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**Features**

![Bixby icon] 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 icon] Camera

The camera on your device has several unique features. See Camera on page 56.

![Security icon] Security

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

![Night mode icon] Night mode

Use a darker theme to keep your eyes comfortable at night. See Night mode on page 118.

![Expandable storage icon] Expandable storage

Expand storage with a supported microSD™ card. See Memory card on page 123.

![Water and dust resistance icon] Water and dust resistance

This device is rated IP68 using the Ingress Protection rating system. See Maintaining water and dust resistance on page 152.
Getting started

Device layout

Assemble your device

Start using your device
Device layout

- Proximity sensor
- Iris scanner
- Volume keys
- Bixby key
- microSD/SIM card tray
- Front camera
- Power key

Getting started

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 152.

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 152.

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/.

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.
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 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/smartsupport 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 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.

Devices and software are constantly evolving — the illustrations you see here are for reference only.
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:
  • Trash Remove from Home: Delete a widget from your screen.
  • Widget settings: Customize the function or appearance of the widget.
  • Info 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.
Getting started

**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.

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

💡 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 > Fingerprint**.
  - **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.

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 (تحقق) Show predictive text to view suggested words while you type.
  - Tap (.green) 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:
  - 𝜏 Clipboard: Access the clipboard.
  -  khổ 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.
• **Emergency alerts**: View and configure emergency alerts and alert types.
• **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 137.
Apps

Using apps

Samsung apps

Google apps

Carrier 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.

Tips: 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.

Tips: 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.

- 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.

○ 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.

Before you start exercising

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

- Heart disease; Asthma or lung disease; Diabetes, or liver or kidney disease; and Arthritis.
Before beginning your exercise regimen check with your doctor if you have symptoms suggestive of heart, lung, or other serious disease, such as:

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

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

Samsung Members

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

Visit samsung.com/us/support/owners/app/samsung-members to learn more.

- From Apps, tap Samsung folder > 👍 Samsung Members.
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 to learn more.

- From Apps, tap Samsung folder > 📊 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™ 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.

- 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 104.

**Simple Pay**

Use Simply 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](http://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 132.
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 Samsung folder > Smart Switch.
The Calculator app features both basic and scientific math functions, as well as a unit converter.

- From Apps, tap Calculator.
The Calendar app can be connected to your various online accounts to consolidate all your calendars in one place.

- From Apps, tap Calendar.

- Change to other calendar views
- Double-tap to edit event
- Go to today’s date
- Create a new event
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.
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.

• **Shutter sound:** Play a tone when taking a picture.

• **Reset settings:** Reset the camera settings.

• **About Camera:** View app and software information.
The Clock app offers features for keeping track of time and setting alarms.

- From Apps, tap 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

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

Devices and software are constantly evolving — the illustrations you see here are for reference only.
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.
Go to the Gallery to look at 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. FromGallery, 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. FromGallery, 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.
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.

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.
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.
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 ⬇️Swap to switch between the two calls.
   - Tap ➔Merge to hear both callers at once (multi-conferencing).

Video calls
To make Video calls:

- Tap 📱Phone, enter a number, and then tap 🎥Video call.

💡 NOTE Not all devices support video calling. The receiver has the option to accept the video call or answer the call as a regular voice call.
Wi-Fi calling
Make calls over Wi-Fi when you are connected to a Wi-Fi network. Contact your carrier for details.

1. From Phone, tap More options > Settings > Wi-Fi calling.
2. Tap to enable this feature.
3. Follow the prompts to set up and configure Wi-Fi calling.

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

- From Phone, tap More options > Settings.

Real Time Text (RTT)
Type back and forth in real time with the other person while on a call.

You can use RTT whenever you are calling someone whose phone also supports RTT or is connected to a teletypewriter (TTY) device. The RTT icon appears on all incoming RTT calls.

1. From Phone, tap More options > Settings.
2. Tap Real time text for the following options:
   - Always visible: Show the RTT call button on the keypad and during calls.
   - Use external TTY keyboard: Hide the RTT keyboard when an external TTY keyboard is connected.
   - TTY mode: Choose the preferred TTY mode for the keyboard in use.

