

SAMSUNG

USER MANUAL

Galaxy S9 | S9+

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Special Features

Learn about your mobile device's special features.

Hello Bixby

Bixby responds to your voice commands and can help you understand your settings and set up your Samsung device.

For more information, see ["Bixby" on page 40.](#)

Dual Camera

The Galaxy S9+ is equipped with a rear dual camera. The dual optical zoom feature and Live focus shooting mode utilize both cameras.

For more information, see ["Camera and Video" on page 70.](#)

Flexible Security

Use your face, fingerprint, or iris to unlock your device.

Face Recognition

Configure facial recognition security to add an extra layer of security when using your device.

For more information, see ["Face Recognition" on page 44.](#)

Fingerprint Scanner

Use your fingerprint 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.

For more information, see ["Fingerprint Scanner" on page 47.](#)

Iris Scanner

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

For more information, see [“Iris Scanner” on page 45.](#)

Intelligent Scan

Combine iris and face recognition data to improve your security experience.

For more information, see [“Intelligent Scan” on page 49.](#)

Water and Dust Resistance

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

For more information, see [“Maintaining Water and Dust Resistance” on page 219.](#)

Getting Started

Learn about your mobile device hardware, assembly procedures, and how to get started using your new device.

Front View



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

- **Proximity sensor**

- Turns off the screen and disables touch functionality during a call when the device is in close proximity to the body.
- Turns the screen back on and enables touch functionality during a call when the device is outside a specific range from the body.

- **Power key**

- Press to turn the screen on or off.
- Press and hold to select a power control option.
- Press twice quickly to launch the camera.

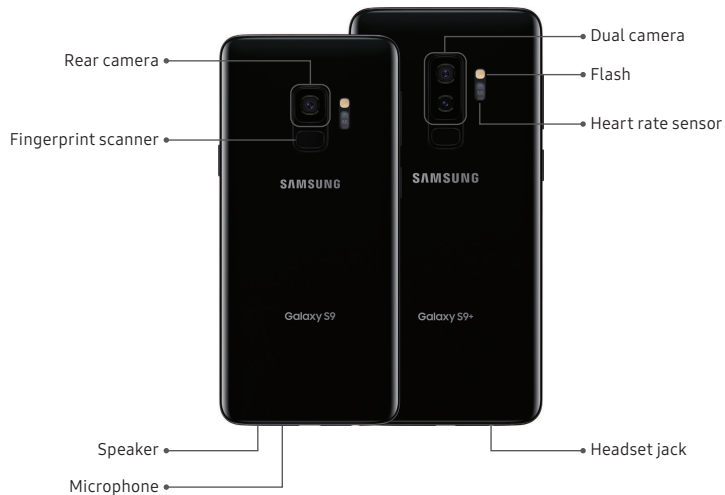
- **Volume keys**

- Adjust the volume for ringtones, media, notifications, and system sounds. For more information, see [“Volume” on page 156.](#)
- In the camera app, press a volume key to take a photo.

- **Bixby key**

- Launch Bixby. For more information, see [“Bixby” on page 40.](#)

Back View



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

Set Up Your Device

Learn how to set up your device for the first time.

Assemble Your Device

Install a SIM card and an optional memory card (not included), and charge your device before using.

Install a SIM Card and Memory Card

When you subscribe to a cellular network, you are provided with a SIM card. You may be able to use your previous SIM card. Contact your service provider for more details.

Warning: Small components such as SIM cards and memory cards can pose a choking risk. Please be careful when handling these cards to avoid damaging them.

You can install an optional microSD™ memory card (not included) to add more memory space to your device. A memory card can be installed at any time. It is not necessary to install it prior to using the device.

Caution: Be careful when using the removal tool to eject an internal card tray.

1. Insert the removal tool into the hole on the SIM card/Memory card tray, and then push until the tray pops out.
2. Place the SIM card on the tray with the gold contacts facing down.
3. Place the memory card on the tray with the gold contacts facing down.



4. Slide the SIM card/Memory card tray back into the slot.

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 219.

Charge the Battery

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

Note: 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. For more information, see “Maintaining Water and Dust Resistance” on page 219.

The battery comes partially charged. You can use the device while charging.

Caution: Use only charging devices that are approved by Samsung. Samsung accessories are designed for your device to maximize battery life. Using other accessories may void your warranty and may cause damage.

1. Insert the USB Type-C cable into the USB charger/Accessory port.



2. Connect the USB cable to the charging head, and then plug the charging head into a standard outlet.
3. Unplug the charging head from the outlet and remove the USB cable from the device when charging is complete.

While charging, the device and the charger may become hot when using wireless charging or fast charging. This does not affect the device's lifespan or performance and is in the device's normal range of operation.

The charger may stop charging if the battery becomes too hot.

If the device heats up while charging the battery:

1. Disconnect the charger from the device and close any running apps.
2. Wait for the device to cool down, and then begin charging the device again.
 - If the lower part of the device overheats, check for damage to the connected USB cable. Replace the damaged USB cable with a new Samsung-approved cable.
 - If using a wireless charger, do not place foreign materials between the device and the wireless charger.

Start Using Your Device

Turn Your Device On or Off

The instructions below explain how to turn your device on or off.

To turn the device on:

- ▶ Press and hold the **Power** key until the device turns on.

To turn the device off:

1. Press and hold the **Power** key.
2. Tap **Power off**, and confirm when prompted.

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.

To lock the device:

- ▶ Press the **Power** key.

To unlock the device:

- ▶ Press the **Power** key or double-tap  **Home**, and then drag your finger across the screen.

The default Screen lock on your device is Swipe.

To choose a secure screen lock, see ["Set a Secure Screen Lock" on page 186.](#)

Add a Google Account

Your new device uses your Google™ Account to fully utilize its Android™ features.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **Accounts**.
3. 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 182.](#)

Add a Samsung Account

Create a Samsung account for access to Samsung content and apps on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** >  **Samsung account**.

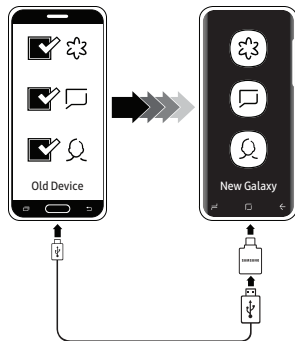
Add an Email Account

View and manage all of your email accounts.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **Accounts**.
3. Tap  **Add account** > **Email**.

Transfer Data from Your Old Device

Use Smart Switch™ to transfer contacts, photos, and other content from your old device. 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. For more information, visit samsung.com/us/support/owners/app/smart-switch.



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.

To use Smart Switch:

1. From a Home screen, swipe up to access **Apps**, and then tap  **Settings** > **Cloud and accounts** > **Smart Switch**.
2. Follow the prompts and select the content to transfer.

Visit samsung.com/smartswitch for more information and to learn how to use the On-the-Go adapter to transfer content faster.

Set Up Your Voicemail

You can access your voicemail from a Home screen.

1. From a Home screen, tap  **Phone**.
2. Touch and hold  **Voicemail**.
3. Follow the tutorial to create a password, record a greeting, and record your name.

For more information, see [“Voicemail” on page 118](#).

Learn About Your Device

Learn some of the key features of your mobile device, including the screens and icons, as well as how to navigate the device and enter text using the keyboard.

Navigation

Please note that a touchscreen 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 touchscreen may damage the tempered glass surface and void the warranty.

Tap

Lightly tap items to select or launch them.

- Tap the keyboard to enter characters or text.
- Tap an item to select it.
- Tap an app shortcut to launch the app.

Double-Tap

Lightly tap items twice to select or launch them.

- Double-tap an image to zoom in or out.

Touch and Hold

Touch and hold items to activate them.

- Touch and hold a field to display a pop-up menu of options.

Swipe

Lightly drag your finger vertically or horizontally across the screen.

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

Drag

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 on a Home screen.

Pinch and Spread

Pinch the screen using your thumb and forefinger or spread by moving your fingers apart.

- Pinch the screen to zoom out while viewing a picture or a web page.
- Spread your fingers on the screen to zoom in while viewing a picture or a web page.

Touch Sensitivity

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features**.
3. Tap **Touch sensitivity** to enable.

