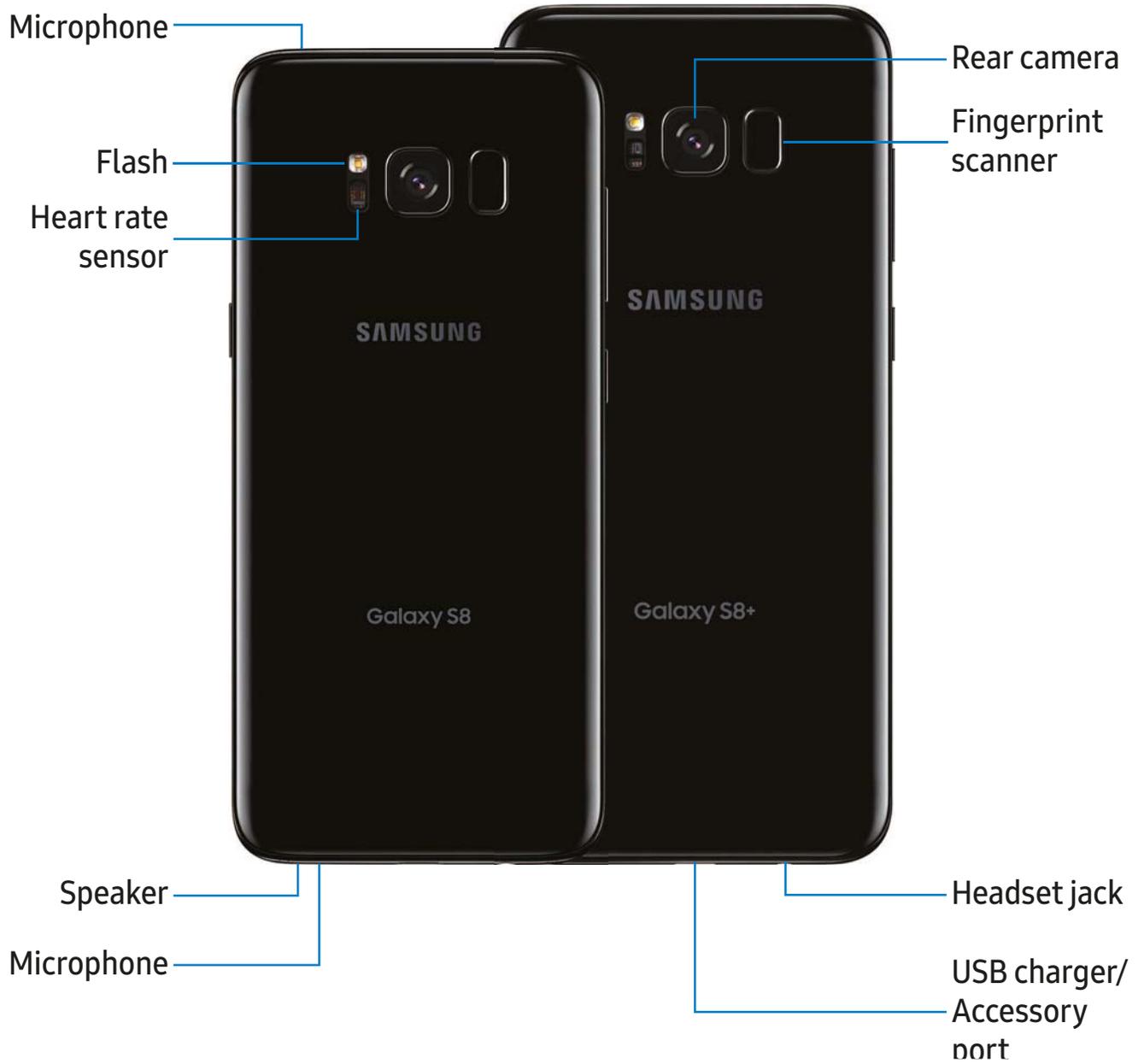
Start using your device



# Device layout



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



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

## Assemble your device

Your device uses a nano-SIM card. Your SIM card may be preinstalled, or you may be able to use your previous SIM card. Contact your carrier for more details.



### Install SIM/microSD card

Slide the SIM card and optional microSD™ card (sold separately) into the tray with the gold contacts facing down.

### Charge your device

Before turning on your device, charge it fully.

 **NOTE** Use only charging devices and batteries 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** on page 151.

 **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. For more information, see **Maintaining water and dust resistance** on page 151.

 **NOTE** 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 normal range of operation. Remove the device from the charger 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/).

## Accessories

Supported accessories for your device that are purchased separately, like a fast wireless charger or case with a cover, can be configured through Settings.

- From Settings, tap  **Advanced features** > **Accessories**.

## Start using your device

Use the Power key to turn your device on or off. 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 **Power** key.
  - To turn the device off, press and hold the **Power** key, and tap  **Power off**. Confirm when prompted.
  - To restart your device, press and hold the **Power** key, and tap  **Restart**.

## 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.

## 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](#) on page 130.



**Power key**  
Press to lock.  
Press to turn on the screen, and then drag your finger across the screen to unlock.

## Accounts

Set up and manage your email accounts, your Google™ Account, and Samsung account.

 **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** > **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](#) on page 129.

### Add a Samsung account

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

1. From Settings, tap  **Accounts and backup** > **Accounts**.
2. Tap  **Add account** > **Samsung account**.

 **TIP** To quickly access your Samsung account, from Settings tap  **Samsung account**.

### Add an email account

Sign in to one or more of your email accounts to view and manage email messages.

1. From Settings, tap  **Accounts and backup** > **Accounts**.
2. Tap  **Add account** > **Email**.

## 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. You can also use the included On-the-Go adapter to transfer content quickly and easily from your old device without installing the Smart Switch app.

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** > **Smart Switch**.
2. Follow the prompts and select the content to transfer.



 **NOTE** The USB option must be set to Media device (MTP) on the other device. Transferring content with a USB cable may increase battery consumption. Make sure your battery is fully charged.

Visit [samsung.com/smartswitch](https://samsung.com/smartswitch) for more information and to learn how to use the On-the-Go adapter to transfer content faster.

## Set up voicemail

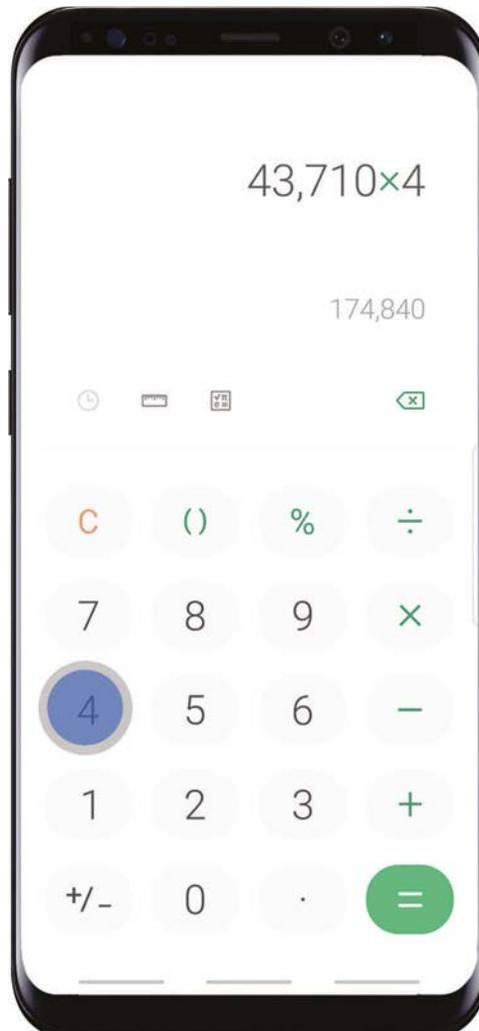
You can set up your voicemail service when you access it for the first time. You can access voicemail through the Phone app.

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 tempered glass surface and void the warranty.

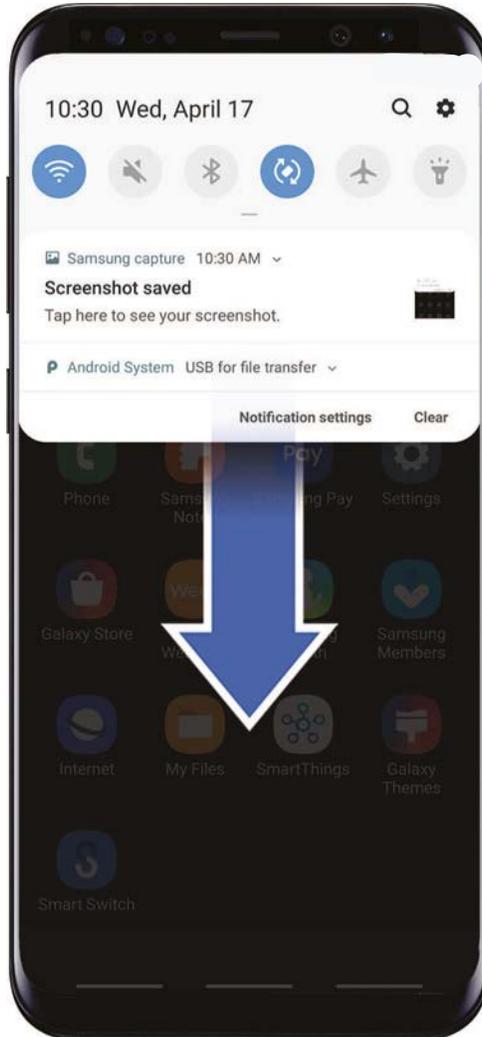
### Tap



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 to zoom in and out.

- Bring 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

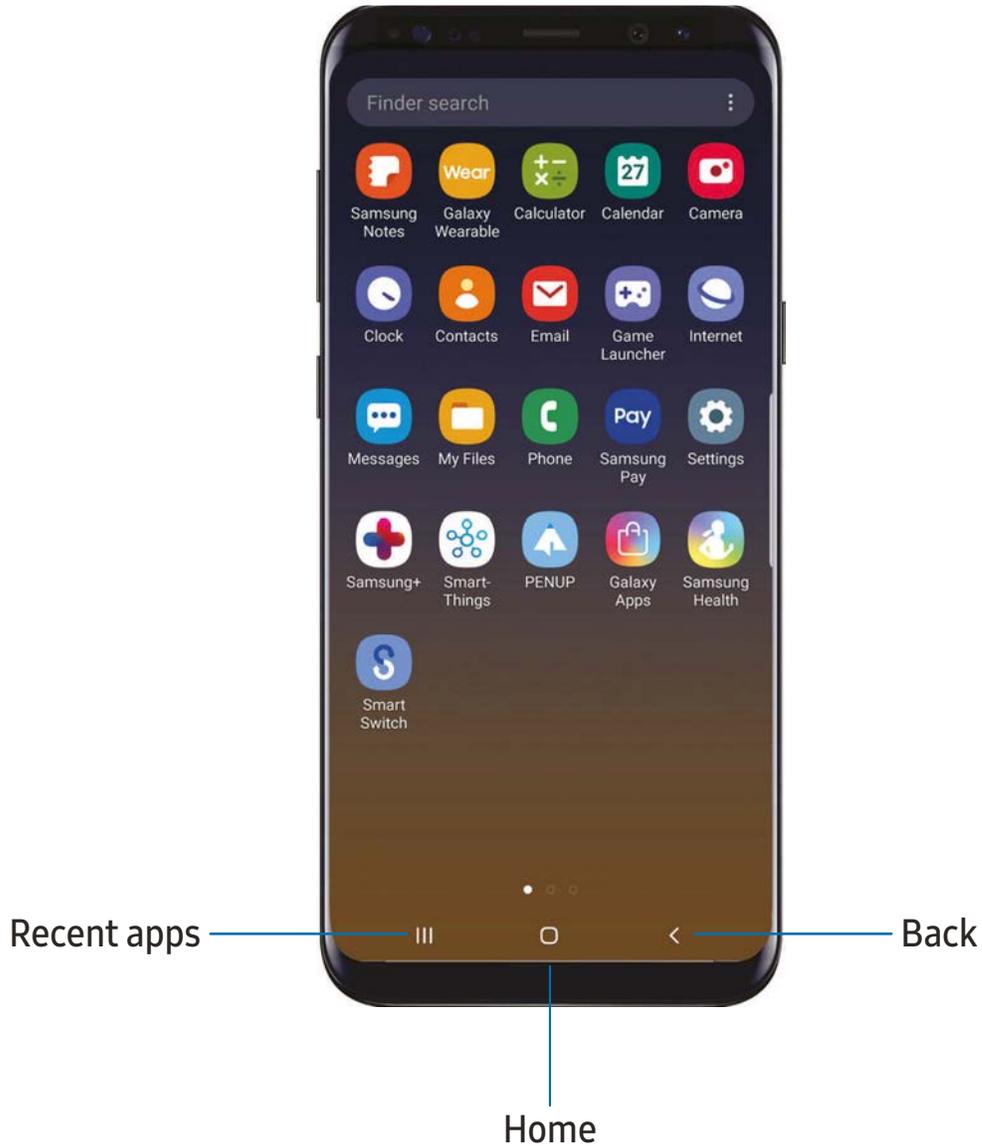


Touch and hold items to activate them.

- 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

The Navigation bar, at the bottom of the screen, displays the navigation keys.



## Navigation gestures

To make more space on the screen, you can hide the navigation keys, and instead use gestures to navigate the device. Simply swipe up on the screen where the navigation buttons used to display to navigate the device.

- From Settings, tap  **Display** > **Navigation bar** > **Full screen gestures**.
  - Tap **Gesture hints** to display lines at the bottom of the screen where gestures must be done for each navigation button.

 **TIP** You can also quickly switch between navigation gestures and navigation buttons using the Quick settings menu.

## Button order

Personalize your device by changing where the Recent apps and Back buttons display on the Navigation bar.

- From Settings, tap  **Display** > **Navigation bar**, and tap an option under **Button order**.

## Customize your home screen

The Home screen is the starting point for navigating your device. You can place your favorite apps and widgets here. You can set up additional Home screens, remove screens, change the order of screens, and choose a main Home screen.

### App icons

You can 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:

- Touch and hold an app icon, and tap  **Remove from Home**.

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

### Use folders

Organize App shortcuts in folders on an Apps screen or Home screen.

For more information, see [Create and use folders](#) on page 44.

### Wallpapers

You can change the look of the Home and Lock screens by choosing a favorite picture or preloaded wallpaper.

1. From a Home screen, touch and hold the screen.
2. Tap  **Wallpapers**.
3. Tap **View all** to see all available wallpapers.
4. Tap an image to choose it.
  - Infinity wallpapers are applied to all screens.
  - Tap the screen or screens to which you want to apply the wallpaper.
  - If available, tap **Motion effect** to add movement to your screens.
5. Tap **Set as wallpaper**, and confirm when prompted.

## 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** to customize.
3. Tap **View all** to see downloaded themes.
4. Tap a theme to preview and download it to My themes.
5. 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  **Wallpapers** > **Icons** to customize.
3. Tap **View all** to see downloaded icons.
4. Tap an icon set to preview and download it to My icons.
5. 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 touch and hold a widget, drag it to a Home screen, and release it.

## 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 from Home**: Delete a widget from your screen.
  -  **Widget 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  **Home screen 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.
  - **Apps button:** Add a button to the Home screen for easy access to the Apps screen.
  - **App icon badges:** Enable to show badges on apps with active notifications. You can also choose the badge style.
  - **Lock Home screen layout:** Prevent items on the Home screen from being removed or repositioned.
  - **Add apps to Home screen:** Automatically add newly-downloaded apps to the Home screen.
  - **Quick-open 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.
  - **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.
  - **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 **Easy mode** to enable this feature.
3. Tap **Apply** to confirm.