💡 NOTE To use RTT, you must be connected to a 4G LTE or Wi-Fi network.
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 to learn more.

Drive

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

Visit support.google.com/drive to learn more.

Duo

Make one-to-one video calls.

Visit support.google.com/duo to learn more.

Gmail

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

Visit 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 to learn more.
Google Pay
Pay with your Android phone at participating stores and within mobile apps with Google Pay™.

Visit support.google.com/pay 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 137.

Visit 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 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 to learn more.

Play Music
Play music and audio files on your device.

Visit 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 to learn more.

YouTube
Watch and upload YouTube™ videos right from your device.
Visit support.google.com/youtube to learn more.
Carrier apps

Some apps require a data plan or paid subscription. Contact your carrier for additional information.

Device Unlock
Your device is network locked. Use Device Unlock to inquire about your device’s unlock eligibility.

Name ID
Modify Caller ID information. Name ID identifies unknown callers by Name, City, and State.

T-Mobile
Get online access to account information such as your current activity, billing information, service plans, downloads, and more.

Visual Voicemail
Easily manage your inbox without ever dialing into your voicemail.
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.

Lookout

Configure and manage key security options, such as anti-virus and anti-malware technology, a lost and stolen device locator service, an application privacy adviser, and a backup service.
Settings

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®-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.

**Mobile networks**

Use Mobile networks to configure your device's ability to connect to mobile networks and use mobile data.

- From Settings, tap **Connections > Mobile networks**.
  - **Data roaming**: Choose whether to allow your device to connect to mobile data while traveling outside your carrier's network area.
  - **Network mode**: You can select which network modes your mobile phone can use.
  - **Access Point Names**: Choose or add APNs, which have the network settings your device needs to connect to your provider.
  - **Network operators**: Choose available and preferred networks.

💡 **TIP** Use these features to help manage connection settings that may affect your monthly bill.

**Data usage**

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

- From Settings, tap **Connections > Data usage**.
**Turn on Data saver**

Use Data saver to reduce your data consumption by preventing selected apps from sending or receiving data in the background.

1. From Settings, tap Connections > Data usage > Data saver.
2. Tap to turn on Data saver.
   - To allow some apps to have unrestricted data usage, tap Allow app while Data saver on, and tap next to each app to specify restrictions.

**Monitor mobile data**

You can customize your mobile data access by setting limits and restrictions.

- From Settings, tap Connections > Data usage. The following options are available:
  - **Mobile data**: Use mobile data from your plan.
  - **Mobile data usage**: View data usage over mobile connections over a period of time. You can view total usage as well as usage by app.
  - **Billing cycle and data warning**: Change the monthly date to align with your carrier’s billing date.

💡 TIP Use these features to keep an eye on your estimated 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.
   - **Broadcast network name (SSID)**: Make your device visible to others.
   - **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.

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. 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 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.

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.
settings

**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.

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.

💡 **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.

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 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.
Set up SIM card lock
You can set up a PIN to lock your SIM card, which prevents unauthorized use of your
SIM card if someone attempts to use it another device.

○ From Settings, tap Biometrics and security > Other security settings > Set up
SIM card lock and follow the prompts.
  • Tap Lock SIM card to turn on the feature.
  • Tap Change SIM card PIN to create a new PIN.

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.

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.

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:
  - **Real time text**: Activate real-time text (RTT) calling.
  - **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.

- 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

Videos
samsung.com/us/support/videos

Smart Simulator
samsungsimulator.com

Tips
samsung.com/us/support/tips

Samsung Care
samsung.com/us/support

Talk to an agent
Contact us on Facebook Messenger
Find us on Facebook
Follow us on Twitter
READ THIS INFORMATION BEFORE USING YOUR MOBILE DEVICE.

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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
- Spanish: samsung.com/us/Legal/Phone-HSGuide-SP

Tablet:
- English: samsung.com/us/Legal/Tablet-HSGuide
- Spanish: samsung.com/us/Legal/Tablet-HSGuide-SP

End User License Agreement:
- English: samsung.com/us/Legal/SamsungLegal-EULA4
- Spanish: 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”.

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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.

**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.
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.