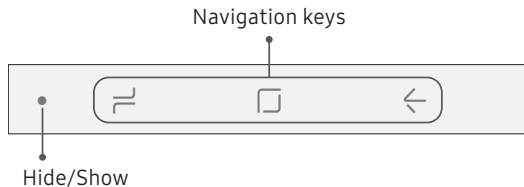
Common Options

The device uses basic command options to perform common actions.

-  **More options:** Tap to view more menu options for a screen.
-  **Delete:** Tap to select items to delete.
-  **Share:** Tap to select items to share, and then choose a sharing method.
-  **Edit:** Tap to customize the screen.
- **On/Off:** Tap to turn the option on () or off ()
-  **Menu:** Tap to view available options for the field.

Navigation Bar

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



Full Screen Mode

The navigation keys are hidden in full screen mode. When hidden, you can still use  **Home** by touching and holding the area of the screen where the icon is normally displayed.

To enter or exit full screen mode:

- ▶ Double-tap the **Hide/Show** icon to the left of the navigation keys.

To view the navigation keys in full screen mode:

- ▶ Swipe up from the bottom of the screen to display the Navigation bar.

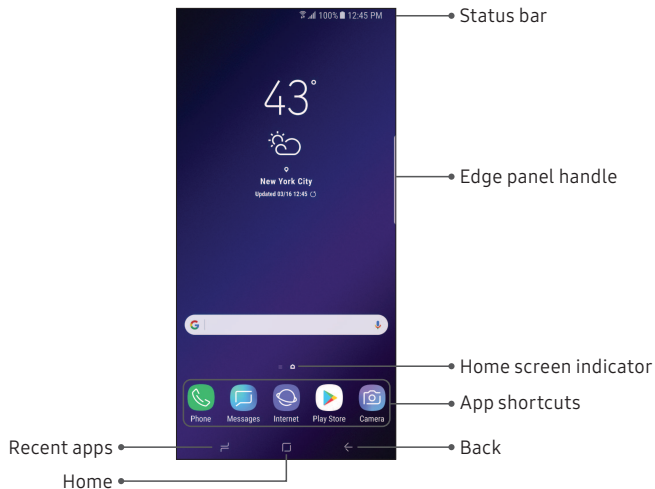
Navigation Bar Settings

You can configure the Navigation bar background color and button layout.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Navigation bar** for the following settings:
 - **Show and hide button:** Add a button on the left side of the navigation bar to show or hide the Navigation bar.
 - **Background color:** Choose a color for the background of the Navigation bar.

- **Hard press Home button:** Adjust the amount of pressure needed to touch and hold  **Home** by moving the slider.
- **Unlock with Home button:** Touch and hold  **Home** while the screen is off to skip the Lock screen and go directly to the Home screen.
- **Button layout:** Choose the order of the navigation keys.

Home Screen



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Customize Your Home Screen

Screens

Your device has multiple Home screens to hold app shortcuts and widgets. You can add, remove, change the order of screens, as well as choose a different main Home screen.

1. From a Home screen, pinch the screen.
2. Use these options to manage screens:
 - To align shortcuts into a line at the top of a screen, tap  **Align top**.
 - To align shortcuts into a line at the bottom of a screen, tap  **Align bottom**.
 - To remove a Home screen, tap  **Remove**.

- To set a screen as the main Home screen, tap  **Main**. This screen is displayed when you tap  **Home**.
- To change the order of screens, touch and hold a screen, and then drag it to a new position.
- To add a screen, swipe to the end of the screens, and then tap  **Add**.
- To enable Bixby Home, swipe right, and then tap **On/Off**.

App Shortcuts

You can use app shortcuts to launch an app from any Home screen.

1. From a Home screen, swipe up to access **Apps**.
2. Touch and hold an app shortcut to open the options menu.
3. Tap  **Add to Home**.

To remove a shortcut:

1. Touch and hold an app shortcut to open the options menu.
2. Tap  **Remove from Home**.
 - Removing a shortcut does not delete the app, it just removes the shortcut from a Home screen.

To move a shortcut from one Home screen to another:

1. Touch and hold an app shortcut to release it.
2. Drag the app shortcut to a new Home screen, and then release it.

Use Folders

You can organize App shortcuts in folders on an Apps list screen and Home screen.

For more information, see [“Create and Use Folders” on page 62.](#)

Wallpapers

Change the look of the Home and Lock screens with wallpaper. You can display a favorite picture or choose from preloaded wallpapers.

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

Themes

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

1. From a Home screen, pinch the screen.
2. Tap **Themes** to customize.
 - Tap a theme to preview and download it to My themes.
3. Tap **View all** to see downloaded themes.
4. Tap a theme, and then tap **Apply** to apply the selected theme.

Icons

Apply custom icons to replace built-in app icons.

1. From a Home screen, pinch the screen.
2. Tap **Wallpapers > Icons** to customize.
3. Tap an icon set to preview and download it to My icons.
 - Tap **View all** to see downloaded icons.
4. Tap an icon, and then tap **Apply** to apply the selected icon set.

Icon Frames

You can show icons with shaded frames to make them stand out on the Home screen and Apps list screen.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings > Display > Icon frames** and choose one of the following options:
 - **Icons only:** Show icons only.
 - **Icons with frames:** Show icons with shaded frames.
3. Tap **Done**, and confirm when prompted.

Widgets

Widgets are simple application extensions that run on a Home screen.

To add a widget to a Home screen:

1. From a Home screen, pinch the screen.
2. Tap **Widgets**.
3. Touch and hold a widget, drag it to a Home screen, and release it.

To remove a widget from a Home screen:

1. From a Home screen, touch and hold a widget to open the options menu.
2. Tap  **Remove from Home screen**.

Home Screen Settings

Customize your Home and Apps screens.

1. From a Home screen, pinch the screen.
2. Tap **Home screen settings** to customize:
 - **Home screen layout:** Set your device to have a Home and Apps screen, or only a Home screen where all apps are located.
 - **Home screen grid:** Choose a dimension option to determine how icons are arranged on the Home screen.
 - **Apps screen grid:** Choose a dimension option to determine how icons are arranged on the Apps screen.
 - **Apps button:** Add an apps button to the Home screen for easy access to the Apps screen.

- **App icon badges:** Select how to show icon badges when apps receive notifications.
- **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 from the Home screen by swiping down.
- **Portrait mode only:** Prevent the Home screen from rotating to Landscape mode.
- **Hide apps:** Select apps to hide.
- **About Home screen:** View version information.

Easy Mode

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Easy mode**.
3. Tap **Easy mode** to enable this feature.
4. Tap **Apply** to confirm.

To disable Easy mode:

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Easy mode** > **Standard mode**.
3. Tap **Apply** to exit Easy mode.

Status Bar

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

Status Icons

-  Battery full
-  Battery low
-  Battery charging
-  Vibrate mode
-  Mute mode
-  Signal strength
-  Network not available
-  Wi-Fi active
-  Location service active

Notification Icons

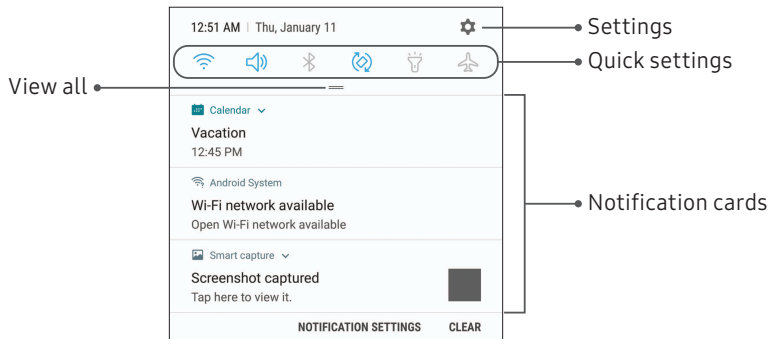
-  Missed call
-  Call in progress
-  Call on hold
-  New email
-  New voicemail
-  New message
-  File download in progress
-  File upload in progress
-  Wi-Fi available
-  App updates available

Status Bar Display

Configure display options for the Status bar.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Status bar**.
 - Tap **Show recent notifications only** to display only the three most recent notification icons on the Status bar.
 - Tap **Show battery percentage** to display the battery charge percentage next to the battery icon on the Status bar.