To disable Easy mode:

1. From Settings, tap  **Display** > **Easy mode** > **Standard mode**.
2. Tap **Apply** to exit Easy mode.

## Status bar

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

### Status icons



Battery full



Battery low



Charging



Mute



Vibrate



Airplane mode



Bluetooth active



Wi-Fi active



Location active



NFC active

### Notification icons



Missed calls



Call in progress



Call on hold



New message



Voicemail



New email



Download



Upload



Wi-Fi available



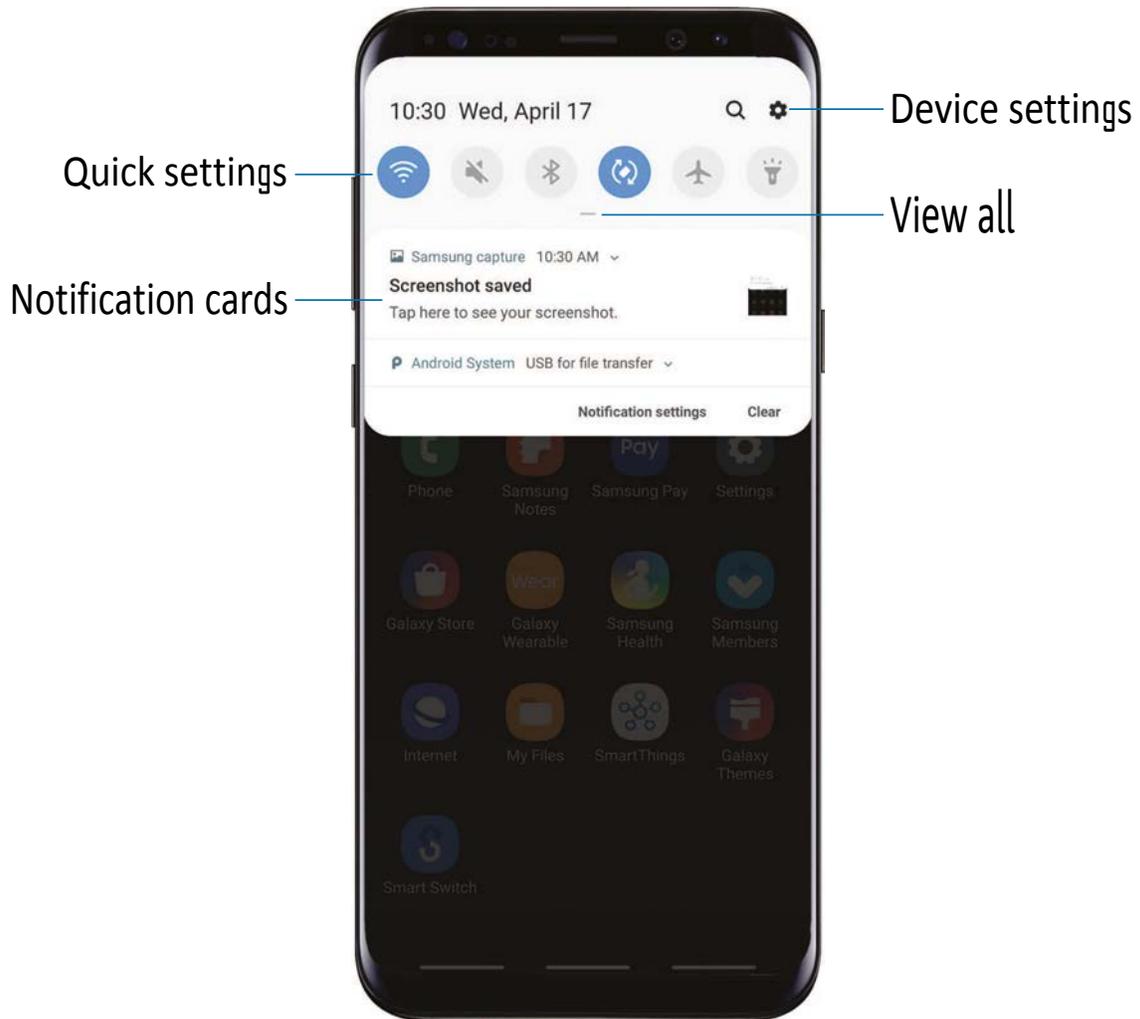
App update

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. Drag the Status bar down to display the Notification panel.
2. Swipe down the list to see notification details.
  - 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**.
3. Drag upward from the bottom of the screen or tap  **Back** to close the Notification panel.

## Finger sensor gestures

You can also open or close the Notification panel by swiping up or down on the fingerprint sensor.

1. From Settings, tap  **Advanced features** > **Motions and gestures** > **Finger sensor gestures**.
2. Tap  to enable the feature.

## Quick settings

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

1. Drag the Status bar down to display the Notification panel.
2. Drag — **View all** downward.
  - Tap a quick setting icon to turn it on or off.
  - Touch and hold a quick setting icon to open the setting.
  - Tap  **Search** to search the device.
  - Tap  **Settings** to quickly access the device's settings menu.
  - Tap  **More options** to reorder Quick settings or to change the button layout.
3. Drag — **View all** upward to close Quick settings.

## Edge screen

The Edge screen provides a variety of useful tools for notifications, information feeds, and timekeeping.

### Edge panels

Edge panels can be used to access apps, tasks, and contacts, as well as view news, sports, and other information on the Edge screen.



**Edge panel handle**  
Swipe to the center  
of the screen to  
open the Edge  
screen

## Configure Edge panels

You can customize the Edge panels.

1. From the Edge screen, tap  **Edge panel settings**.
2. Tap  to enable the feature. The following options are available:
  -  **Checkbox**: Enable or disable each panel.
  - **Edit** (if available): Configure individual panels.
  -  **More options**:
    - **Reorder**: Change the order of the panels by dragging them to the left or right.
    - **Uninstall**: Remove an Edge panel from your device.
    - **Edge panel handle**: Customize the position and style of the Edge panel handle.
    - **Galaxy Apps**: Search for and download more Edge panels from Galaxy Apps.
3. Tap  **Back** to save changes.

## Edge panel position

You can change the position of the Edge panel handle.

1. From the Edge screen, tap  **Edge panel settings**.
2. Tap  **More options** > **Edge panel handle** for the following options:
  -  **Move**: Drag to change the position of the Edge panel handle along the edge of the screen.
  - **Position**: Choose either **Right** or **Left** to set which side the Edge screen displays on.
  - **Move from any screen**: Touch and hold the Edge panel handle to change its position from any screen.

## Edge panel style

Change the style of the Edge panel handle.

1. From the Edge screen, tap  **Edge panel settings**.
2. Tap  **More options** > **Edge panel handle** for the following options:
  - **Transparency**: Drag the slider to adjust the transparency of the Edge panel handle.
  - **Size**: Drag the slider to adjust the size of the Edge panel handle.

## Apps edge

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

1. From any screen, drag the **Edge panel handle** to the center of the screen. Swipe until the Apps edge panel is displayed.
2. Tap an app or app pair to open it.

To configure Apps edge:

1. From any screen, drag the **Edge panel handle** to the center of the screen. Swipe until the Apps edge panel is displayed.
2. Tap  **Add app** to add other apps to the Apps edge.
  - To add an app to the Apps edge, 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 shortcut for two apps to open in Multi window, tap **Create app pair**.
  - 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 Edge panel, drag each app to the desired location.
  - To remove an app, tap  **Remove**.
3. Tap  **Back** to save changes.

## Edge lighting

Set the Edge screen to light up when you receive calls or notifications while the device is turned over.

1. From Settings, tap  **Display** > **Edge screen** > **Edge lighting**.
2. Tap  to enable the feature.
3. Tap **Show Edge lighting**, and tap one of the following options:
  - **While screen is on:** Show Edge lighting only when the screen is on.
  - **While screen is off:** Show Edge lighting only when the screen is off.
  - **Always:** Show Edge lighting at all times.

### Edge lighting advanced settings

Customize the color, width, and transparency of the Edge lighting feature.

1. From Settings, tap  **Display** > **Edge screen** > **Edge lighting**.
2. Tap **Edge lighting style** to customize:
  - **Effect:** Choose an edge effect.
  - **Color:** Choose a preset or custom color, and enable app colors.
  - **Transparency:** Drag the **Transparency** slider to adjust the transparency of the Edge lighting.
  - **Width:** Drag the **Width** slider to adjust the width of the Edge lighting.
  - **Duration:** Adjust how short or long the Edge lighting displays.
3. Tap **Done** when finished.

### Edge lighting interaction

You can tap or swipe the Edge lighting pop-up to open an app, open an app in a pop-up, or dismiss a notification.

1. From Settings, tap  **Display** > **Edge screen** > **Edge lighting**.
2. Tap **Edge lighting interaction**, and then tap  to enable the feature.

## Manage Edge lighting notifications

Choose which notifications will light up the Edge screen.

1. From Settings, tap  **Display** > **Edge screen** > **Edge lighting**.
2. Tap **Manage notifications** to choose the apps that can activate Edge lighting when a notification is received.

## About Edge screen

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

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

## 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.

## Bixby Home

The Bixby Home page displays customized content based on your interactions. Bixby learns from your usage patterns and will suggest content you may like.

- From a Home screen, swipe right or press the **Bixby** key.

## 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 **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 **Bixby Vision** and follow the prompts.

## 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 to show one of the following on the screen when your device isn't in use: **Home button and clock**, **Clock**, **Home button**.
  - **Display mode**: Customize when to show the AOD.
  - **Show music information**: Show music details when the FaceWidgets music controller is in use.
  - **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.

## AOD themes

Apply custom themes for Always On Display.

1. From a Home screen, touch and hold the screen, and tap  **Wallpapers > AODs**.
  - Tap an AOD to preview and download it to My Always On Displays.
2. Tap **View all** to see downloaded AODs.
3. Tap an AOD, and then tap **Set** to apply the selected AOD.

## Flexible security

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

### Face recognition

You can enable Face Recognition to unlock your screen.

- 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.

 **TIP** To use your face to unlock your device, you must set a pattern, PIN, or password.

## Face recognition management

Customize how face recognition works.

- From Settings, tap  **Biometrics and security** > **Face recognition**.
  - **Remove face data:** Delete existing faces.
  - **Face unlock:** Enable or disable face recognition security.
  - **Stay on Lock screen:** 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.
  - **Brighten screen:** Increase the screen brightness temporarily so that your face can be recognized in dark conditions.
  - **Samsung Pass:** Access your online accounts using face recognition.

## Iris scanner

Use iris recognition as an alternative to entering passwords in certain apps. You can also use your irises to verify your identity when logging in to your Samsung account.

For support, visit [samsung.com/us/irisscanner](https://samsung.com/us/irisscanner).

 **NOTE** The Iris scanner is not intended to be used as a medical device and the biometric data collected and stored locally by the mechanism is not intended to be used for any diagnostic, therapeutic, or preventative purposes. Please follow all instructions for use of this feature.

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

 **NOTE** To register just one of your eyes, tap the link on the setup screen to register one iris.

## Iris verification

Iris verification can be used for other accounts accessed from your device.

- From Settings, tap  **Biometrics and security** > **Irises**.
  - **Remove iris data:** Delete existing irises.
  - **Preview screen mask:** Choose a mask to display when using the iris scanner.
  - **Iris unlock:** Enable to unlock the device using your irises.
  - **Screen-on iris recognition:** Unlock your device with your irises as soon as the screen turns on.
  - **Stay on Lock screen:** When you unlock your device with iris recognition, stay on the Lock screen until you swipe the screen.
  - **Samsung Pass:** Use your irises for identification when using supported apps.
  - **Samsung Pay:** Use your irises to make payments quickly and securely.
  - **Tips for using iris recognition:** View a tutorial on how to use the iris scanner.

## 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.

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

 **TIP** To use your fingerprint to unlock your device, you must set a pattern, PIN, or password.

## 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 touch and hold 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.

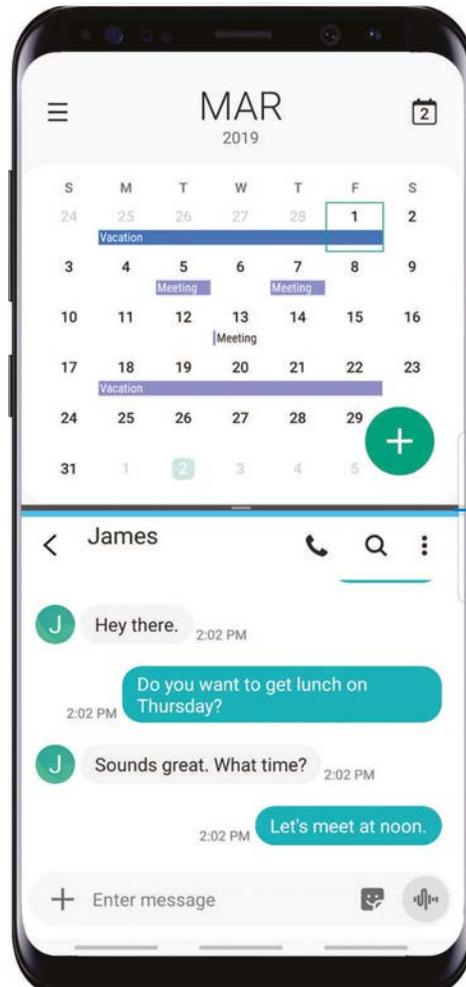
### Fingerprint verification settings

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.
  - **Samsung Pass:** Use your fingerprint for identification when using supported apps.
  - **Samsung Pay:** Use your fingerprints to make payments quickly and securely.

## 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.



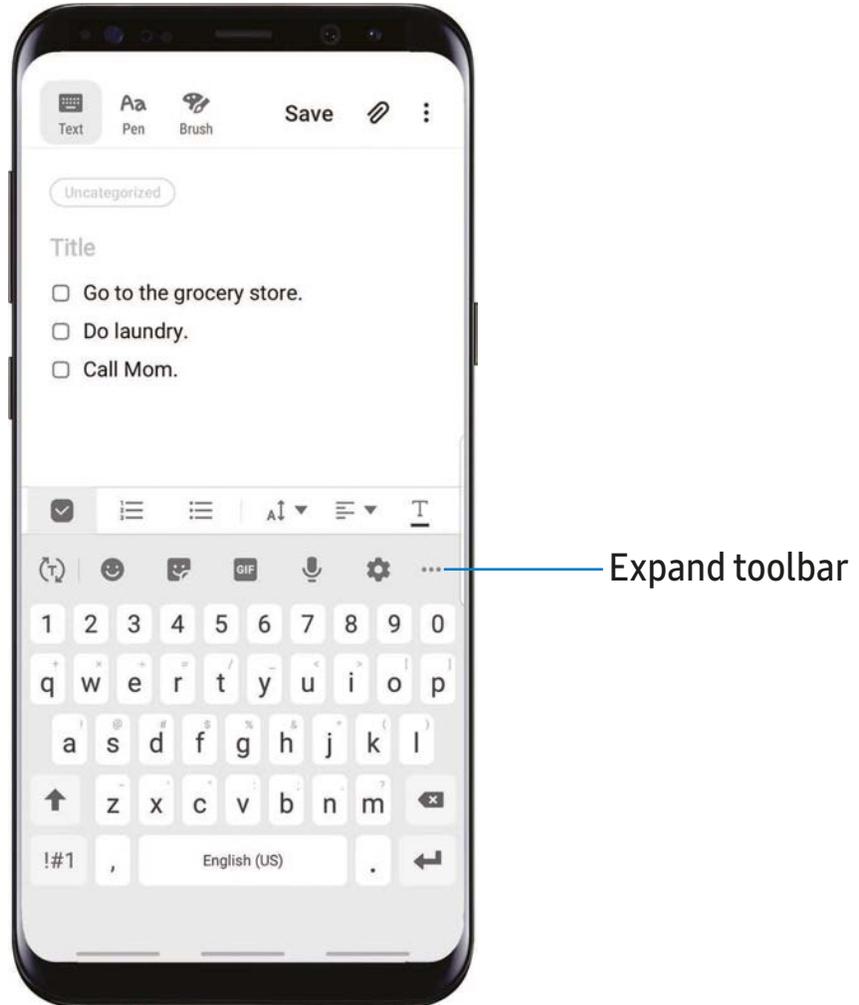
Split screen control

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.

 **TIP** After opening Multi window, you can quickly exit and open the split screen by tapping  **Recent apps**.

## Enter text

Text can be entered using a keyboard or your voice.



- Tap a field to display the Samsung keyboard.
  - Tap  Show predictive text to view suggested words while you type.
  - Tap  Show toolbar functions to view all keyboard options.

## Toolbar functions

The toolbar provides additional helpful functions.

- From the Samsung keyboard, tap **⋮ Expand toolbar** for the following options:
  -  **Clipboard**: Access the clipboard.
  -  **Emojis**: Insert an emoji.
  -  **GIF keyboard**: Add animated GIFs.
  -  **Modes**: Select a keyboard layout.
  -  **Settings**: Access keyboard settings.
  -  **Stickers**: Add illustrated stickers.
  -  **Text editing**: Use an editing panel to help pinpoint text that you want to cut, copy, and paste.
  -  **Voice input**: Use Samsung voice input.

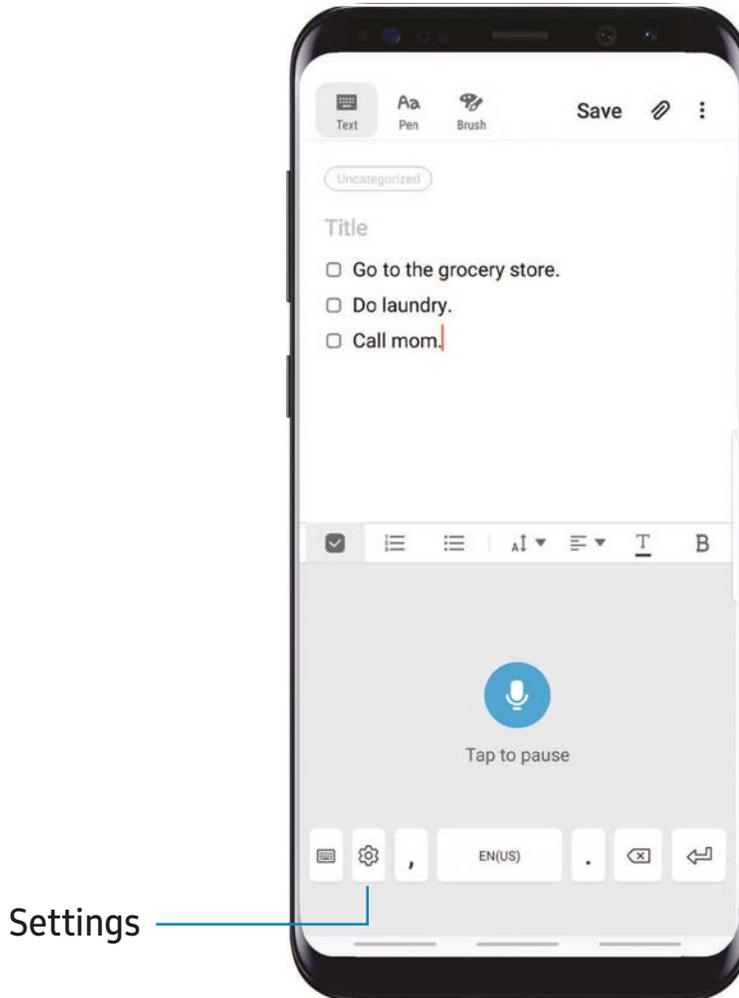
## Configure the Samsung keyboard

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, slide the Space bar sideways.
  - **Smart typing**: Use predictive text and auto-correction features to prevent common typing mistakes. Type by swiping between letters.
  - **Keyboard layout and feedback**: Customize the appearance and function of the keyboard.
  - **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.

## Use Samsung voice input

Instead of typing, enter text by speaking.



1. From the Samsung keyboard, tap  Voice input.
2. Tap the screen 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 **Power** key.
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:

- **Flashlight:** Use the device's flash as a steady source of light.
- **Emergency alarm:** Sound an audible siren.

- **Share my location:** Send your location information to your emergency contacts.
- **Phone:** Launch the call screen.
- **Internet:** Launch the web browser.
-  **Add**
  - **Email:** Launch the Email app.
  - **Maps:** Launch Google Maps™.
-  **Battery charge:** Displays estimated battery charge percentage.
- **Estimated battery life:** Displays estimated remaining battery charge time based on current battery charge and usage.
- **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.
  - **Remove apps:** Choose apps to remove from the screen.
  - **Manage 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.

1. Press and hold the **Power** key.
2. Tap  **Emergency mode**.

 **NOTE** When Emergency mode is activated, Locating method is set to Battery saving. After Emergency mode is turned off, you may need to adjust your location settings. For more information, see **Location** on page 136.

# Apps

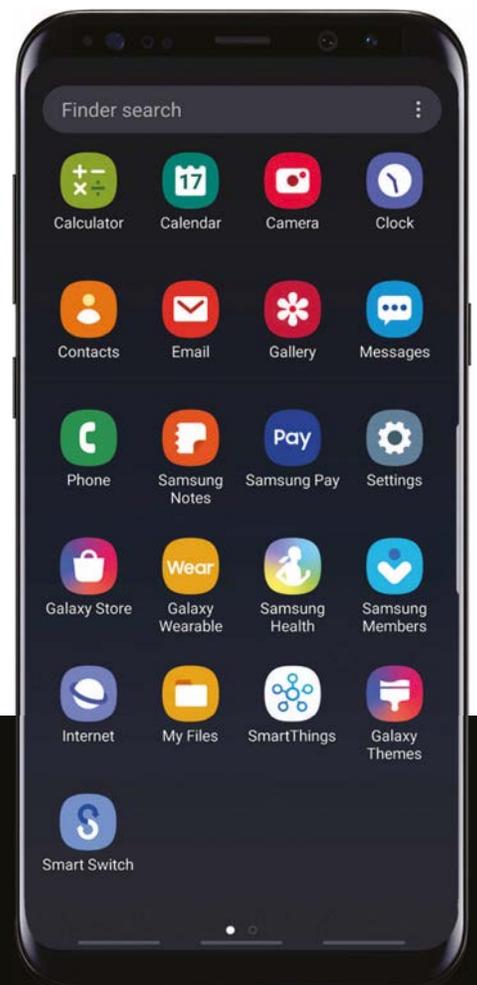
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Using apps

Samsung apps

Google apps

Additional apps



# Using apps

The Apps list displays all preloaded and downloaded apps. Apps can be downloaded from Galaxy Apps 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 **Finder 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** > **Finder 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.
  - **Enter 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 **Add**.
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.

## Samsung apps

The following apps are either preloaded or downloaded over-the-air to your device during setup.

### 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**.



### Galaxy Apps

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

- From Apps, tap **Samsung** folder >  **Galaxy Apps**.



### 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).

- From Apps, tap **Samsung** folder >  **Galaxy Wearable**.



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).

○ From Apps, tap **Samsung** folder >  **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, including heart rate readings, may be affected by factors such as environmental conditions, skin condition, specific activity performed while using/wearing the device, settings of the device, user configuration/user-provided information, placement of the sensor on the body, and other end-user interactions. For more information on proper wear and use, visit [samsung.com/us/heartratesensor](https://samsung.com/us/heartratesensor).

## 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.



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.

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

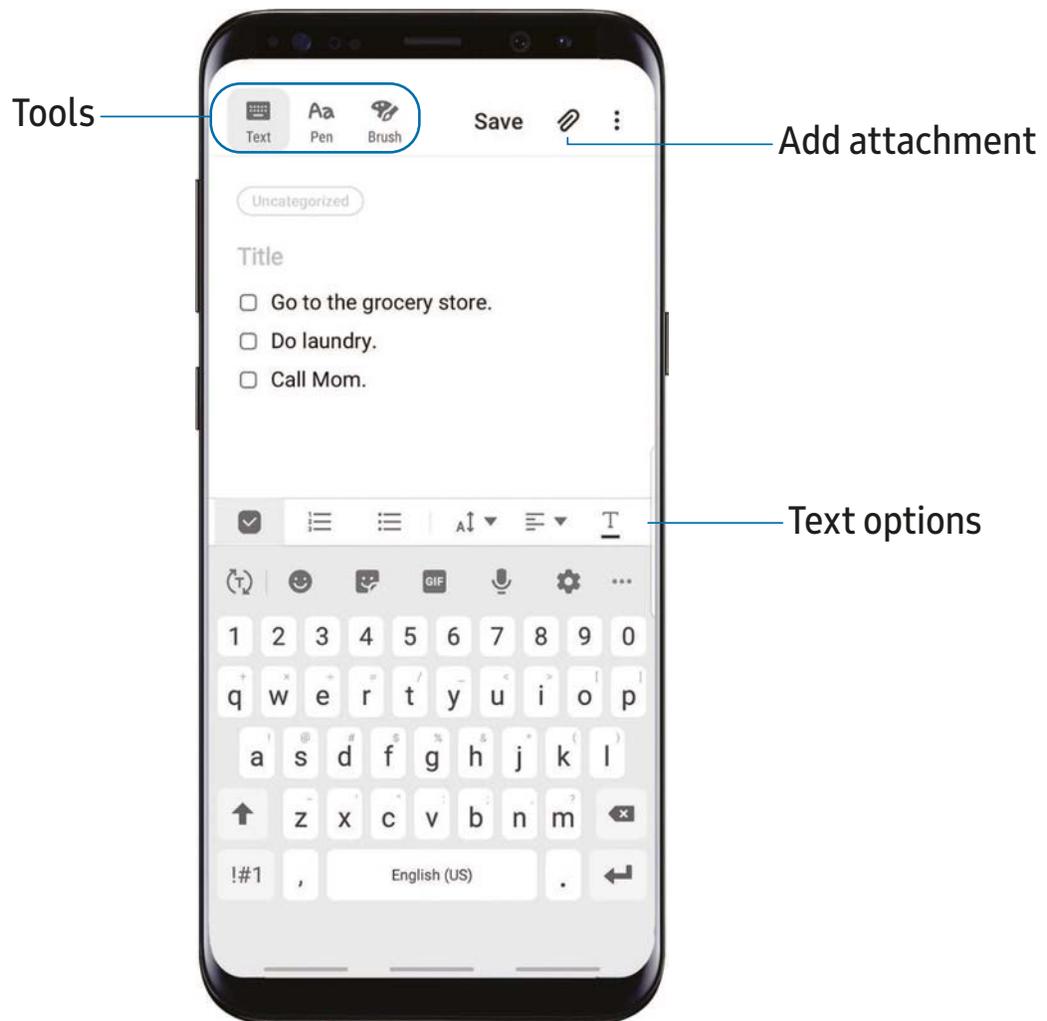
- From Apps, tap **Samsung** folder >  **Samsung Members**.

## 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.

- From Apps, tap  Samsung Notes >  Create.



## Edit notes

Make edits to notes you create.

1. From  **Samsung Notes**, tap a note to view it.
2. Tap  **Edit**, and make changes. When you are finished, tap **Save**.

## Notes options

You can edit, share, or manage notes.

- From  **Samsung Notes**, tap  **More options** for the following options:
  - **Edit**: Select notes to share, delete, or move.
  - **Sort by**: Change the way notes are organized.
  - **View by**: Switch between Grid, List, or Simple list.

## Notes menu

You can view your notes by category.

- From  **Samsung Notes**, tap  **Menu** for the following options:
  - **All notes**: View all notes.
  - **Frequently used**: Quick access to commonly used notes.
  - **Trash**: View deleted notes.
  - **Categories**: View notes by category.
  -  **Settings**: View settings for the Samsung Notes app.

## 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).

- From Apps, tap  **Samsung Pay**, and 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 iris, 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** on page 102.

### Simple Pay

Use Simple Pay to access Samsung Pay from the Lock Screen, Home screen, or Always On Display.

1. From  **Samsung Pay**, tap  **Menu** > **Settings** > **Use Favorite Cards**.
2. Tap  to enable Simple Pay on each screen.

To use Simple Pay:

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

## **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, iris, or PIN, and each transaction uses a unique token each time, so your device only allows payments with your consent.

If your device is ever lost, you can use the Find My Mobile function to remotely wipe your data for even more protection. For more information, see **Find My Mobile** on page 131.



## 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.

- From Apps, tap **Samsung** folder >  **SmartThings**, and sign in with your Samsung account.

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



## Smart Switch

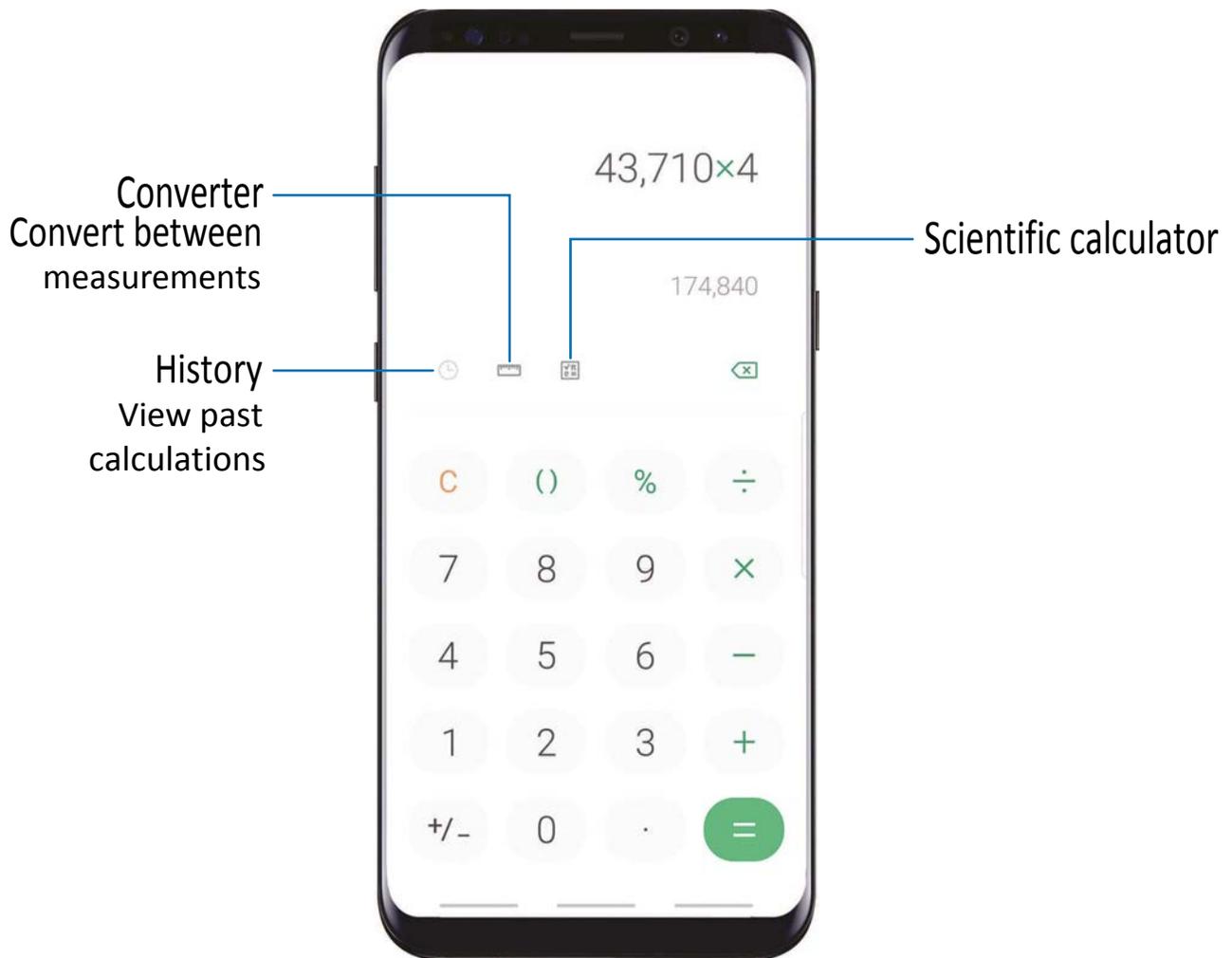
Use Smart Switch to transfer contacts, photos, and other content from your old device. For more information, see [Transfer data from an old device](#) on page 10.

- From Apps, tap  **Smart Switch**.