Notification Panel



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

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**.
3. Drag upward from the bottom of the screen or tap  **Back** to close the Notification panel.

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

To enable this feature:

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Finger sensor gestures**.
3. Tap **On/Off** to enable this feature.

Quick Settings

The Notification panel also provides quick access to device functions, allowing you to quickly turn them on or off.

1. Drag the Status bar down to display the Notification panel.
2. Drag  **View all** downward.
 - Tap a setting to turn it on or off.
 - 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.

- From any screen, drag the **Edge panel handle** to the center of the screen. Swipe left or right to view other panels.

To configure Edge panels:

1. From any screen, drag the **Edge panel handle** to the center of the screen, and then tap  **Edge panel settings**.

2. Tap **On/Off** to enable the feature. The following options are available:

-  **Checkbox**: Enable or disable each panel.
- **Edit** (if available): Configure individual panels by tapping.
- **Download**: Search for and download more Edge panels from Galaxy Apps.
-  **More options** > **Reorder**: Change the order of the panels by dragging them to the left or right.
-  **More options** > **Uninstall**: Remove an Edge panel from your device.
-  **More options** > **Edge panel handle**:
 -  **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 appears on.
 - **Move from any screen:** Touch and hold the Edge panel handle to change its position from any screen.
 - **Size:** Drag the slider to adjust the size of the Edge panel handle.
 - **Transparency:** Drag the slider to adjust the transparency of the Edge panel handle.
3. Tap  **Back** to save changes.

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.

People Edge

People edge allows you to quickly communicate with contacts in your My people list.

1. From any screen, drag the **Edge panel handle** to the center of the screen. Swipe until the People edge panel is displayed.
2. Tap a contact, and tap  **Call** or  **Message**.

To configure People edge:

1. From any screen, drag the **Edge panel handle** to the center of the screen. Swipe until the People edge panel is displayed.
2. Tap  **Add contact**.
 - To add a contact, tap **Select contacts**.
 - To remove a contact, tap  **Delete**.
 - To change the order of the contacts, drag each contact to the desired location.
3. Tap  **Back** to save changes.

Smart Select

The Smart select feature captures an area of the screen as an image or animation that you can share or pin to the screen.

1. From any screen, drag the **Edge panel handle** to the center of the screen. Swipe until the Smart select panel is displayed.
2. Tap a Smart select tool to use:
 -  **Rectangle**: Capture a rectangular area of the screen.
 -  **Oval**: Capture an oval area of the screen.
 -  **Animation**: Record activity on the screen as an animated GIF.
 -  **Pin to screen**: Capture an area and pin it to the screen.

Edge Lighting

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Edge screen** > **Edge lighting**.
3. Tap **On/Off** to enable the feature.
4. Choose one of the following options:
 - **When screen is on**: Show Edge lighting only when the screen is on.
 - **When 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Edge screen** > **Edge lighting**.
3. 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.
4. Tap **Apply** when finished.

Manage Edge Lighting Notifications

Choose which notifications will light up the Edge screen.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Edge screen** > **Edge lighting**.
3. Tap **Manage notifications** to choose the apps that can activate Edge lighting when a notification is received.

Quick Reply

Reject an incoming phone call with a text message by placing your finger on the heart rate sensor for two seconds. The call is rejected, and a preset message is sent to the caller.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Edge screen**.
3. Tap **Edge lighting** >  **More options** > **Quick reply**.
 - To edit the text reply, tap the default message.

About Edge Screen

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **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. For more information, visit samsung.com/us/support/owners/app/Bixby.

You can customize Bixby's chat responses, quick commands, and more from the Bixby Home page.

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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Camera** >  **Bixby Vision** and follow the prompts.

Gallery

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery**, and then tap a picture to view it.
3. 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 a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Touch and hold an image until a pop-up menu is displayed.
4. 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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Always On Display**.
3. Tap **On/Off** to enable the feature, and then set the following options:
 - **Content to show:** Choose to show **Home button and clock**, **Clock or information**, or **Home button**.
 - **Always on Display alerts:** Show alerts from selected apps about upcoming events on the AOD.
 - **Auto brightness:** Automatically adjust the brightness of Always On Display.

- **Show always:** Enable to show the Always On Display at all times.
 - **Set schedule:** If Show always is disabled, then set a schedule for when to start and end Always On Display.
- **About Always On Display:** View the current software version and license information.

Some display settings can appear on both the Lock screen and Always On Display (AOD). For more information, see ["Lock Screen and AOD Settings" on page 187.](#)

AOD Themes

Apply custom themes for Always On Display.

1. From a Home screen, pinch the screen.
2. Tap **Wallpapers** > **AOD** to customize.
 - Tap an AOD to preview and download it to My Always On Display.
3. Tap **View all** to see downloaded AODs.
4. Tap an AOD, and then tap **Apply** to apply the selected AOD.

Face Recognition

Use face recognition as an alternative to entering passwords in certain apps. You can use face recognition to unlock the screen by recognizing your face.

Register a Face

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Face recognition**.
3. Follow the prompts to register your face.

Face Recognition

Customize how face recognition works.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Face recognition** for the following options:
 - **Remove face data:** Delete existing faces.
 - **Samsung Pass:** Access your online accounts using face recognition.
 - **Face unlock:** Enable or disable face recognition security.
 - **Face unlock when screen turns on:** Unlock your device with face recognition as soon as the screen turns on.
 - **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.

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.

Register Irises

Register your irises for identity verification.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings > Lock screen and security > Iris scanner**.
3. 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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Iris scanner**.
 - **Remove iris data:** Delete existing irises.
 - **Preview screen mask:** Choose a mask to display when using the iris scanner.
 - **Samsung Pass:** Use your irises for identification when using supported apps.
 - **Samsung Pay:** Use your irises to make payments quickly and securely.
 - **Iris unlock:** Enable to unlock the device using your irises.

- **Iris unlock when screen turns on:** Unlock your device with your irises as soon as the screen turns on.
- **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.

Register a Fingerprint

To use your fingerprint to unlock your device, you must set a pattern, PIN, or password. You can register up to three fingerprints.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Fingerprint scanner**.
3. Follow the prompts to register your fingerprint.

Fingerprint Management

Add, delete, and rename fingerprints.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Fingerprint scanner** for the following options:
 - To rename a fingerprint, tap the fingerprint, enter a new name, and then tap **Rename**.
 - To add a fingerprint, tap  **Add fingerprint** and follow the prompts to register a fingerprint.
 - To delete a fingerprint, touch and hold the fingerprint, and then tap **Remove**.

Fingerprint Verification

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Fingerprint scanner** for the following options:
 - **Samsung Pass:** Use your fingerprint for identification when using supported apps.
 - **Samsung Pay:** Use your fingerprints to make payments quickly and securely.
 - **Fingerprint unlock:** Use your fingerprint for identification when unlocking your device.

Intelligent Scan

Use Intelligent scan to improve accuracy and security by combining iris and face recognition.

To register a face for identity verification, see [“Register a Face” on page 44.](#)

To register your irises, see [“Register Irises” on page 45.](#)

Intelligent Scan Verification

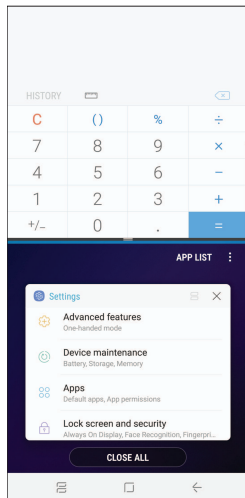
Customize how Intelligent scan works.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings > Lock screen and security > Intelligent scan** for the following options:
 - **Remove face and iris data:** Delete stored iris and face information.
 - **Samsung Pass:** Access your online accounts using Intelligent scan verification.
 - **Intelligent scan unlock:** Unlock your device using both iris and face scanning.
 - **Screen-on intelligent scan:** Unlock your device with Intelligent scan as soon as the screen turns on.

Multi Window

Multitask by using two 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, touch and hold  **Recent apps**.
2. Tap  **Multi window** in the title bar to launch an app in split screen view.
 - Recently opened apps are displayed in the lower window. Apps that support Multi window have the  **Multi window** icon in their title bar.
 - If there are no recently opened apps that support Multi window, or if you want to launch a different app, tap **App list**.
3. Tap an app in the lower window to add it to the split screen view.