## Calculator

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

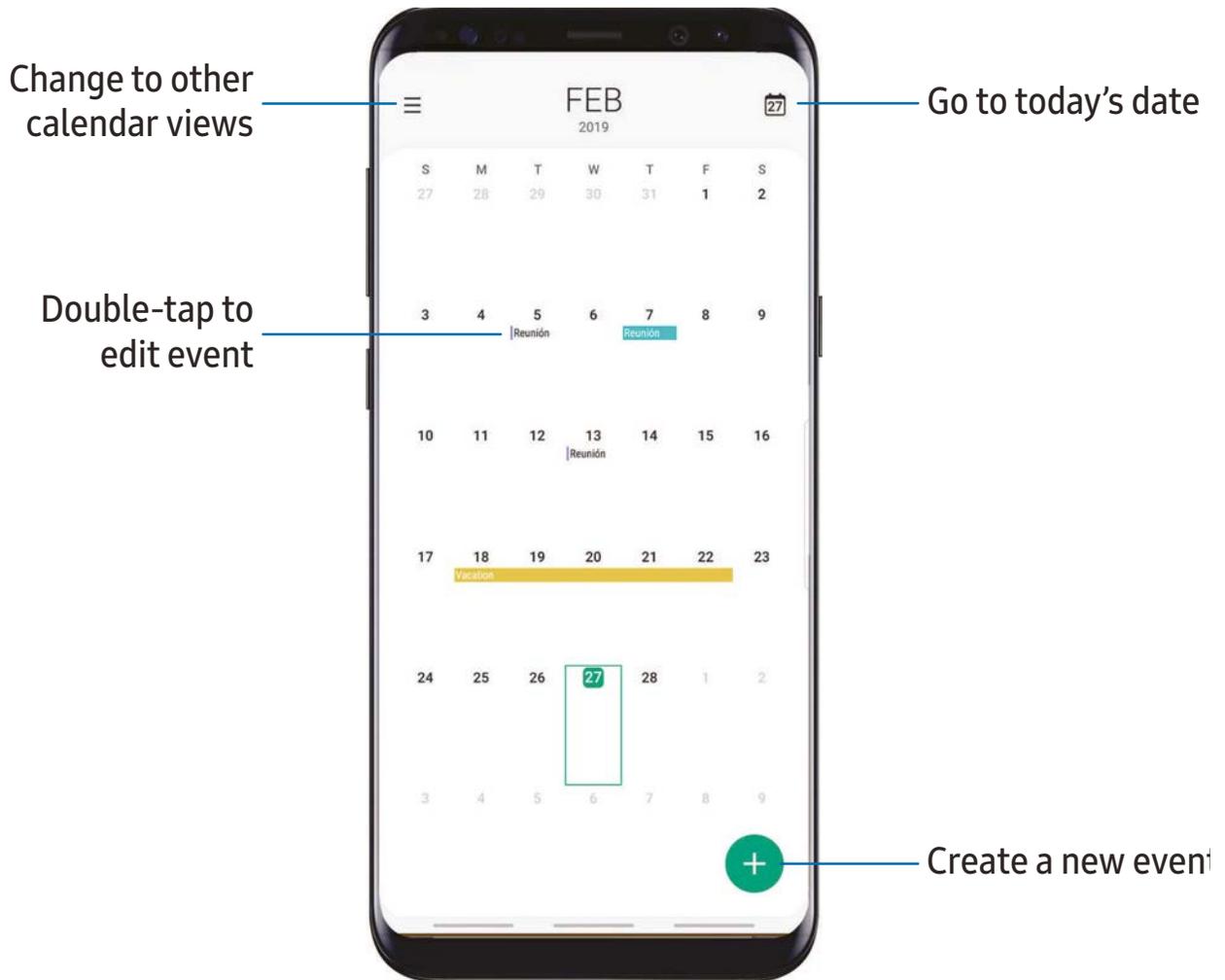
- From Apps, tap  Calculator.



# Calendar

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

- From Apps, tap  Calendar.



## Add calendars

Add your accounts to the Calendar app.

1. From  Calendar, tap  Menu.
2. Tap  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.

## Create an event

Use your Calendar to create events.

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

## Delete an event

Delete events from your Calendar.

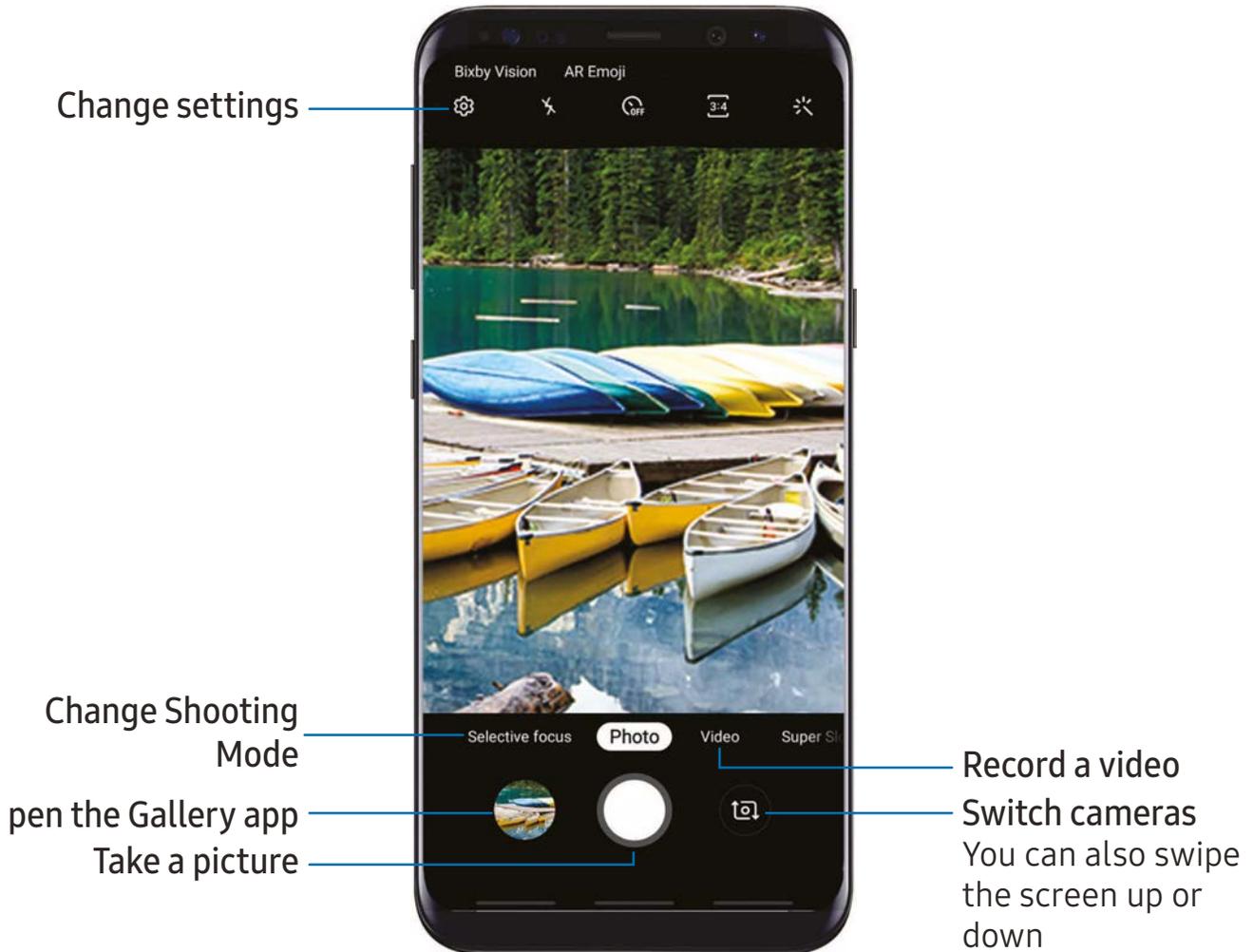
1. From  Calendar, tap an event, and tap again to edit it.
2. Tap **Delete**, and confirm when prompted.

# Camera

You can capture high-quality pictures and videos using the Camera app.

○ From Apps, tap  Camera.

 **TIP** If Quick launch is enabled, quickly press the **Power** key twice.



## 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 light bulb 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**.

## Camera Features

Your device features several camera modes and settings that are designed to take your photography to the next level. See below for some useful tips about your camera.

### Super Slow-mo

Record videos at a high frame rate for viewing in slow motion.

1. From  **Camera**, swipe left to **Super slow-mo**.
2. Tap  **Super Slow-mo** to record.

 **TIP** Hold your device steady for best results.

### AR Emoji

Turn yourself into an emoji that you can add to text messages.

1. From  **Camera**, tap **AR Emoji > Create my emoji**.
2. Tap  **Capture**, and follow the prompts to create your emoji.

## Record videos

Record high-quality videos using your device.

1. From  **Camera**, swipe right or left to change the shooting mode to **Video**.
2. Tap  **Capture** 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.

## Change shooting modes

The Camera is equipped with a variety of shooting modes to capture pictures and videos in specific scenarios.

- From  **Camera**, the shooting modes are located in a row near the bottom of the screen.
  - To change the shooting mode, swipe the screen right or left.
  - To view the entire list of shooting modes and each mode's description, touch and hold a shooting mode.

## Configure shooting mode

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

- From  **Camera**, touch and hold a shooting mode.
  - **Food:** Take pictures that emphasize the vivid colors of food.
  - **Panorama:** Create a linear image by taking pictures in either a horizontal or vertical direction.
  - **Pro:** Manually adjust the ISO sensitivity, exposure value, white balance, and color tone while taking pictures.
  - **Selective focus:** Change the focus of pictures after they have been taken. You can focus on subjects near to the camera, far away from the camera, or both.
  - **Photo:** Allow the camera to determine the ideal mode for the picture.
  - **Video:** Allow the camera to determine the ideal mode for the video.
  - **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.
  - **Wide selfie:** Take wide-angle selfie shots to fit more people into your pictures.
  - **Virtual shot:** Create multi-directional views of objects.

## 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:

### Pictures

- **Rear picture size:** Choose resolution and aspect ratio for pictures captured with the rear camera.
- **Front picture size:** Choose resolution and aspect ratio for pictures captured with the front camera.
- **Motion photos:** Create a short video by taking pictures.
- **Hold shutter button to:** Choose whether to take a picture, take a burst shot, or create a GIF when holding the shutter button down.
- **Save options:** Choose picture format and whether to flip your selfies.

### Videos

- **Rear video size:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
- **Front video size:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
- **Video stabilization:** Activate anti-shake to keep the focus steady when the camera is moving.

### Useful features

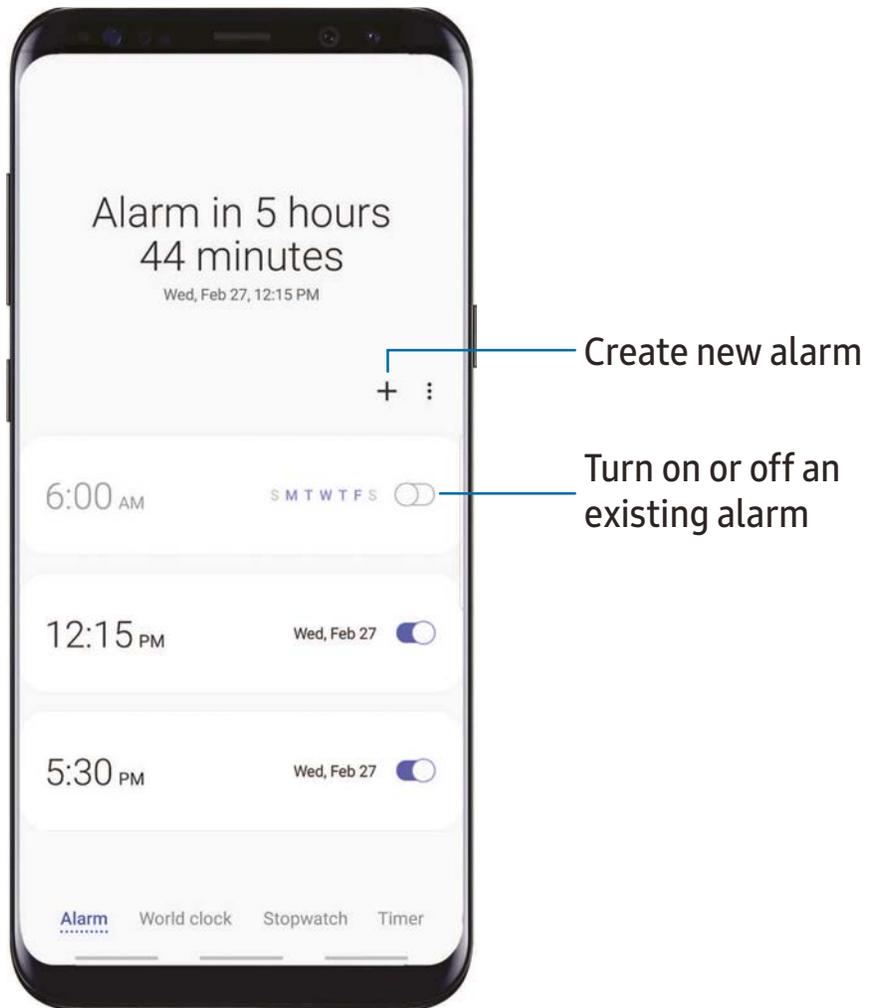
- **HDR (rich tone):** Enables the light sensitivity and color depth features of the device to produce a brighter and richer picture.
- **Tracking auto-focus:** Keep a moving subject in focus.
- **Grid lines:** Display viewfinder grid lines to help compose a picture or video.
- **Location tags:** Attach a GPS location tag to the picture.
- **Selfie shape correction:** Automatically correct face shapes in selfies.
- **Camera modes:** Set the default camera mode. You can also reorder or hide your shooting modes.

- **Shooting methods:**
  - **Press Volume key to:** Use the Volume key to take pictures, record video, zoom, or control system volume.
  - **Voice control:** Take pictures speaking key words.
  - **Floating shutter button:** Add an extra shutter button that you can move anywhere on the screen.
  - **Tap screen:** Tap the screen to take selfies.
  - **Show palm (Selfie):** Hold your hand out with your palm facing the camera to have your picture taken in a few seconds.
  - **Tap heart rate sensor:** Tap the heart rate sensor to take a selfie.
- **Storage location:** Select a memory location.
  - A memory card (not included) must be installed to view Storage location.
- **Quick launch:** Press the Power key twice in quick succession to open the camera.
- **Review pictures:** Review pictures after taking them.
- **Reset settings:** Reset the camera settings.
- **About Camera:** View app and software information.

# 1 Clock

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

- From Apps, tap **1** Clock, and tap a tab to use a feature.



## 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 day 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.

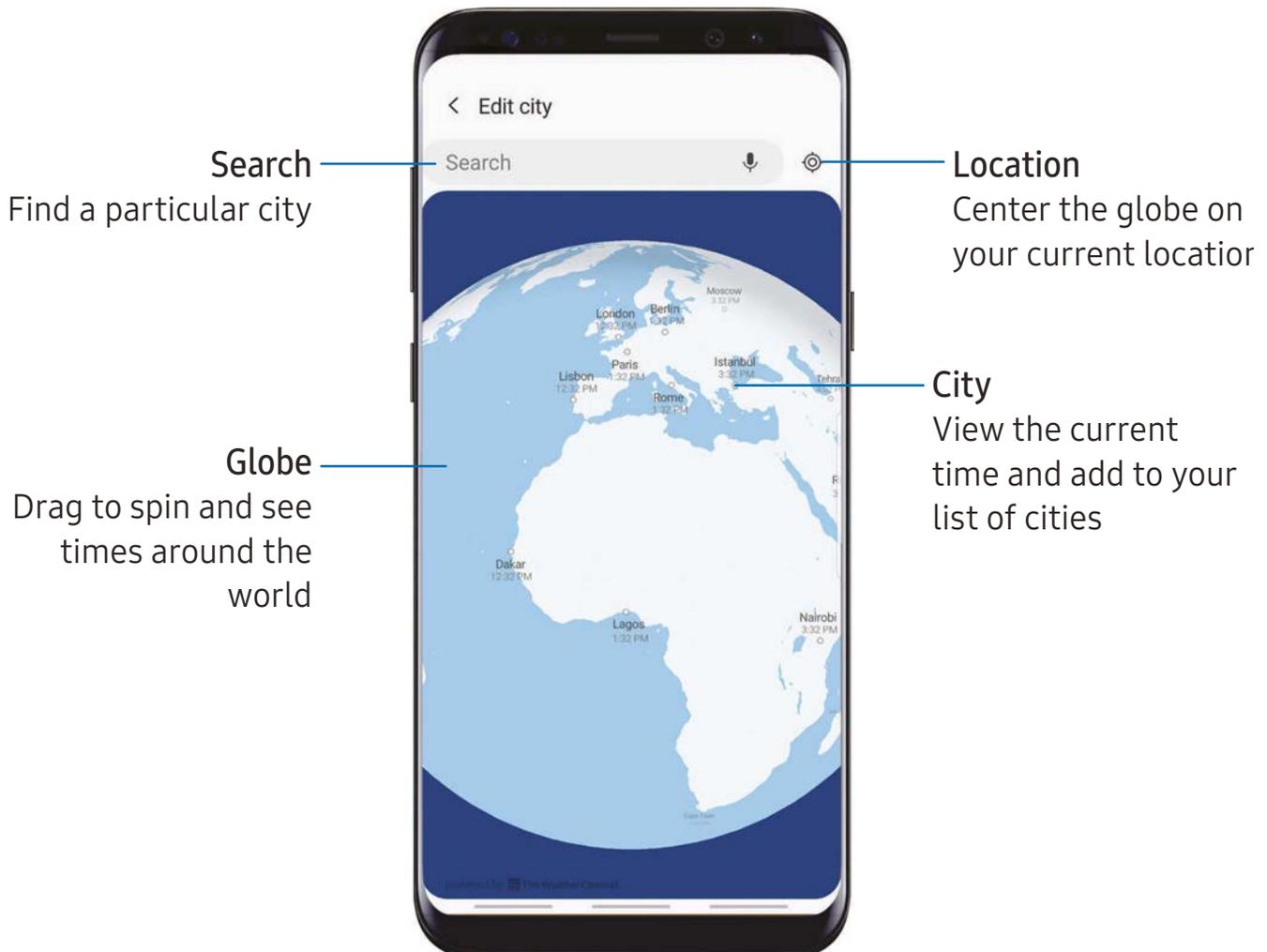
### Delete an alarm

You can delete an alarm that you created.

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

## 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** > **Search**, and enter the name of the city.
3. Tap the city name in the list, 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**.

## 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.

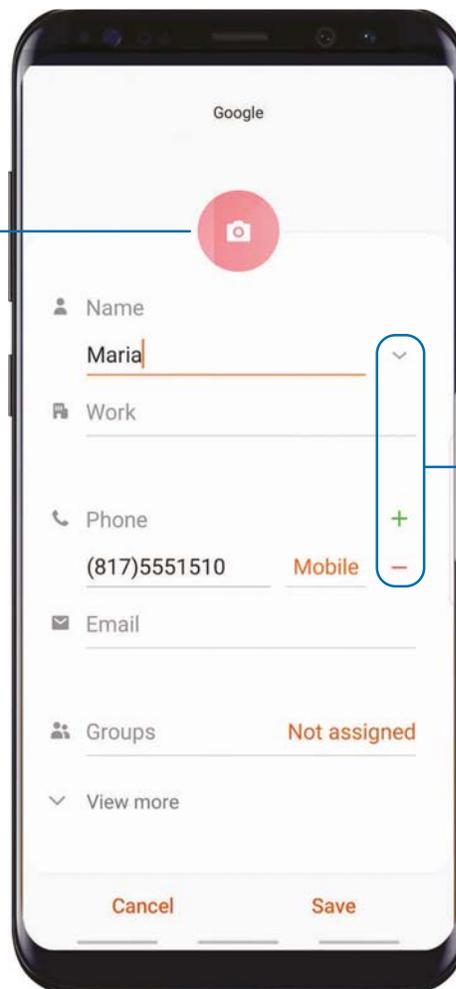
1. From  **Clock**, tap **Timer**.
2. Use the keypad and tap **Hours**, **Minutes**, and **Seconds** to set the Timer.
3. Tap **Start** to begin the Timer.
  - To temporarily stop the Timer, tap **Pause**. To continue, tap **Resume**.
  - To stop and reset the Timer, tap **Cancel**.
  - To save a preset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

## 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.

- From Apps, tap  **Contacts** >  **Create contact**.

**Add contact's photo**  
You can take a new photo or select one from the Gallery



**Add, delete, and expand additional fields**

## 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**.

## Call or message a contact

You can quickly call or message a contact using their default phone number.

1. From  **Contacts**, tap a contact.
2. Tap  **Call** or  **Message**.

## Direct share

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** > **Direct share**, and tap  to enable the feature.

## Favorites

When you mark contacts as favorites, they are easily accessible from other apps.

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

## 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 **vCard file (VCF)** or **Text**.
4. Choose a sharing method and follow the prompts.

## Groups

You can use groups to organize your contacts.

### Create a group

Create your own contact groups.

1. From  **Contacts**, tap  **Menu** > **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  **Contacts**, tap  **Menu** > **Groups**, and then tap a group.
  - To remove a contact, touch and hold a contact to select it, and then tap  **Delete**.
  - To add a contact, tap  **More options** > **Edit group** > **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  **Contacts**, tap  **Menu** > **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  **Menu** > **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  **Menu** > **Groups**, and then tap a group.
2. Tap  **More options** > **Delete group**.
  - 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.

### Import contacts

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

1. From  **Contacts**, tap  **Menu** > **Manage contacts**.
2. Tap **Import/export contacts**.
3. Tap **Import** and follow the prompts.

## Export contacts

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

1. From  **Contacts** tap  **Menu** > **Manage contacts**.
2. Tap **Import/export contacts**.
3. Tap **Export** and follow the prompts.

## Link contacts

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

1. From  **Contacts**, tap the contact to select it.
2. Tap  **More options** > **Link to another contact**.
3. Tap contacts to choose them.
4. Tap **Link**.

To unlink contacts:

1. From  **Contacts**, tap the contact to select it.
2. Tap  **More options** > **Add/remove linked contacts**.
3. Tap **Unlink** beside contacts to unlink them from the main contact.

## Delete contacts

Delete a single contact or multiple contacts.

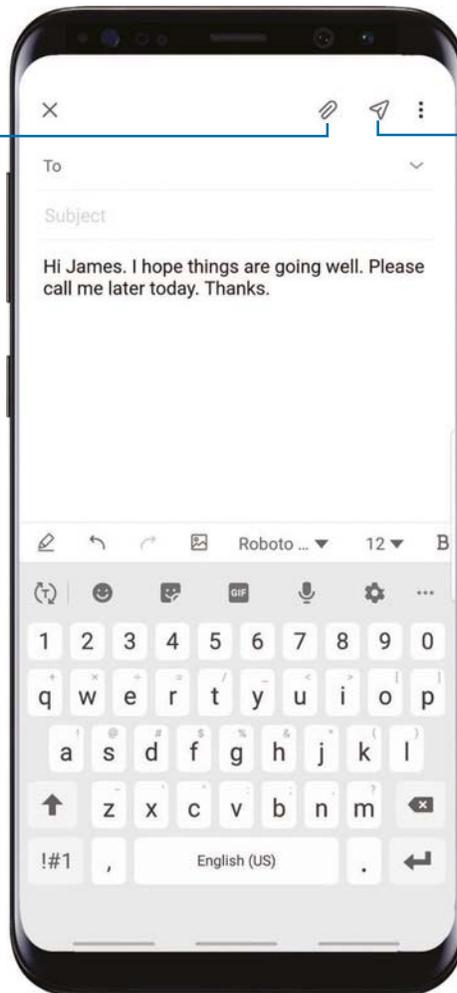
1. From  **Contacts**, touch and hold a contact to select it.
  - You can also tap other contacts to select them for deletion.
2. Tap  **Delete**, and confirm when prompted.

# Email

View and manage multiple email accounts in one app. To add an email account, see [Add an email account](#) on page 9.

- From Apps, tap  Email.

Attach documents,  
images, and more



Send the email  
message

## Create and send an email

Compose and send email messages from your device.

1. From  **Email**, tap  **Compose new email**.
  - Different email account may have additional steps and options.
2. Tap the **To** field to add an email address or tap  **Add from Contacts** to select a recipient from your contacts.
  - When adding multiple recipients, separate them with a semicolon (;). More recipients can be added at any time before the message is sent.
  - If adding a recipient from your Contacts, tap the contact to place a checkmark, and then tap **Done**. The contact is displayed in the recipients field.
  - Tap  **Show additional fields** to add Cc and Bcc fields.
3. Tap the **Subject** and **Message** fields to enter text.
  - Tap  **Attach** to add files, images, audio, and more to your email.
  - Tap  **More options** for additional email options.
4. Review your message and tap  **Send**.

## Manage the inbox

Organize and search your inbox.

- From  **Email**:
  - Tap a message to read and reply or forward it.
  - Tap  to search for key words in your email inbox.
  - Tap  **More options** > **Edit** for additional message options.
  - Tap  **More options** > **Sort** to customize how messages display.

## View multiple email accounts

You can view email you receive for multiple accounts, or you can view email accounts individually.

- From  **Email**, tap  for the following options:
  - **[Account name]**: View email for only one email account.
  - **All accounts**: View all email in a combined inbox.

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

## Email settings

Modify settings associated with using the Email app.

- From  **Email**, tap  >  **Settings**.
  - Under **General**, tap an option, and then follow the prompts.
  - Tap an account to configure specific settings for only that account.

## Remove email accounts

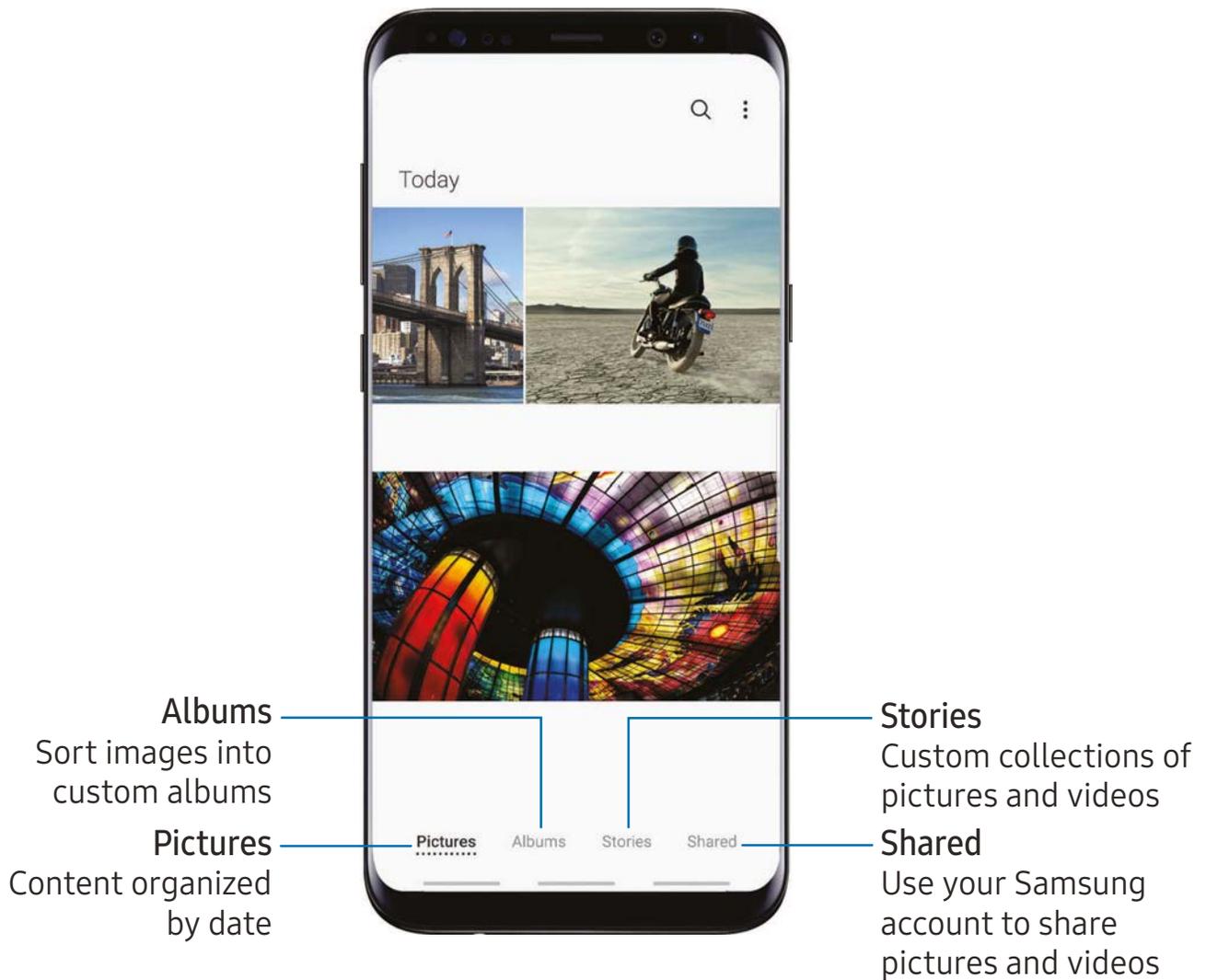
Should you need to remove an email account from your device, you can do so through the Settings menu.

1. From  **Email**, tap  >  **Settings**.
2. Tap the account you want to remove.
3. Tap **Remove**, and confirm when prompted.

# 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 mark the picture as a favorite, tap  **Favorite**.
  - To use Bixby Vision on the current picture, tap  **Bixby Vision**. For more information, see **Bixby** on page 30.
  - To access the following features, tap  **More options**:
    - **Details**: View and edit information about the picture.
    - **Set as wallpaper**: Set the picture as wallpaper.
    - **Set as Always On Display image**: Set the picture as the background image for the Always On Display.
    - **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.
  -  **Effects**: Add color effects.
  -  **Stickers**: Overlay illustrated or animated stickers.
  -  **Text**: Add text to the picture.
  -  **Draw**: Add handwritten text or hand drawn content.
  -  **Brightness**: Adjust brightness image controls.

## 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  **Favorite**. 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:
  -  **Trim**: Cut segments of the video.
  -  **Effects**: Add visual effects to the video.
  -  **Beauty face**: Enhance faces.
  -  **Sticker**: Overlay illustrated or animated stickers.
  -  **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** > **Share**, and then tap pictures and videos to select them.
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, or tap the **All** checkbox at the top of the screen to select all pictures and videos.
3. Tap  **Delete**, and confirm when prompted.

## Take a screenshot

When you capture an image of your screen, your device will automatically create a Screenshots album in the Gallery app.

- From any screen, press and hold the **Power** and **Volume down** keys.

## Enable Smart capture

When taking a screen shot, capture an image of any scrollable areas of the screen that are currently hidden, as well as the area that is visible, and crop and share the screenshot immediately.