Window Controls

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

- ▶ Tap the middle of the window border for the following options:
 -  **Add app pair on Home screen:** Add the open pair of apps as a shortcut to the Home screen.
 -  **Snap window:** Choose an area of the selected app to snap to the top of the screen.
 -  **Switch windows:** Swap the two windows.
 -  **Open in pop-up view:** Open the selected app in a pop-up window.
 -  **Close app:** Close the selected app.

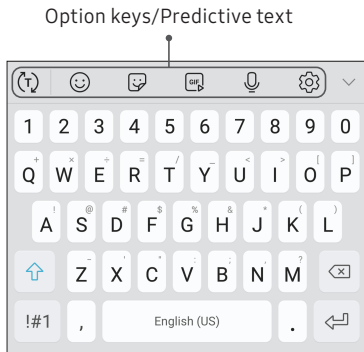
Multi Window Settings

Additional features are available for Multi window.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Multi window**, and then tap **On/Off** to enable each of the following options:
 - **Use Recents button:** Touch and hold  **Recent apps** to either put the app into split screen view or dock the open app at the top of the screen. While in Multi window view, touch and hold  **Recent apps** to close the app on the bottom.
 - **Pop-up view action:** Swipe down diagonally from either the right or left top corner of the screen to put the app into pop-up view.

Enter Text

Text can be entered using an on-screen keyboard or your voice.



► Tap a field to display the Samsung keyboard.

- Tap **!#1 Symbol** to insert symbols.

Option Keys

From the Samsung keyboard, the following option keys are along the top of the keyboard:

- **Toggle**: Switch to predictive text.
- **Emoji**: Insert an emoticon.
- **Sticker**: Add illustrated stickers.
- **GIF keyboard**: Add animated GIFs.
- **Voice input**: Use Samsung voice input.
- **Settings**: Access keyboard settings.
- **More**: Tap to view and reorder additional options.

Configure the Samsung Keyboard

Set customized options for the Samsung keyboard.

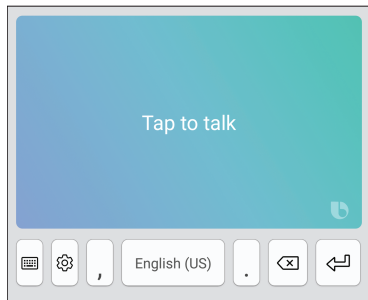
► From the Samsung keyboard, tap  **Settings** for the following options:

- **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:** Configure the keyboard toolbar, change keyboard size and colors for visibility, adjust layout, and choose key-tap feedback.

- **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.

Emergency Mode

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

To save battery power, Emergency mode:

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

Activate Emergency Mode

To activate Emergency mode:

1. Press and hold the **Power** key.
2. Tap **Emergency mode**.
 - When accessing for the first time, read and accept the Terms and conditions.
3. Tap **Turn on**.

Emergency Mode Features

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

- **Flashlight:** Use the device's flash as a steady source of light.
- **Emergency alarm:** Sound an audible siren.
- **Share my location:** Send your location information to your emergency contacts.
- **Phone:** Launch the call screen.
- **Internet:** Launch the web browser.
-  **Add:** Add other available apps.
 - **Email:** Launch the Email app.
 - **Facebook:** Launch the Facebook™ app.
 - **Maps:** Launch Google Maps™.
-  **Battery charge:** Display estimated battery charge remaining.
- **Estimated usage time remaining:** Display estimated standby time that can be reached 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 cellular service.
-  **More options:**
 - **Turn off Emergency mode:** Disable Emergency mode and return to standard mode.
 - **Remove:** 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, check your location settings. For more information, see [“Location” on page 147](#).

Apps

Learn how to change the way apps are displayed, organize apps into folders, and install, uninstall, disable, or hide apps.

Use Apps

The Apps list displays all preloaded and downloaded apps. You can uninstall, disable, or hide apps from view.

Access Apps

Access and launch all apps from the Apps list.

1. From a Home screen, swipe up or down to access **Apps**.
2. Tap an app's shortcut to launch it.
 - To return to the main Home screen, tap  **Home**.

Add an Apps Shortcut

In addition to swiping to access apps, you can add an Apps button to the Home screen.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **More options** > **Home screen settings** > **Apps button**.
3. Tap **Show Apps button** > **Apply**.

Search for Apps

If you are not sure exactly where to find a certain setting, you can use the Search feature.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Search phone**.
3. Enter a word or words in the **Search phone** field.
As you type, apps that match are displayed on the screen.
4. Tap an entry to go to that app.
 - To customize the Finder search settings, tap  **More options** > **Settings**.

Galaxy Essentials

View and download Samsung apps that are optimized for use with Galaxy devices.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **More options** > **Galaxy Essentials**.

Uninstall or Disable Apps

Uninstall or disable apps you have download.

1. From a Home screen, swipe up to access **Apps**.
2. Touch and hold an app to open the options menu.
 - To uninstall an app, tap **Uninstall**.
 - To disable an app, tap **Disable**.

Note: Some preloaded apps can only be disabled, not uninstalled. Apps that are disabled are turned off and hidden from view.

Sort Apps

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **More options** > **Sort**.
 - **Custom order:** Arrange apps manually.
 - To remove empty spaces between apps, tap  **More options** > **Clean up pages**.
 - **Alphabetical order:** Sort apps alphabetically.

Create and Use Folders

Create a folder to organize App shortcuts on an Apps list screen.

1. From a Home screen, swipe up to access **Apps**.
2. Touch and hold an app shortcut, and then drag it on top of another app shortcut until it is highlighted.
3. 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**.
4. Tap  **Back** to close the folder.

Copy a Folder to a Home Screen

Create a folder and copy it to a Home screen.

1. From a Home screen, swipe up to access **Apps**.
2. Touch and hold a folder, and then drag it to the top of the screen.
3. Drag the folder to the desired location on the Home screen, and then release it.

Delete a Folder

When you delete a folder, the app shortcuts are returned to the Apps list screen.

1. From a Home screen, swipe up to access **Apps**.
2. Touch and hold a folder to delete.
3. Tap  **Delete folder**, and confirm when prompted.

App Settings

Manage your downloaded and preloaded apps.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Apps**.
3. Tap  **Menu** to set which apps to view, and then choose **All apps**, **Enabled**, or **Disabled**.
4. Tap  **More options** for the following options:
 - **Sort by size/name:** Sort the apps by size or name.
 - **Default apps:** Choose or change apps that are used by default for certain features, like email or browsing the Internet.
 - **App permissions:** Control which apps have permissions to use certain features of your device.
 - **Show/Hide system apps:** Show or hide system (background) apps.
5. Tap an app to view and update information about the app. The following options may be displayed:
 - **Special access:** Select which apps can have special access permissions to features on your device.
 - **Reset app preferences:** Reset options that have been changed. Existing app data is not deleted.
 - **Uninstall/Disable:** Uninstall or disable the app. Preloaded apps can only be disabled.
 - **Force stop:** Stop an app that is not working correctly.
 - **Mobile data:** View mobile data usage.
 - **Battery:** View battery usage since the last full charge.
 - **Storage:** Manage the app's storage usage.
 - **Memory:** View memory usage.

- **Notifications:** Configure notifications from the app.
- **Permissions:** View permissions granted to the app for access to your device's information.
- **Set as default:** Set the app as a default for a certain category of apps.

Note: Options vary by apps.

Calculator

The Calculator provides basic and advanced arithmetic functions.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calculator**, and enter the first number.
3. Tap an arithmetic function key, and enter the next number.
4. Tap  **Equals** to view the result.
5. Tap  **Clear** to clear the results.

View Calculator History

View and clear your Calculator history.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calculator** > **History**.
 - To return to the calculator, tap **Keypad**.
 - To clear the calculator history, tap **Clear history**.

Convert Units of Measurement

Quickly convert units of measurement using the unit converter.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calculator** >  **Unit converter**.
3. Select a category and use the drop-down menus to choose units of measurement.
4. Enter a numeric value to view the conversion.

Scientific Calculator

The Calculator app also provides advanced arithmetic functions.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calculator**, and turn the device to landscape view.
 - If Auto rotate is not enabled, tap  **Scientific calculator**.

Calendar

Manage your events and tasks.

Add Calendars

Add existing calendars to the Calendar app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar** >  **More options**.
3. Tap **Manage calendars** >  **Add account**, and select an account type.
4. Enter your account information and follow the prompts.

Calendar View

There are several ways the calendar can be viewed.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar** > **View**, and then tap an option:
 - **Year**: Display all twelve months of this year. Swipe across the screen to display another year.
 - **Month**: Display the current month. Swipe across the screen to display another month. Events and tasks are also displayed.
 - **Week**: Display the current week. Swipe across the screen to display another week.
 - **Day**: Display today's schedule by hour. Swipe across the screen to display another day.
 - **Tasks**: Display all tasks.
3. Tap **Today** to return to the current date.

Create an Event

Use your Calendar to create events.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar** >  **Add** to add an event.
3. Enter details for the event, and then tap **Save**.

Share an Event

Share events from your Calendar.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar**, tap an event, and tap again to edit it.
3. Tap **Share**, choose a sharing method, and follow the prompts.

Delete an Event

Delete events from your Calendar.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar**, tap an event, and tap again to edit it.
3. Tap **Delete**, and confirm when prompted.

Create a Task

Use your Calendar to create tasks. Tasks are items you add to the calendar to be accomplished on a certain day. A task appears as a checklist item and is removed once you mark the task as complete.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar** > **View** > **Tasks**.
3. Tap  **Add** to add a task.
4. Enter details for the task, and then tap **Save**.

Delete a Task

Delete tasks from your Calendar.

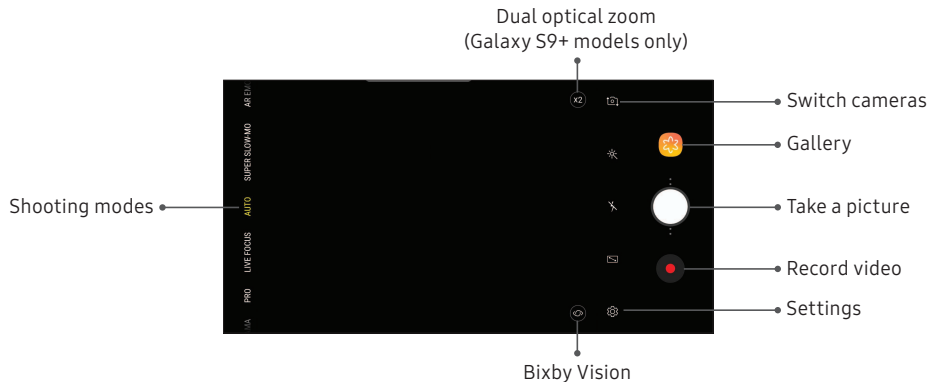
1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar**, and tap a day on the calendar to view the tasks for the day, or tap **View** > **Tasks**.
3. Tap the  **Checkbox** by the task to mark it as complete and remove it from the calendar.
 - To delete a task, tap the task to open it, tap **Delete**, and confirm when prompted.

Calendar Settings

Use Calendar settings to customize your calendar.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Calendar** >  **More options** > **Settings**.
3. Tap an option and follow the prompts.

Camera and Video



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

Take Pictures

Take pictures with your device's front or rear camera.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Camera**.
3. Use the display screen as a viewfinder. While aiming the camera, these options are available:
 - To focus the shot, tap the screen. When you tap the screen, a brightness scale is displayed. Slide the light bulb to adjust the brightness.
 - To change the shooting mode, swipe the screen right or left.
 - To quickly switch between the front and rear cameras, swipe the screen up or down.
 - To change a camera setting, tap  **Settings**.
4. Tap  **Take a picture**.

Record Videos

Record high-quality videos using your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Camera**, and aim the camera at your subject.
3. Tap  **Record** to begin recording a video.
 - To take a picture while recording, tap  **Capture**.
 - To temporarily stop recording, tap  **Pause**. To continue recording, tap  **Resume**.
4. Tap  **Stop** when you are finished recording.

Configure Shooting Mode

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Camera**, and swipe to the right or left to see the available shooting modes. To view and reorganize shooting modes, touch and hold a shooting mode.

Rear camera

- **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. This mode is available on the Galaxy S9 only.
- **Live focus:** Take artistic pictures by adjusting the depth of field. This mode is available on the Galaxy S9+ only.
- **Auto:** Allow the camera to determine the ideal mode for the picture.
- **Super slow-mo:** Record videos at a high frame rate for viewing in slow motion. You can play a specific section of each video in slow motion after recording it.
- **AR Emoji:** Create an emoji of yourself or add animations, frames, and stickers using augmented reality.

- **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.
- **Slow motion:** Record videos at a high frame rate which can be played in slow motion.
- **Sports:** Take clearer pictures of fast moving subjects.

Front camera

- **Selfie focus:** Enhance the focus of a selfie by adding blur to the background.
- **Selfie:** Take selfie shots and apply various effects, such as an airbrushed effect.
- **AR Emoji:** Create an emoji of yourself or add animations, frames, and stickers using augmented reality.
- **Wide selfie:** Take wide-angle selfie shots to fit more people into your pictures.

Camera Settings

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Camera** >  **Settings**.

Rear camera

- **Picture size:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
- **Video size:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
- **Timer:** Take time-delayed pictures or videos.
- **HDR (rich tone):** Enables the light sensitivity and color depth features of the device to produce a brighter and richer picture.

- **Tracking AF:** Focus on and track a subject selected on the preview screen.
- **Super slow-mo:** Record videos at a high frame rate for viewing in slow motion. You can play a specific section of each video in slow motion after recording it.
 - **Multi-take:** Catch multiple moments in super slow motion while recording a video.
 - **Single-take:** Record a single action in super slow motion.

Front camera

- **Picture size:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
- **Video size:** Select a resolution. Selecting a higher resolution for higher quality requires more memory.
- **Timer:** Take time-delayed pictures or videos.

- **HDR (rich tone):** Enables the light sensitivity and color depth features of the device to produce a brighter and richer picture.
- **Save pictures as previewed:** Save self-portraits or self-recordings as viewed on the camera screen, not as flipped images.
- **Shooting methods:**
 - **Tap screen:** Tap the screen to take selfies.
 - **Show palm:** Hold your hand out with your palm facing the camera to have your picture taken in a few seconds.
 - **Tap heart rate sensor:** Once your face has been recognized, tap the heart rate sensor to take a selfie.
- **Face shape correction:** Reduce the effects of camera lens distortion on faces.

Common

- **Edit camera modes:** Enable, disable, and rearrange shooting modes.
- **Motion photo:** Create a short video by taking pictures.
- **Video stabilization:** Activate anti-shake to keep the focus steady when the camera is moving.
- **Grid lines:** Display viewfinder grid lines to help compose a picture or video.
- **Location tags:** Attach a GPS location tag to the picture.
- **Review pictures:** Review pictures after taking them.
- **Quick launch:** Press the Power key twice in quick succession to open the camera.
- **Storage location:** Select a memory location.
 - A memory card (not included) must be installed to view Storage location. For more information, see [“Install a SIM Card and Memory Card” on page 9.](#)
- **Voice control:** Take pictures using key words.
- **Floating Camera button:** Add an extra camera button that you can move anywhere on the screen in Auto and Selfie modes.
- **Hold Camera button to:** Choose an action for when the Camera button is touched and held.
- **Press Volume key to:** Use the Volume key to take pictures, record video, zoom, or control system volume.
- **Reset settings:** Reset the camera settings.

Clock

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

1. From a Home screen, swipe up to access **Apps**.
2. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Clock** >  **Add alarm**.
3. Tap the following items to configure an alarm:
 - **Date**: Choose the day for this alarm.
 - **Time**: Set a time for the alarm.
 - **Repeat**: Choose when to repeat the alarm.
 - **Alarm name**: Enter a name for the alarm.

- **Snooze**: Allow snoozing. Set interval and repeat values for the alarm while snoozing.
- **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.
- **Read time aloud**: Read the time aloud when the alarm rings.

4. Tap **Save** to save the alarm.

Turn Off Alarm

At the set alarm time, the phone sounds the alarm and/or vibrates.