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

## Palm swipe to capture a screenshot

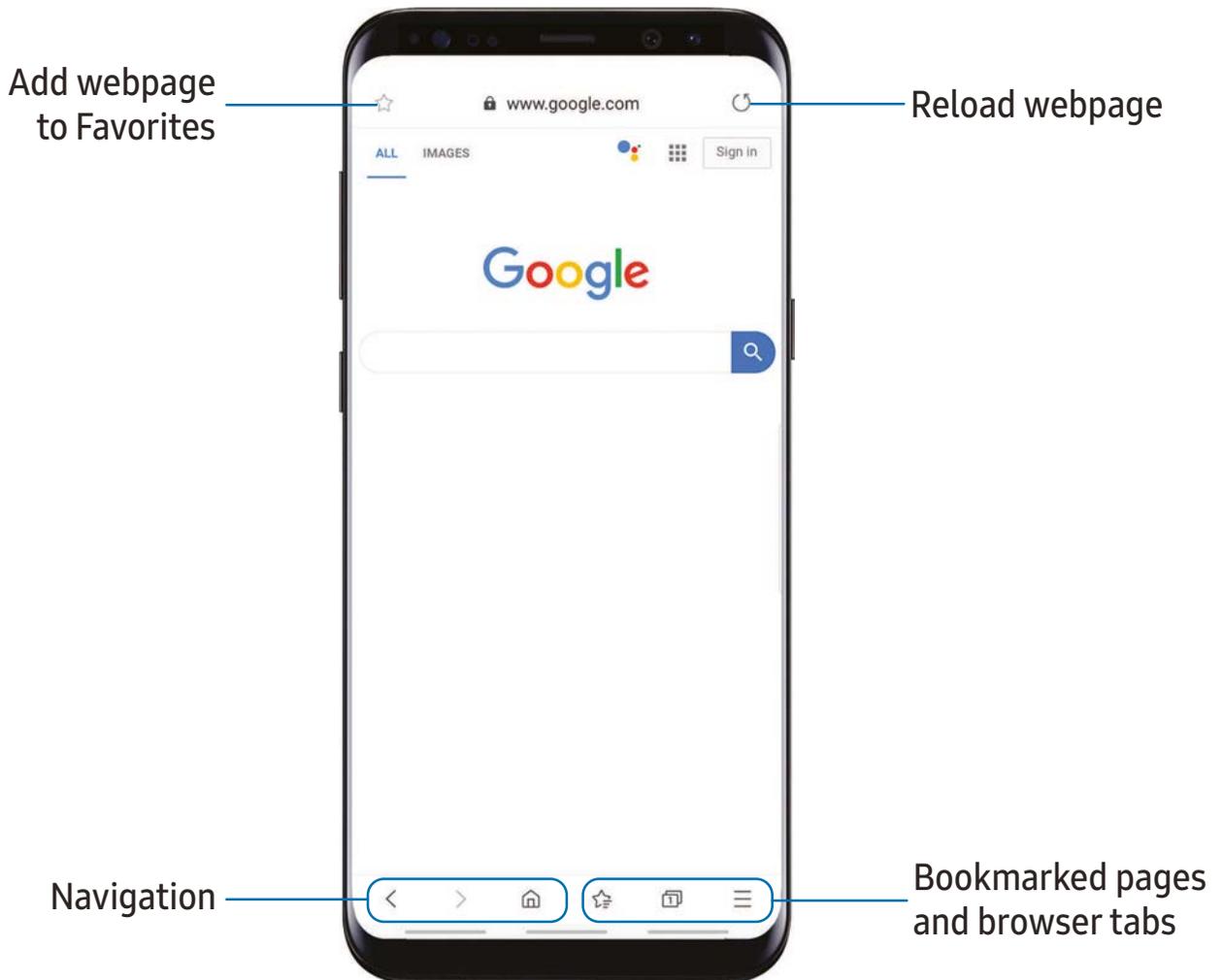
Capture an image of the screen by swiping the edge of your hand across it, from side to side, keeping in contact with the screen.

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

## 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.

- From Apps, tap **Samsung** folder >  **Internet**.



 **NOTE** 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.

## Bookmarks

The Bookmarks page stores Bookmarks, Saved pages, and your browsing History.

### 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

Saving a web page stores its content on your device so that you can access it offline.

- From  Internet, tap  > Add page to > Saved pages.

 **NOTE** To view saved web pages, tap  > Saved pages.

### View history

To view a list of recently visited web pages:

- From  Internet, tap  > 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  > 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  Tabs > Turn on Secret mode.
2. Tap **Set password** to protect your Secret mode data with a password.

To turn off Secret mode:

- From  Internet, tap  Tabs > Turn off Secret mode.

## Internet settings

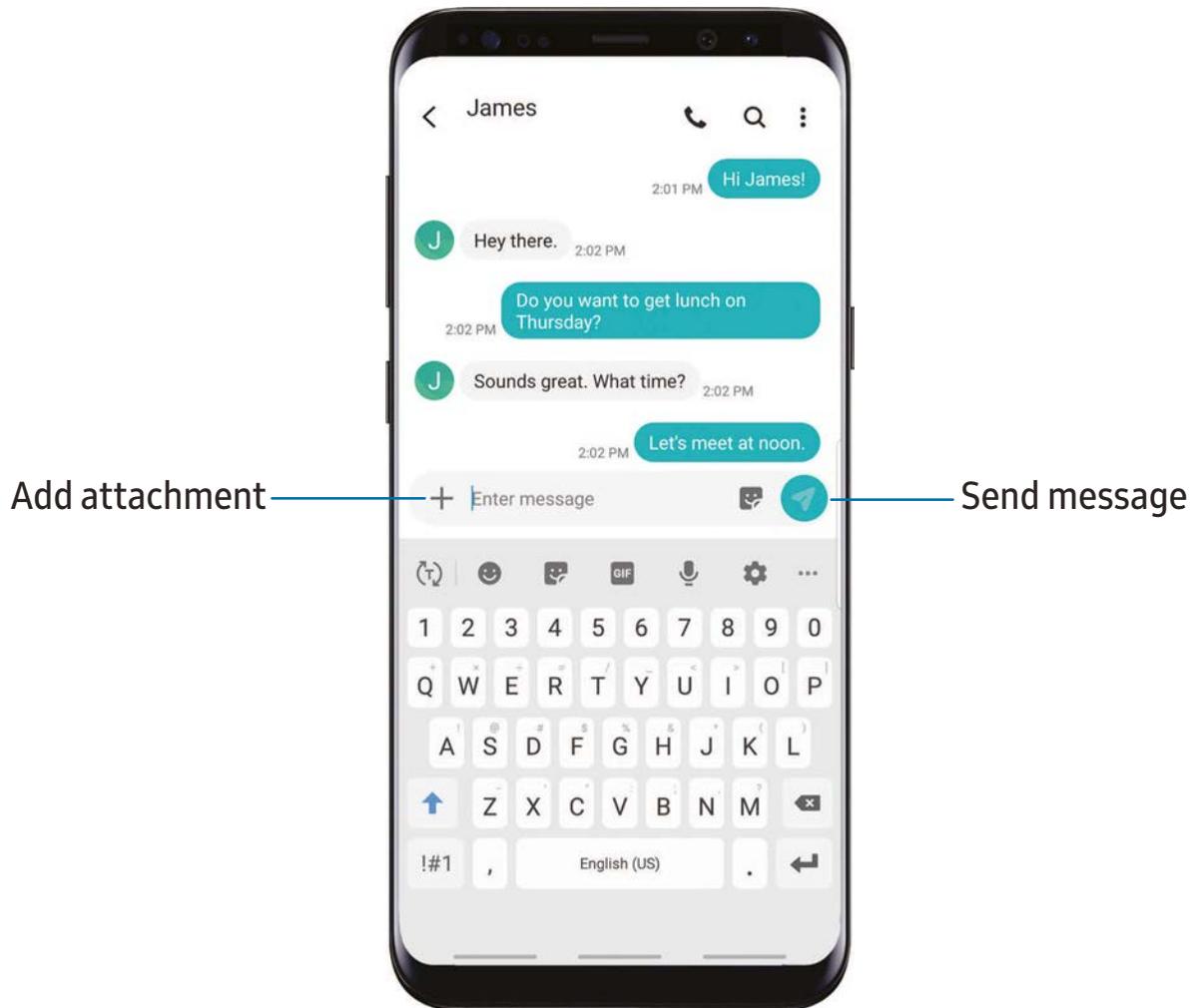
Modify settings associated with using the Internet app.

- From  Internet, tap  > 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 Apps, tap  Messages >  Compose.



### 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** > **Edit**.
2. Tap each conversation you want to delete.
3. Tap  **Delete**, and confirm when prompted.

## Emergency alerts

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

1. From  **Messages**, tap  **More options** > **Settings**.
2. Tap **Emergency alert settings** to customize notifications for emergency alerts.

## 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.
2. Tap **Send messages to** > **Add** and add recipients by creating new contacts or selecting from Contacts.
  - To include a picture from your front and rear camera, tap **Attach pictures**.
  - To include a five-second audio recording in your SOS message, tap **Attach audio recording**.
3. Press the **Power** key quickly three times to send an SOS message.

## Message settings

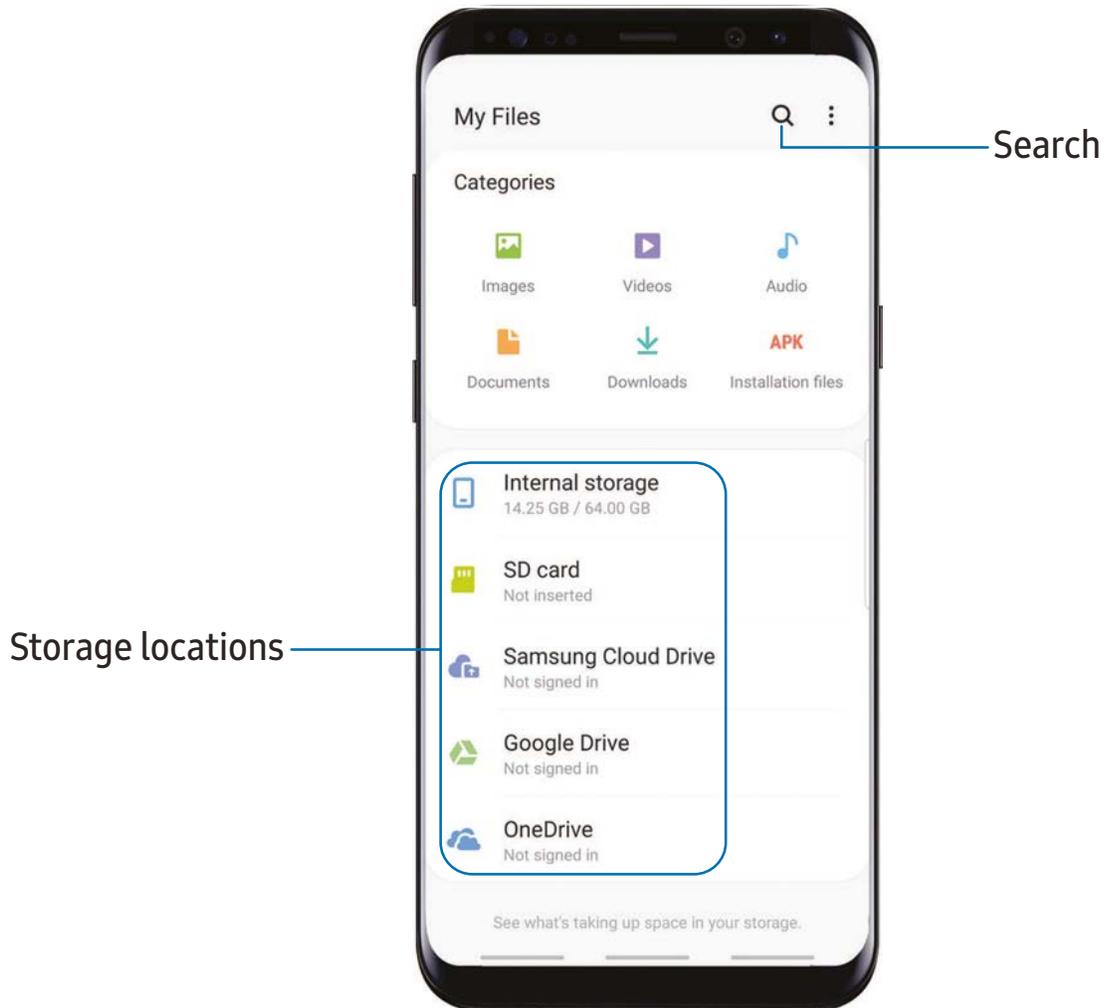
Configure the settings for text and multimedia messages.

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

## My Files

View and manage files stored on your device, including images, videos, music, and sound clips.

- From Apps, tap **Samsung** folder >  **My Files**.



## File groups

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

- **Recent files:** View recently accessed files.
  - This option displays 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 drives vary depending on the services you sign in to.
- **Storage analysis:** See what's taking up space in your storage.

## My Files options

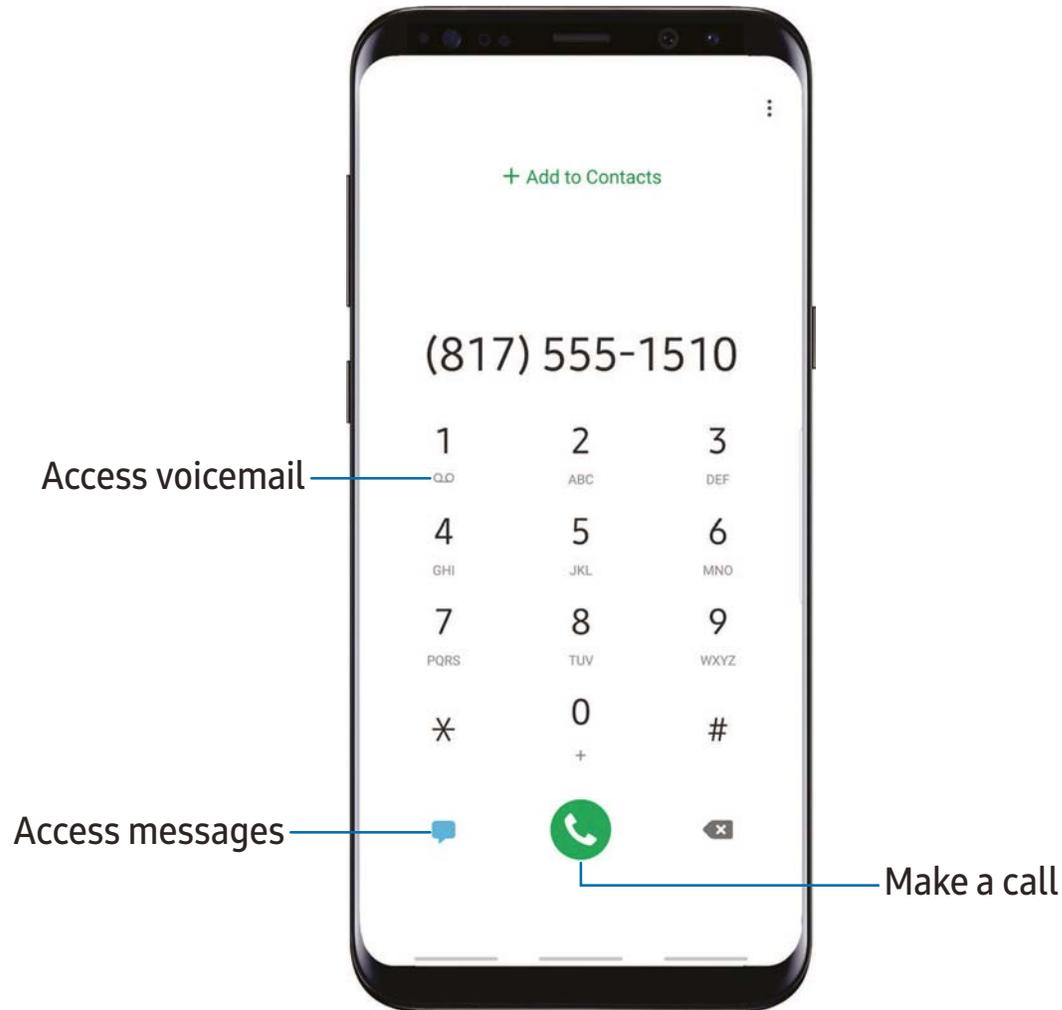
Use My Files options to search, edit, clear file history, and more.

- From  **My Files**, the following options are available:
  -  **Search:** Search for a file or folder.
  -  **More options:**
    - **Clear recent files:** Remove the list of recently accessed files. This option is only available after a file has been opened through My Files.
    - **Storage analysis:** See what's taking up space in your storage.
    - **Settings:** View settings for the app.

## Phone

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

- From a Home screen, tap  Phone.



## 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.

### Enable swipe to call

Swipe a contact or number to the right to make a call.