1. To stop an alarm, tap **Dismiss**, or swipe  **Dismiss** to the left or right.
2. To postpone the alarm, tap **Snooze**.

Delete an Alarm

You can delete an alarm that you created.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Clock**, and find the alarm in the alarm list (under Alarm), and then touch and hold it to select it.
3. Tap **Delete**.

World Clock

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Clock** > **World clock**.
3. Tap  **Add city**.
4. Tap **Search** and enter the name of the city.
5. Tap the city name in the list, and then tap **Add**.
 - To remove a city, touch and hold it, and tap **Delete**.

Stopwatch

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Clock** > **Stopwatch**.
3. Tap **Start** to begin timing.
 - To keep track of lap times, tap **Lap**.
4. Tap **Stop** to end timing.
 - To continue timing after stopping the clock, tap **Resume**.
 - To reset the Stopwatch to zero, tap **Reset**.

Timer

The Timer provides a countdown timer for up to 99 hours, 59 minutes, and 59 seconds.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Clock** > **Timer**.
3. Use the keypad and tap **Hours**, **Minutes**, and **Seconds** to set the length of the Timer.
4. Tap **Start** to begin the Timer.
 - To temporarily stop the Timer, tap **Pause**. To continue timing after pausing, tap **Resume**.
 - To stop and reset the Timer, tap **Cancel**.

Contacts

Store and manage your contacts. You can synchronize with personal accounts added to your device. For more information, see [“Add an Account” on page 197](#).

Note: The Contacts app and the Contacts tab in the Phone app have different options and functions.

Add a Contact

Use the following procedure to add a new contact.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** >  **Create contact**, and then tap contact fields to enter information.
 - Choose a storage account for the contact. You can store the contact on the device or sync it with an account.
 - Tap  **Contact photo** to assign a picture or an animated GIF to the new contact.
3. Tap **Save**.
 - Enter a name and other contact information.
 - Tap  **Add** field to enter additional entries.
 - Tap  **Remove** field to remove an entry.
 - Tap  **View more** for additional fields.
 - Tap the label to the right of an entry to choose a label for the field (for example, Home or Work).
 - Tap **Scan business card** to import contact information from a business card through the device's camera.

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 a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**, and then tap a contact.
3. Tap  **Details** > **Edit**.
4. Tap any of the fields to add, change, or delete information.
5. Tap **Save**.

Share a Contact

Share a contact by using various sharing methods.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**, and then tap a contact.
3. Tap  **Details** > **Share**.
4. Tap either **vCard file (VCF)** or **Text**.
5. Choose a sharing method and follow the prompts.

Import Contacts

Your device can import contacts from an installed memory card (not included).

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** >  **More options** > **Manage contacts**.
3. Tap **Import/Export contacts**.
4. Tap **Import** and follow the prompts.

Export Contacts

Manually back up contacts to an installed memory card (not included).

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** >  **More options** > **Manage contacts**.
3. Tap **Import/Export contacts**.
4. Tap **Export** and follow the prompts.

Link or Unlink Contacts

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**, and then tap the contact to select it.
3. Tap  **Details** >  **More options** > **Link contacts**.
4. Tap contacts to choose them.
5. Tap **Link**.

To unlink contacts:

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**, and then tap the contact to select it.
3. Tap  **Details** >  **More options** > **Manage linked contacts**.
4. Tap **Unlink** beside contacts to unlink them from the main contact.

Favorites

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**, and then tap a contact.
3. Tap  **Details**.
4. Tap  **Add to Favorites** to mark contacts as Favorites and the star brightens .
 - To remove contacts from Favorites, tap  **Remove from Favorites** and the star dims .

Delete Contacts

Delete a single contact or multiple contacts.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**, and then touch and hold a contact to select it.
 - You can also tap other contacts to select them for deletion.
3. Tap **Delete**, and confirm when prompted.

Groups

You can use groups to organize your contacts.

Create a Group

Create your own contact groups.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** > **Groups**.
3. Tap **Create**, 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**.
4. Tap **Save**.

Add or Remove Group Contacts

Add more contacts to a group, or remove contacts.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** > **Groups**, and then tap a group.
 - To remove a contact, touch and hold a contact to select it, and then tap **Remove**.
 - To add a contact, tap **Edit** > **Add member**, and then tap the contacts you want to add. When finished, tap **Done** > **Save**.

Send a Message to a Group

Send a text message to members of a group.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** > **Groups**, and then tap a group.
3. Tap  **More options** > **Send message**.

Send an Email to a Group

Send an email to members of a group.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** > **Groups**, and then tap a group.
3. Tap  **More options** > **Send email**.
4. 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.
5. Choose an email account and follow the prompts.

Delete a Group

Delete a group you have created.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** > **Groups**, and then tap a group.
3. Tap  **More options** > **Delete**.
 - To only delete the group, tap **Group only**.
 - To delete the group and the contacts in the group, tap **Group and members**.

Contacts Settings

These settings allow you to modify settings associated with using the Contacts app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts** >  **More options** > **Settings**.
3. Tap an option and follow the prompts.

Direct Share

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Direct share**, and tap **On/Off** to enable.

Email

View and manage all of your email accounts in one app. To add an email account, see ["Add an Email Account" on page 14.](#)

Create and Send an Email

Learn how to create and send email messages.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Email** >  **Compose new email**.
3. Tap the **To** field to manually add an email address or tap  **Add from Contacts** to select a recipient from Contacts, Groups, or Recents.
 - If manually entering recipients, enter additional recipients by separating each entry 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.

4. 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.
5. Review your message and tap **Send**.

Manage the Inbox

There are several tools available from the Inbox screen.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Email**.
 - Tap a message to read and reply or forward it.
 - Tap **Search** to search for key words in your email inbox.
 - Tap **Edit** for additional message options.
 - Tap **Sort by** 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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Email**.
3. Tap  **Mailbox** at the top left of the screen to choose a different view:
 - **[Account name]**: View email for only one email account.
 - **All accounts**: View all email in a combined inbox.

Remove Email Accounts

Email accounts can be removed from your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Email**.
3. Tap  **Mailbox** >  **Settings**.
4. Tap the account you want to remove.
5. Tap **Remove**, and confirm when prompted.

Email Settings

Modify settings associated with using the Email app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Email**.
3. Tap  **Mailbox** >  **Settings**.
 - Under **General**, tap an option, and then follow the prompts.
 - Tap an account to configure specific settings for only that account.

Galaxy Apps

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Galaxy Apps**.

Gallery

View, edit, and manage pictures and videos.

The following categories allow you to organize your content:

- **Pictures:** View pictures and videos in the order they were saved. Content is organized by date.
- **Albums:** Create custom albums to organize your pictures and videos.
- **Stories:** Create custom collections of related pictures and videos and share them with your contacts.

View Pictures

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery > Pictures**.
3. 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**. The picture is added to Favorites under the Albums tab.
 - To use Bixby Vision on the current picture, tap  **Bixby Vision**. For more information, see ["Bixby" on page 40](#).

- To access the following features, tap  **More options:**
 - **Details:** View and edit information about the picture, including the date created, location, and properties.
 - **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.
 - **Show date and location tags:** See date and location tags when viewing your pictures.
 - **Print:** Send the picture to a connected printer.
 - **Open in Photo Editor Pro:** Edit the picture in Photo Editor Pro.

Edit Pictures

Edit pictures stored on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery > Pictures**.
3. Tap a picture to view it.
 -  **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.
 -  **Draw:** Add handwritten text or hand drawn content.

Play Video

Play videos stored on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery** > **Pictures**.
3. 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, including the date created, location, and properties.
 - **Set as wallpaper**: Set the video as wallpaper.

- **Show date and location tags**: See date and location tags when viewing your videos.

4. Tap  **Play video** to play the video.

Video Enhancer

Enhance the playback quality of your videos in any video app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Video enhancer**.
3. Tap **On/Off** to enable this feature.

Edit Video

Edit videos stored on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery > Pictures**.
3. Tap a video to view it.
4. Tap  **Edit** to use the following tools:
 -  **Trim**: Cut segments of the video.
 -  **Effects**: Add visual effects to the video.
 -  **Touch up effect**: Apply the Touch up effect to faces in the video.
 -  **Stickers**: Overlay illustrated or animated stickers.
 -  **Audio**: Adjust the volume levels and add background music to the video.
5. Tap **Save**, and then confirm when prompted.