1. From Settings, tap  **Advanced features** > **Motions and gestures** > **Swipe to call or send messages**.
2. Tap  to enable this feature.

### 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.

### Direct calls

Call the contact whose call log, message, or contact details are currently on the screen by bringing the device close to your ear.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Direct call**, and tap  to enable.

## 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** 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**.

## Places

Explore nearby places and easily contact them.

1. From  **Phone**, tap **Places**.
2. Tap a location for contact information and directions.

## 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 **Add to contacts** or **Update existing**.

## 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.

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  **Remove** by the contact you want to remove from Speed dial.

## Voicemail

Use your phone's voicemail feature.

For information on setting up voicemail, see **Set up voicemail** on page 11.

1. From  **Phone**, touch and hold the  **1** key.
2. Follow the voice prompts from the voicemail center.

## 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.

Make an emergency call from a locked screen

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.

1. Drag  **Phone** upward to open the call screen.
2. Tap **Emergency call** to display the Emergency dialer.
3. Enter the emergency telephone number (911 in North America) and tap  **Call**.
4. Complete your call. During this type of call, you have access to most in-call features.

## Optional calling services

If available with your service plan, the following calling services are supported.

### Place a multi-party call

If your service plan supports this feature, you can make another call while a call is in progress.

1. From the active call, tap  **Add call** to dial the second call.
2. Dial the new number and tap  **Call**. When the call is answered:
  - Tap the **On hold** number to switch between the two calls.
  - Tap  **Merge** to hear both callers at once (multi-conferencing).

### Phone settings

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

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

## TTY mode

A teletypewriter (TTY) is a telecommunications device that allows people who are deaf, hard of hearing, or who have speech or language disabilities to communicate by telephone.

1. From  Phone, tap  More options > Settings.
2. Tap Other call settings > TTY mode.
3. Tap TTY Off, TTY Full, TTY HCO, or TTY VCO.

# Google apps

Enjoy these apps from Google.



## Chrome

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.



## Drive

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.



## Duo

Make one-to-one video calls.

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



## Gmail

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

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



## Google

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.



## Maps

Get directions and other location-based information. You must enable location services to use Google Maps. For more information, see **Location** on page 136.

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



## Photos

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.



## Play Movies & TV

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.



## Play Music

Play music and audio files on your device.

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



## Play Store

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.



## YouTube

Watch and upload YouTube™ videos right from your device.

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

## Additional apps

The following apps are preloaded or downloaded over-the-air to your device.



### Facebook

Keep up with friends and family with the Facebook app. Share updates, photos, and videos, as well as text, chat, and play games.

# Settings

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Access Settings

Connections

Sounds and vibration

Notifications

Display

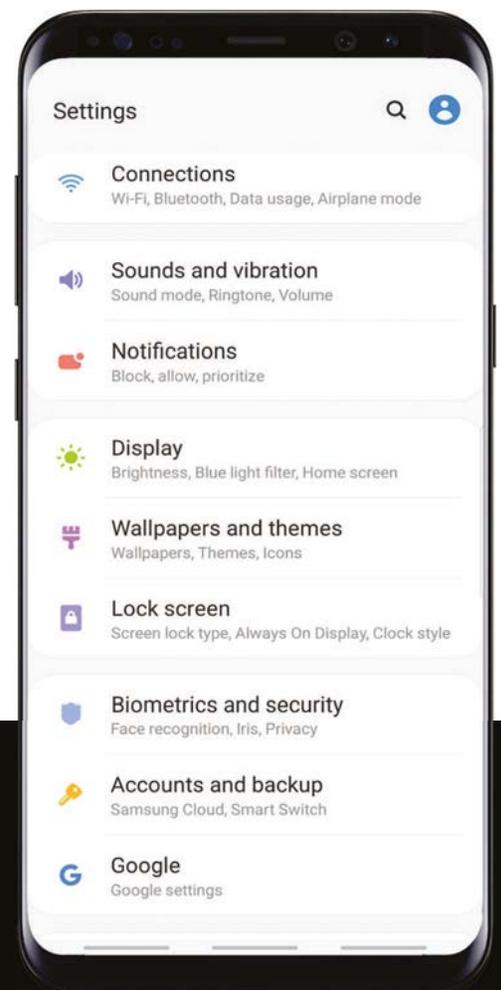
Device maintenance

Lock screen and security

Accounts

Accessibility

Other settings



## Access Settings

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

- Drag down the Status bar, and then 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

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.

### Manually connect to a 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.
- **Auto reconnect:** Choose this option if you want to automatically reconnect to this network whenever you are in range.
- **Advanced:** Add any advanced options, such as IP and Proxy settings.

4. Tap **Save**.

## 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 **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.
  - **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.
3. Tap **View more** to see additional network settings.
  - **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.
  - **MAC address:** View your device's MAC address, which is required when connecting to some secured networks (not configurable).
  - **IP address:** View your device's IP address (not configurable).

## 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 **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** > **Wi-Fi Direct**. Tap a device to disconnect it.

## Bluetooth

You can pair your device to other Bluetooth<sup>®</sup>-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.

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

 **TIP** You will need to pair with the device again in order to connect to it.

## Advanced options

Additional Bluetooth features are available in the Advanced menu.

1. From Settings, tap  **Connections** > **Bluetooth**.
2. Tap **Advanced** for the following options:
  - **Dual audio**: Play audio from your device to two connected Bluetooth devices.
  - **Media volume sync**: Sync the volume level set on the connected Bluetooth devices to your device.
  - **Ringtone sync**: Use the ringtone set on your phone when you receive calls through a connected Bluetooth device.
  - **Bluetooth control history**: View apps that have used Bluetooth recently.

## Phone visibility

Turn on visibility to allow other Bluetooth devices to find your device.

- From Settings, tap  **Connections** > **Phone visibility**, and then tap  to make your device visible.

## 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.

- From Settings, tap  **Connections** > **NFC and payment**, and then tap  to turn on this feature.
-  **TIP** The device that you are transferring to needs to support NFC, and it needs to be within four centimeters of your device.

## Android Beam

Use Android Beam to share photos, contacts, or other data between NFC-enabled devices.

1. From Settings, tap  **Connections** > **NFC and payment**, and then tap  to turn on NFC.
2. Tap **Android Beam**, and then tap  to turn on this feature.

 **TIP** When sharing a file, tap  **Android Beam** to use 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 payment**, and then tap  to turn on NFC.
2. Tap **Tap and pay** > **Payment** to see the default payment app.
  - To use another payment app when it is open instead of the default app, tap **Tap and pay with open apps**.
  - To set another payment app as the default, tap **Others**, and then tap the app 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 disconnects your device from all networks and turns off connectivity features.

1. From Settings, tap **Connections** > **Airplane mode**.
2. 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.

 **TIP** Check with your carrier about service fees.

### 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**.

## Allowed devices list

Create a custom list of devices that are allowed to connect to your Mobile hotspot.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap  **More options** > **Allowed devices**, and then tap **Add** to enter the other device's Device name and MAC address.
3. Tap **Add** to add the device.
  - To restrict connections to your Allowed devices list, tap **Allowed devices only**.

 **TIP** You need the device name and MAC address of devices that you want to add to the Allowed devices list.

## 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  **More options** > **Configure mobile hotspot** for the following settings:
  - **Network name:** View and change the name of your Mobile hotspot.
  - **Hide my device:** Prevent your Mobile hotspot from being discoverable by other devices.
  - **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.
  - **Show advanced options:** Configure additional Mobile hotspot settings.

## Timeout settings

You can set the Mobile hotspot to automatically turn off when there are no connected devices.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap  **More options** > **Timeout settings**, and then select an interval.

 **TIP** This feature can help you manage your data usage.

## Wi-Fi sharing

Turn on Wi-Fi sharing to quickly share your Wi-Fi network with other devices.

1. From Settings, tap  **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
2. Tap **Wi-Fi sharing** to turn on this feature.

 **TIP** Use this feature to share your Wi-Fi network without giving out your Wi-Fi password.

## 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**.

 **NOTE** The other device does not need Wi-Fi to use this sharing method.

## 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  **Download plugin** and follow the prompts to add a print service.
3. Tap the print service, and then tap  **More options** > **Add printer**.

 **TIP** Make sure the app you want to print from supports printing.

## MirrorLink

If your car is compatible with MirrorLink™ you can mirror your device's display on your car's entertainment and information screen using a USB connection.

Visit [mirrorlink.com](http://mirrorlink.com) to learn more.

1. Connect your device to your car's system using the USB cable.
2. From Settings, tap  **Connections** > **More connection settings** > **MirrorLink**.
3. Tap **Connect to car via USB**, and follow the prompts.

## Download booster

Download booster improves download speed by using both Wi-Fi and 4G LTE networks at the same time when downloading files over 30 MB in size.

- From Settings, tap  **Connections** > **More connection settings** > **Download booster**, and tap  to enable.

 **NOTE** Download booster uses mobile data services.

## 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**.

 **TIP** A secured screen lock is required to set up a VPN.

## 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

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

- From Settings, tap  **Sounds and vibration** > **Sound mode**, and then choose a mode:
  - **Sound:** Use the sounds, vibrations, and volume levels you have chosen in Sound settings for notifications and alerts.
  - **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.

## Easy mute

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

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Easy mute**, 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:
  - **Vibrate while ringing:** Set your device to vibrate in addition to ringing when you receive a call.
  - **Vibration pattern:** Choose from preset vibration patterns.
  - **Vibration intensity:** Set vibration intensity levels for calls, notifications, and feedback by dragging the sliders.

## Volume

Set the volume level for call ringtones, notifications, and other audio.

- From Settings, tap  **Sounds and vibration** > **Volume**, and drag the sliders.

 **TIP** You can also use the **Volume** key to adjust the volume. Slide the volume controls to customize all volume options.

## Use Volume keys for media

Set the default of the Volume key to control the media volume.

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

## Media volume limiter

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

1. From Settings, tap  **Sounds and vibration** > **Volume**.
2. Tap  **More options** > **Media volume limiter**.
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 sounds

Choose a preset sound for all notification alerts.

1. From Settings, tap  **Sounds and vibration** > **Notification sounds**.
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 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 sounds and vibration** for the following options:
  - **Touch sound:** Play tones when you touch or tap the screen to make selections.
  - **Screen lock sound:** Play a sound when you unlock the screen.
  - **Charging sound:** Play a sound when a charger is connected.
  - **Dialing keypad tone:** Play a tone when dialing numbers on the Phone keypad.
  - **Keyboard sound:** Play a sound when typing with the Samsung keyboard.
  - **Keyboard vibration:** Vibrate when typing with the Samsung keyboard.
  - **Touch vibration:** Vibrate when you tap navigation buttons or touch and hold items on the screen.

## 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.

1. From Settings, tap  **Sounds and vibration** > **Advanced sound settings** > **Sound quality and effects**.
2. Tap **Dolby Atmos** to experience breakthrough audio that flows above and around you.

## 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** > **Advanced sound settings** > **Sound quality and effects**.
2. Tap **Equalizer** to choose a music genre.

## Headset audio options

Enhance the sound resolution of music and videos for a clearer listening experience. These features are only available with a headset connected.

- From Settings, tap  **Sounds and vibration** > **Advanced sound settings** > **Sound quality and effects**, and tap an option to turn it on:
  - **UHQ upscaler**: Sharpens audio resolution for crisp sound.
  - **Tube Amp Pro**: Simulates the soft timbre of a tube amplifier.
  - **Concert hall**: Simulates the reverb of a concert hall.

## Adapt sound

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

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

 **TIP** Tap  **Add personalized sound profile** to take a hearing test and let your device identify the best sound for you.

## Separate app sound

You can play media sound on a speaker or headphones separate from the rest of the sounds on your device.

1. From Settings, tap  **Sounds and vibration** > **Advanced sound settings** > **Separate app sound**.
2. Tap  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.

 **TIP** You need to connect to a Bluetooth device to make this option available in the Audio device menu.

# Notifications

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

## Manage notifications

You can configure notifications from apps and services.

- From Settings, tap  **Notifications**.
  - **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.
  - **Do not disturb:** Allow notifications from this app even when Do not disturb is turned on.
  - **Status bar:** Modify how many notifications appear on the Status bar.
  - **LED indicator:** Use the LED indicator for status notifications, like sound recording, unread notifications, and battery charging.
  - To block notifications from an app, tap  next to the app. Tap **See all** to open the complete list of apps.

## Customize app notifications

You can change notification settings for each app.

1. From Settings, tap  **Notifications** > **See all**.
2. Tap an app for the following options:
  - **Show notifications:** Receive notifications from this app.
  - **App icon badges:** Show a badge on the icon when there are notifications.
  - **Categories:** Configure notification options that are specific to this app.

## Smart alert

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

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Smart alert**, and tap  to enable.

## Smart pop-up view

Receive notifications as icons that can be tapped and expanded in pop-up view.

- From Settings, tap  **Advanced features** > **Smart pop-up view**, and tap  to enable.

## Display

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

### 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.
    - **Reset usage patterns**: Clear your brightness adjustment history. Your device begins learning your preferences again after the reset.

## Blue light filter

The Blue light filter can help you sleep better if you use your device at night. 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**.

## Night mode

Night mode allows you to switch to a darker theme to keep your eyes more comfortable at night.

- From Settings, tap  **Display** > **Night mode** for the following options:
  - **Turn on now:** Put your device in Night mode.
  - **Turn on as scheduled:** Configure Night mode for either **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:
  - Drag the **Font size** slider to adjust the size of text.
  - Tap **Font style** to choose a different font.
    - Tap a font to select it, or tap  **Download fonts** to add fonts from Galaxy Apps.
  - Tap **Bold font** to make all fonts appear with bold weight.

## Screen zoom

Adjust the zoom level to increase or decrease the size of content on the screen.

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.

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.

## Lift to wake

Turn on the screen by lifting the device.

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

## Full screen apps

You can choose which apps you want to use in the full screen aspect ratio.

- From Settings, tap  **Display** > **Full screen apps** and tap apps to enable this feature.

## 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.

## 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 or disable the feature.

## Screen saver

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

1. From Settings, tap  **Display** > **Screen saver**.
2. Tap  to enable the feature and configure the following options:
  - **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.

## Smart stay

Smart stay uses the front camera to detect your face so that the screen stays on while you are looking at it.

- From Settings, tap  **Advanced features** > **Motions and gestures** > **Smart stay**, and tap  to enable the feature.

## Reduce animations

Decrease certain motion effects, such as when opening apps.

- From Settings, tap  **Advanced features** > **Reduce animations**, 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** > **Motions and gestures** > **One-handed mode**.
2. Tap  to enable the following:
  - **Gesture:** Swipe up diagonally from either bottom corner to reduce the display size.
  - **Button:** Tap  **Home** three times in quick succession to reduce the display size.

## 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

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  **Device care** > **Optimize now**.

### Battery

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

- From Settings, tap  **Device care** > **Battery** for options:
  - **Battery usage:** View power usage by app and service.
  - **Power mode:** Select a power mode to extend battery life.
  - **Usage by apps:** View power usage by app today or over the past week.
  -  **More options** > **Settings:** Configure advanced battery settings and notifications.

## Storage and memory card

View the device memory and usage. You can also mount, unmount, or format an optional memory card (not included).

### Device storage

Quickly optimize your device's memory, increasing available memory.

- From Settings, tap  **Device care** > **Storage** > **Clean now**.

### 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.

For more information, see **Assemble your device** on page 5.

### 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  **Device care** > **Storage**.
2. Tap  **More options** > **Storage settings**.
3. Under **Portable storage**, 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  **Device care** > **Storage**.
2. Tap  **More options** > **Storage settings**.
3. Under **Portable storage**, tap your SD card, and then tap **Unmount**.
4. 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  **Device care** > **Storage**.
2. Tap  **More options** > **Storage settings**.
3. 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.

1. From Settings, tap  **Device care** > **Memory**.
  - The used and available memory are shown.
2. To free up as much memory as possible, tap **Clean now** and follow the prompts.
  - The selected apps and services in the list will be closed.

## Security

Scan your device with anti-malware to keep it secure and protected from suspicious activities.