Share Pictures and Videos

Share pictures and videos from the Gallery app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery > Pictures**.
3. Tap  **More options > Share**, and then tap pictures and videos to select them.
4. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Gallery**.
3. Tap  **More options** > **Edit**.
4. Tap pictures and videos to select them, or tap the **All** checkbox at the top of the screen to select all pictures and videos.
5. Tap **Delete**, and confirm when prompted.

Take a Screenshot

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

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

Screenshot Options

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features**.
3. Tap **On/Off** to enable each of the following:
 - **Smart capture**: 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.
 - **Palm swipe to capture**: 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.

Google Apps

Enjoy these apps from Google. Certain apps require a Google Account. Visit google.com to learn more.

Chrome

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Chrome**.

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

Drive

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Google** folder >  **Drive**.

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

Duo

Make one-to-one video calls.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Google** folder >  **Duo**.

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

Gmail

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Gmail**.

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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Google**.
3. Follow the prompts to enable your feed.

Maps

Get directions and other location-based information. You must enable location services to use Google Maps. For more information, see ["Location" on page 147](#).

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Maps**.

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™.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Google** folder >  **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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Google** folder >  **Play Movies & TV**.

Visit play.google.com/store/movies to learn more.

Play Music

Play music and audio files on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Play Music**.

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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Play Store**.

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

YouTube

Watch and upload YouTube™ videos right from your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **YouTube**.

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

Internet

Access the Internet with a fully-featured web browser. For more information, visit samsung.com/us/support/owners/app/samsung-internet.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap the address field, enter the web address, and then tap **Go** on the keyboard.
 - ☆ **Add to Bookmarks**: Add the current web page to bookmarks.
 - ↺ **Refresh**: Refresh or reload the current web page.
 - < **Back** or ⬅ **Back**: Return to the previous page.
 - > **Forward**: Go forward to a recent page.
 - 🏠 **Home**: Display your Internet Home screen.

-  **Bookmarks**: Manage bookmarked pages, saved pages, and history.
-  **Tabs**: Manage open tabs. The number on the icon indicates the number of tabs that are currently open.

Quick Menu

Access common features of your browser.

- ▶ Tap  **Quick menu** for the following options:
 -  **Share**: Share the web page with others.
 -  **New tab**: Open a new tab.
 -  **Turn on Night mode**: Switch to Night mode.
 -  **Web page text size**: Change the text size.
 -  **Close**: Close the Quick menu.
 -  **Settings**: Change Quick menu options.

Browser Tabs

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **Tabs** > **New tab**.
 - To close a tab, tap  **Close tab**.

Bookmarks

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

Save a Bookmark

Bookmarking a web page saves the web address so that you can access it quickly.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **Add to Bookmarks**.

Open a Bookmark

Quickly launch a web page from the Bookmarks page.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **Bookmarks** > **Bookmarks**.
4. 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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **More options** > **Save webpage**.

Open a Saved Web Page

View a web page that has been saved.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **Bookmarks** > **Saved pages**.
4. Tap a saved page.

View History

To view a list of recently visited web pages:

- Tap  **Bookmarks** > **History**.

Share Pages

Web pages can be shared with your contacts.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **More options** > **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 a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **Tabs**.
4. Tap **Turn on secret mode**.
5. Tap **Set password** to protect your Secret mode data with a password.

– or –

Tap **Don't use password**.

To turn off Secret mode:

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **Tabs** > **Turn off secret mode**.

Internet Settings

Modify settings associated with using the Internet app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Internet**.
3. Tap  **More options** > **Settings**.
4. Tap an option and follow the prompts.

Messages

Learn how to send and receive text messages (SMS) and multimedia messages (MMS).

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Messages** >  **New message**.
 - You can choose recipients from Contacts or enter a phone number.
3. Tap **Start**.
4. To create an audio recording, touch and hold  **Audio**.
– or –

Tap the **Enter message** field to enter a message.

- To add an attachment, tap  **Attach**.
5. Review the message and tap  **Send**.

Note: If you exit a message before you send it, the message is automatically saved as a draft.

Send SOS Messages

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Send SOS messages**, and then tap **On/Off** to enable this feature.
3. 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**.
4. Press the **Power** key quickly three times to send an SOS message.

View Messages

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Messages**, and then tap a message to view it.
 - To play an audio or video attachment, tap  **Play**.
 - To scroll through the list of messages, swipe up or down.

Delete Messages

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Messages** >  **More options** > **Edit**.
3. Tap each message you want to delete.
4. Tap  **Delete**, and confirm when prompted.

Message Search

Search through your messages by using the search feature.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Messages** > **Search**.
3. Enter a word or phrase to search for, and then tap  **Search** on the keyboard.

Messages Settings

Configure the settings for text and multimedia messages.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Messages** >  **More options** > **Settings**.

Emergency Alerts

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Messages** >  **More options** > **Settings**.
3. Tap **Emergency alert settings** to customize notifications for emergency alerts.

Note: Alerts issued by the President cannot be disabled.

My Files

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **My Files**.
3. Tap a category to view the relevant files or folders.
4. Tap a file or folder to open it.

File Groups

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

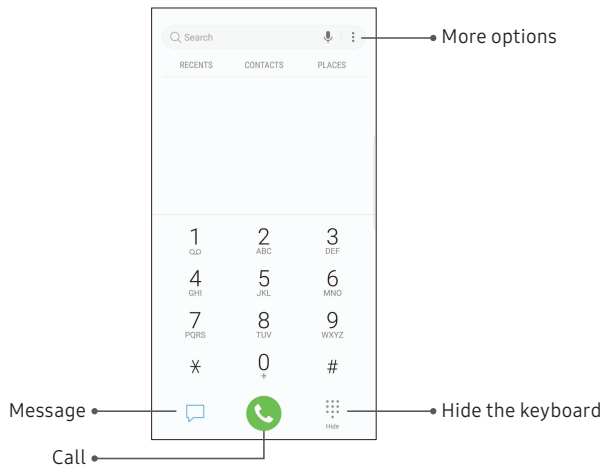
- **Recent files:** View recently accessed files.
 - This option appears if one or more files have been accessed recently.
- **Categories:** View your files based on the file type.
- **Phone:** View folders and files located on the device and optional memory card (not included).
- **Cloud:** View files saved on your cloud accounts.
 - Cloud drives vary depending on the services you sign in to.

My Files Options

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **My Files**. The following options are available:
 -  **Search**: Search for a file or folder.
 -  **More options**:
 - **Clear recent file history**: Clear the Recent files category. This option only appears if files have been accessed recently.
 - **Get more space**: View storage information for your device.
 - **Settings**: View settings for the app.

Phone



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

Make a Call

Make a call from a Home screen.

1. From a Home screen, tap  **Phone**.
2. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Swipe to call or send messages**.
3. Tap **On/Off** to enable this feature.

Make a Call from Recents

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

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

Make a Call from Contacts

Call a contact from the Contacts app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Contacts**.
3. 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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Direct call**, and tap **On/Off** 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.

– or –

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.

– or –

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

Decline with 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.

– or –

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.

Adjust the Call Volume

- ▶ Press the Volume keys to increase or decrease the volume.
– or –
Tap  **Extra volume** to quickly add more volume to the incoming audio.

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 then tap **Call notification**.

To end a call while multitasking:

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

Call Log

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

1. From a Home screen, tap  **Phone**.
2. 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 a Home screen, tap  **Phone**.
2. Tap **Recents**.
3. Tap the call that contains the information that you want to save to your Contacts list.
4. Tap  **Details**.
5. Tap **Create contact**.

– or –

If you want to replace the number for an existing contact, tap **Update existing**.

Delete Call Records

To delete Call log entries:

1. From a Home screen, tap  **Phone**.
2. Tap **Recents**.
3. Touch and hold the call you want to delete from the Call log.
4. 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 a Home screen, tap  **Phone**.
2. Tap **Recents**.
3. Tap the caller you want to add to the Block list.
4. Tap  **Details** > **Block number**, and confirm when prompted.