1. From Settings, tap  **Device care** > **Security**.
2. Tap **Activate** to scan your device.

## 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 and input** > **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, drag  **Move** next to the desired language to the top of the list, and then tap **Apply**.

### Default keyboard

You can select a default keyboard for your device's menus and keyboards. Additional keyboards can be downloaded from the Google Play store.

1. From Settings, tap  **General management** > **Language and input**.
2. Tap **Default keyboard**, and select a keyboard.

### Google Voice typing

Speak rather than type your text entries using Google voice typing.

1. From Settings, tap  **General management** > **Language and input**.
2. Tap **On-screen keyboard** > **Google voice typing** to customize settings.

### Manage on-screen keyboards

Enable or disable on-screen keyboards.

1. From Settings, tap  **General management** > **Language and input**.
2. Tap **On-screen keyboard** >  **Manage keyboards**.
3. Tap each keyboard to enable or disable.

## Physical keyboards

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

1. From Settings, tap  **General management** > **Language and input**.
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.

## Show keyboard button

Show a button on the Navigation bar to quickly switch between keyboards.

1. From Settings, tap  **General management** > **Language and input**.
2. Tap **Show keyboard button** to enable this feature.

## Autofill service

Save time entering information using autofill services.

1. From Settings, tap  **General Management** > **Language and input**.
2. Tap **Autofill service** and select your preferred service.

## 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** > **Language and input** > **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.

## Pointer speed

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

1. From Settings, tap  **General management** > **Language and input**.
2. Under **Pointer speed**, drag the slider to the right to go faster or to the left to go slower.

## Primary mouse button

You can define which mouse button that you favor as primary.

1. From Settings, tap  **General management** > **Language and input**.
2. Tap **Primary mouse button**, and choose either **Left** or **Right**.

## 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:
    - **Select time zone:** Choose a new time zone.
    - **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 also check for software updates, and if necessary, reset services on your device.

### Software update

Check for and install available software updates for your device.

- From Settings, tap  **Software update** for the following options:
  - **Download and install:** Check for software updates and install if any are available.
  - **Auto download over Wi-Fi:** Automatically download software updates when the device is connected to a Wi-Fi network.
  - **Last update:** View information about the installation of the current software.

### Reset

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

#### Reset 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 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

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**.
2. Tap  to activate Auto restart, and then set the following parameters:
  - **Day:** 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.

 **NOTE** When you sign in to a Google Account on your device, Factory Reset Protection 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 Factory Reset Protection (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 is activated. Factory Reset Protection (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** > **Accounts** > [Google Account].
2. Tap **Remove account**.

# Lock screen and security

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

## 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 **Flexible security** on page 32.

## Set a secure screen lock

It is recommended that you secure your device using a secure screen lock (Pattern, PIN, or Password).

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:
  - **View style:** Display notification details or hide them and show only an icon.
  - **Hide content:** Do not show notifications in the notification panel.
  - **Show on Always On Display:** Display notifications on the Always on Display screen.
3. Tap **Done** when finished.
4. 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** on page 31.

## 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:** Change to digital clocks showing both local and home time zones when roaming.
  - **FaceWidgets:** 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.
  - **App shortcuts:** Select which apps to open from the Lock screen.
  - **About Lock screen:** Update the Lock screen's software.

## Google Play Protect

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

1. From Settings, tap  **Biometrics and security** > **Google Play Protect**.
2. Tap options to customize security features.

## Find My Mobile

You can protect your device from loss or theft by allowing your device to be locked, tracked online, and for your data to be deleted remotely. For more information, visit [samsung.com/us/support/owners/app/find-my-mobile](https://samsung.com/us/support/owners/app/find-my-mobile).

-  **TIP** A Samsung account is required, and Google location service must be turned on in order to use Find My Mobile.

## Turn on Find My Mobile

Before you can use the Find My Mobile feature, you must turn it on and customize the options. To access your device remotely, visit [findmymobile.samsung.com](https://findmymobile.samsung.com).

1. From Settings, tap  **Biometrics and security** > **Find My Mobile**.
2. Tap **Add Samsung account** and follow the prompts. The following options are available:
  - **Remote controls**: Turn on to access your device remotely.
  - **Google location service**: Turn on to enable Google location service to find your device.
  - **Remote unlock**: Allow Samsung to store your PIN, pattern, or password, allowing you to unlock and control your device remotely.
  - **Send last location**: Allow your device to send its last location to the Find My Mobile server when the remaining battery charge falls below a certain level.

## 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.

## 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.

## 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.

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

 **TIP** You must sign in to your Samsung account, and use secured lock on your device to set up and use Secure Folder.

## Secure startup

You can protect your device by requiring a PIN, pattern, or password when your phone is turned on.

 **TIP** A secure screen lock (Pattern, PIN, Password, or Fingerprints) is required to use Secure startup.

- From Settings, tap  **Biometrics and security** > **Secure startup** and select an option.

## Encrypt 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.

1. From Settings, tap  **Biometrics and security** > **Encrypt 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** > **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.

## Security update service

You can set your device to automatically check for security updates.

- From Settings, tap  **Biometrics and security** > **Other security settings**, and then tap **Security policy updates** to check for security updates.

## Device administration

You can authorize security features and apps (like Find My Mobile) 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](#) on page 130.
  - **Pin windows:** Pin an app on your device screen, which prevents access to other features of your device.

## Location

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

1. From Settings, tap  **Biometrics and security** > **Location**.
2. Tap  to turn on Location services.
3. Tap **Improve accuracy** to use other connections for determining your location:
  - **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.



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

## Recent location requests

View a list of apps that have requested your location.

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

## App permissions

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  **Biometrics and security** > **App permissions**.
2. Tap a category, and tap  next to the apps you want to be notified about.
  - Tap an app to select which permissions you want to be notified about.

## Permission usage monitor

Apps might use permissions of your device 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  **Biometrics and security** > **Permission usage monitor**.
2. Tap  next to the apps you want to be notified about.

## Send diagnostic data

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

1. From Settings, tap  **Biometrics and security** > **Send diagnostic data**.
2. Read and accept the consent information to enable this feature.

## Samsung Ads

Received customized ads based on your usage of Samsung devices and apps.

- From Settings, tap  **Biometrics and security** > **Samsung Ads**, and then tap  to enable this feature.
  - Tap **About Samsung Ads and Privacy** to learn about Samsung's privacy policies.

# Accounts

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

## 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** > **Accounts** >  **Add account**.
2. Tap one of the account types.
3. Follow the prompts to enter your credentials and set up the account.
  - Tap **Auto sync data** to enable automatic updates to your accounts.

## 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** > **Accounts** > **[Account type]**.
2. Tap an account to configure that account's sync settings.
3. Tap other available options for the account type.

## Synchronize accounts

You can synchronize your calendar, contacts, and other types of accounts.

1. From Settings, tap  **Accounts and backup** > **Accounts** > **[Account type]**.
2. Tap an account to view the sync settings for that account.
3. Tap individual data items to sync.
4. Tap  **More options** > **Sync now** to synchronize the account.

## Remove an account

You can remove accounts from your device.

1. From Settings, tap  **Accounts and backup** > **Accounts** > [Account type].
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 options:
  - **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.

- From Settings, tap  **Accounts and backup** > **Backup and restore** for options:
  - **Back up my data:** Enable back up of application data, Wi-Fi passwords, and other settings to Google servers.
  - **Backup account:** Select a Google Account to be used as your backup account.
  - **Automatic restore:** Enable automatic restoration of settings from Google servers.

### 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](#) on page 10.

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

## Samsung Cloud

You can keep your data safe by backing up and restoring your device. You can also sync your data from multiple devices. For more information, visit [samsung.com/us/support/owners/app/samsung-cloud](https://samsung.com/us/support/owners/app/samsung-cloud).

1. From Settings, tap  **Accounts and backup** > **Samsung Cloud**.
  - If a Samsung account has not been added, the screens explain how to create or sign in to your account.
2. Once a Samsung account is configured, you can view and manage items stored in the Samsung Cloud.

## 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.

## 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).

## Screen Reader

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

- From Settings, tap  **Accessibility** > **Screen reader** and tap an option:
  - **Voice assistant:** Receive spoken feedback when using your device, such as what you touch, select, or activate.
  - **Tutorial:** Learn how to use Voice assistant.
  - **Settings:** Configure Voice assistant 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.
  - **Show button shapes:** Show buttons with shaded backgrounds to make them stand out better against the wallpaper.
  - **Negative colors:** 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.
  - **Color lens:** 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:
  - **Sound detectors:** Receive alerts when the device detects a baby crying or a doorbell.
  - **Mute all sounds:** Turn off all notifications and audio for privacy.
  - **Hearing aid support:** Improve the sound quality to work better with hearing aids.
  - **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.

## 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:
  - **Samsung subtitles (CC)**: Use Samsung subtitles with multimedia files when available.
  - **Google subtitles (CC)**: Use Google subtitles with multimedia files when available.
  - **Speech-to-text**: Use the microphone to record speech and convert it to text.

## 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.
  - **Click after pointer stops**: Automatically click on an item after the pointer stops over it.

## 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 (not included).
    - **Press Volume up to answer:** Use the Volume keys to answer calls.
    - **Answer automatically:** Answer calls after a set duration when using Bluetooth or headsets (not included).
    - **Press Power key to end:** End calls by pressing the Power key.
  - **Easy screen turn on:** Turn on the screen by laying it flat and moving your hand over the screen instead of using the Power button.
  - **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.

## 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.

## Direct access

- From Settings, tap  **Accessibility** > **Advanced settings** and tap an option:
  - **Power and Volume up keys:** Configure selected Accessibility settings to open by quickly pressing the Power 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.
  - **Notification reminders:** Set periodic reminders for any unread notifications.
  - **Voice Label:** Write voice recordings to NFC tags (not included) to provide you with information about objects or locations as you near them.
  - **Direction lock:** Unlock the screen by swiping in a series of directions.

## 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.

## Other settings

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

## Help

View the user manual on your device.

- From Settings, tap  **Help**.

## Manage game features

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).

- From Settings, tap  **Advanced features** > **Game Launcher**.

## 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**, and then view your phone number, model number, serial number, and IMEI information.
2. Tap additional items to view more information about your device.

# Learn more

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## Videos

[samsung.com/us/support/videos](https://samsung.com/us/support/videos)

## Smart Simulator

[samsungsimulator.com](https://samsungsimulator.com)

## Tips

[samsung.com/us/support/tips](https://samsung.com/us/support/tips)

## Samsung Care

[samsung.com/us/support](https://samsung.com/us/support)

## Talk to an agent

Contact us on Facebook Messenger

Find us on Facebook

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# 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. For complete terms and conditions that bind you and Samsung, refer to the "Arbitration Agreement" section of the Terms & Conditions, included with the Product.

## Find legal information online

The full Arbitration Agreement, Standard Limited Warranty, End User License Agreement (EULA), and Health & Safety Information for your device are available online.

Arbitration Agreement, Standard Limited Warranty, and Health & Safety Information:

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)

Tablet:

- English: [samsung.com/us/Legal/Tablet-HSGuide](https://samsung.com/us/Legal/Tablet-HSGuide)
- Spanish: [samsung.com/us/Legal/Tablet-HSGuide-SP](https://samsung.com/us/Legal/Tablet-HSGuide-SP)

End User License Agreement:

- English: [samsung.com/us/Legal/SamsungLegal-EULA4](https://samsung.com/us/Legal/SamsungLegal-EULA4)
- Spanish: [samsung.com/us/Legal/SamsungLegal-EULA4/#SPANISH](https://samsung.com/us/Legal/SamsungLegal-EULA4/#SPANISH)

## Find legal information on the mobile device

The full Arbitration Agreement, Standard Limited Warranty, End User License Agreement (EULA) and Health & Safety Information are also available on the device, in the Samsung legal section of Settings. The location depends on the device, and is usually in the “About device” or “About phone” section, for example:

- **Settings > About phone or About device or About tablet > Legal information > Samsung legal**
- Or, use the Search feature to search for “Legal”.

## Intellectual property

All Intellectual Property, as defined below, owned by or which is otherwise the property of Samsung or its respective suppliers relating to the SAMSUNG mobile device, including but not limited to, accessories, parts, or software relating thereto (the “mobile device”), is proprietary to Samsung and protected under federal laws, state laws, and international treaty provisions. Intellectual Property includes, but is not limited to, inventions (patentable or unpatentable), patents, trade secrets, copyrights, software, computer programs, and related documentation and other works of authorship.

You may not infringe or otherwise violate the rights secured by the Intellectual Property. Moreover, you agree that you will not (and will not attempt to) modify, prepare derivative works of, reverse engineer, decompile, disassemble, or otherwise attempt to create source code from the software. No title to or ownership in the Intellectual Property is transferred to you. All applicable rights of the Intellectual Property shall remain with SAMSUNG and its suppliers.

## Open source software

Some software components of this product, including but not limited to ‘PowerTOP’ and ‘e2fsprogs’, incorporate source code covered under GNU General Public License (GPL), GNU Lesser General Public License (LGPL), OpenSSL License, BSD License and other open source licenses. To obtain the source code covered under the open source licenses, please visit: [opensource.samsung.com](https://opensource.samsung.com)

## Disclaimer of warranties; exclusion of liability

The information below explains that a user accepts this Product as sold, including the hardware and software components as created and packaged for sale. If the user changes these parameters through a unique modification, Samsung will not be held responsible for damages or issues that result from these end-user changes.

Except as set forth in the Standard Limited Warranty that accompanies the Product, the purchaser takes the product “as is”, and Samsung makes no express or implied warranty of any kind whatsoever with respect to the Product, including but not limited to the:

- merchantability of the Product or its fitness for any particular purpose or use;
- design, condition or quality of the Product;
- performance of the Product;
- workmanship of the Product or the components contained therein; or
- compliance of the Product with the requirements of any law, rule, specification or contract pertaining thereto.

Nothing contained in the User Manual or any other document shall be construed to create an express or implied warranty of any kind whatsoever with respect to the Product. Neither Samsung nor the wireless carrier are responsible for, and the Standard Limited Warranty does not apply to, any damage or injury arising from disassembly or repairs by persons not authorized or approved by Samsung to service this Product. In addition, Samsung shall not be liable for any damages of any kind resulting from the purchase or use of the Product or arising from the breach of the express warranty, including incidental, special or consequential damages, or loss of anticipated profits or benefits.

## Modification of software

Samsung is not liable for performance issues or incompatibilities caused by your editing of registry settings, or your modification of Operating System (OS) software.

Using custom OS software may cause your device and applications to work improperly. Your carrier may not permit users to download certain software, such as custom OS.

## 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.

This device is rated IP68 using the Ingress Protection rating system.

Your device has been tested in a controlled environment and shown to be water and dust resistant in certain circumstances (meets requirements of classification IP68 as described by the international standard IEC 60529 – Degrees of Protection provided by Enclosures [IP Code]; test conditions: 15-35°C, 86-106 kPa, 5.0 feet, for 30 minutes). Despite this classification, your device is not impervious to water damage in any situation. It is important that all compartments are closed tightly.

 **NOTE** If any liquid is found to have entered your device components or an internally sealed system, this condition will void your device warranty.

Follow these tips carefully to prevent damage to the device.

- 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.

- Whenever your device gets wet, dry it thoroughly with a clean, soft cloth. If your device has gotten wet, you should dry the inside of the charging port before inserting a power connector to charge your device. If the charging port is not fully dry, your device may operate abnormally. For example, it may charge more slowly or overheat.
- Do not expose the device to salt water or ionized water, or to water over 5.0 feet deep for more than 30 minutes. If your device is exposed to fresh water, dry it thoroughly with a clean, soft cloth. If the device is exposed to any liquid other than fresh water, rinse the device with fresh water immediately and dry it thoroughly with a clean, soft cloth. Failure to rinse the device in fresh water and dry it as instructed may cause the device to suffer from operability or cosmetic issues.
- Water resistant based on IP68 rating, which tests submersion in fresh water up to 5 feet for up to 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.

 **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.

- 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.
- The touchscreen and other features may not work properly if the device is used in water or in other liquids.

## 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.