You can also modify your Block list in Settings:

- From a Home screen, tap  **Phone** >  **More options** > **Settings** > **Block numbers**.

Speed Dial

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

1. From a Home screen, tap  **Phone**.
 - Tap  **Keypad** if the keypad is not displayed.
2. Tap  **More options** > **Speed dial**. The Speed dial screen displays the reserved speed dial numbers.
3. 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.
4. 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.

1. From a Home screen, tap  **Phone**.
 - Tap  **Keypad** if the keypad is not displayed.
2. 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 a Home screen, tap  **Phone**.
 - Tap  **Keypad** if the keypad is not displayed.
2. Tap  **More options** > **Speed dial**.
3. Tap  **Remove** by the contact you want to remove from Speed dial.

Emergency Calls

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

1. From a Home screen, tap  **Phone**.
2. Enter the emergency telephone number (911 in North America) and tap  **Call**.
3. 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.

Voicemail

Use your phone's voicemail feature.

For information on setting up voicemail, see [“Set Up Your Voicemail” on page 15.](#)

1. From a Home screen, tap  **Phone**.
2. Touch and hold  **Voicemail**.
3. Follow the voice prompts from the voicemail center.

Phone Settings

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Phone** >  **More options** > **Settings**.
3. Tap an option and follow the prompts.

TTY Mode

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Phone** >  **More options** > **Settings**.
3. Tap **More settings** > **TTY mode**.
4. Tap **TTY OFF**, **TTY FULL**, **TTY HCO**, or **TTY VCO**.

Samsung Gear

Connect your device to your Samsung Gear using this application. For more information, visit samsung.com/us/support/owners/app/samsung-gear.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Gear**.

Samsung Health

Use Samsung Health™ to plan, track, and manage your health goals and activities, including exercise, sleep, and meals. For more information, visit samsung.com/us/support/owners/app/samsung-health.

Caution: 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.

To access Samsung Health:

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Health**, and read and accept the terms and conditions.
3. Set up your health profile and goals.

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; arthritis.

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

- Pain or discomfort in your chest, neck, jaw, or arms during physical activity;
- Dizziness or loss of consciousness;

- Shortness of breath with mild exertion or at rest, or when lying down or going to bed;
- Ankle swelling, especially at night;
- A heart murmur or a rapid or pronounced heartbeat;
- Muscle pain when walking upstairs or up a hill that goes away when you rest.

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

Samsung Notes

Use Samsung Notes to write and save notes. For more information, visit samsung.com/us/support/owners/app/samsung-notes.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Notes**.
3. Tap  **Create** and type a note. Available options include:
 - **Text:** Use the keyboard to type text.
 - **Pen:** Use your finger to write text.
 - **Brush:** Create a drawing.
 -  **Attach:** Insert an image or voice file into the note.
4. Tap **Save** when finished.

Edit Notes

Make edits to notes you create.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Notes**.
3. Tap a note to view it.
4. Tap **Edit** to make changes.
5. Tap **Save**.

Browse Notes

Browse notes you create.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Notes**.
 - Browse note entries by swiping up or down.
 - To search for a note, tap  **Search**.

Notes Options

You can edit, share, or manage notes.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Notes**.
3. Tap  **More options** for the following options:
 - **Edit**: Select notes to share, delete, or move.
 - **Sort by**: Change the way notes are organized.
 - **List/Grid view**: Switch between List view and Grid view.
 - **Trash**: View deleted notes.
 - **Settings**: View settings for the Samsung Notes app.

Samsung Pay

Samsung Pay™ allows you to make a payment with your device. It is accepted almost anywhere you can swipe or tap your credit card. A Samsung account is required.

For Samsung Pay support, visit samsung.com/us/support/owners/app/samsung-pay.

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 add all payment cards on each device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Samsung Pay**, and tap **Start** and follow the prompts.

Use Samsung Pay

Use Samsung Pay quickly and conveniently whenever you have your device with you.

Note: Make sure the NFC feature is enabled on your device. For more information, see [“NFC and Payment” on page 143](#).

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Samsung Pay**.
3. Select a card to pay with and authorize payments by scanning your finger on the fingerprint sensor or entering your Samsung Pay PIN.
4. Hold your phone over the store's card reader.
 - When your payment is complete, a receipt is sent to your registered email.

Simple Pay

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Samsung Pay**.
3. Tap  **More options** > **Settings** > **Use Favorite Cards**.
4. Tap **On/Off** 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.

Secure Your Information

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

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 188](#).

Samsung+

Samsung+ allows you to access live customer support, view device diagnostics, and learn about your registered Samsung devices. For support, visit samsung.com/us/samsung-plus.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung+**.
3. Tap **Get started**, and sign in to your Samsung account.

Plus Help

The plus icon is at the bottom of every screen to provide you quick access to the help you need.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung+**.
3. Tap  **Plus** for the following options:
 - **Search:** Enter keywords to find the information you need.
 - **Community:** View community boards where you can ask questions and give answers to other Samsung users.
 - **Text chat:** Chat with an automated support system by texting.
 - **Call us:** Start a phone call with customer service.
 - **Video chat:** Start a video call with customer service.

Quick Tabs

The app will open to your Home page. Swipe left and right across the tabs to view Help topics.

- **Get help:** View quick links to call, video, and community support for your device.
- **Diagnostics:** View storage, connection speed, and battery levels for your device.
-  **Home:** Register your Samsung devices and view customized cards.
- **Learn:** View Articles about your device to help you get the most out of it.
- **Community:** View community boards where you can ask questions and give answers to other Samsung users.

Secure Folder

Secure folder is a private encrypted space on the device that can store your private data, files, and apps.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Secure Folder**.
3. Follow the prompts to create a secure lock for your folder.

Add Apps to the Secure Folder

Add apps to the secure folder to add an extra level of security.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Secure Folder**.
3. Tap **Add apps** and tap the apps you want to add to the Secure folder.
4. Tap **Add**.
 - To remove apps from the Secure folder, tap **Edit apps**, select the apps, and tap **Uninstall/Disable**.

Add Files to the Secure Folder

Add files to the secure folder to add an extra level of security.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Secure Folder**.
3. Tap **Add files** and tap the location of your files.
4. Tap the file you want to add, and tap **Done**.
 - To remove files from the Secure folder, touch and hold the file, and tap  **More options** > **Move out of Secure Folder**.

Customize Secure Folder

For added security, you can change the app image and name for Secure folder.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Secure Folder**.
3. Tap  **More options** > **Customize icon**.
 - To change the app name, tap under Enter app name and type a new name, and tap **Apply**.
 - To change the app icon, tap an icon, and tap **Apply**.

Secure Folder Settings

Customize your secure folder settings.

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Secure Folder**.
3. Tap  **More options** > **Settings** and tap an option to customize.

Samsung Connect

Control your devices by monitoring them in one place. Check the status of your devices by looking at the dashboard.

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap **Samsung** folder >  **Samsung Connect**, and sign in with your Samsung account.
3. Follow the prompts to begin using Samsung Connect.

Settings

Configure your device's
connections and settings.

Access Settings

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

- From a Home screen, swipe up to access **Apps**, and then tap  **Settings**.

– or –

Drag down from the Status bar to display the Notification panel, and then tap  **Settings**.

Search for Settings

If you are not sure exactly where to find a certain setting, you can use the Search feature.

1. From a Home screen, swipe up to access **Apps**, and then tap  **Settings**.
2. Tap  **Search**.
3. Enter a word or words in the **Search** field. As you type, settings that match display on the screen.
4. Tap an entry to go to that setting.

Connections

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

Wi-Fi

Connect your device to a Wi-Fi network.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Wi-Fi**, and then tap **On/Off** to turn on Wi-Fi.
 - When Wi-Fi is turned on, your device automatically scans for available networks and displays them.
3. Tap the network you want to connect to.
 - When you select an open network, you are automatically connected to the network. Otherwise, enter a password to connect.

Manually Connect to a Wi-Fi Network

Connect your device to a Wi-Fi network that is hidden.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Wi-Fi**, and then tap **On/Off** to turn on Wi-Fi.
3. Tap  **Add network** at the bottom of the list.
4. Enter information about the Wi-Fi network:
 - **Network name:** Enter the network name.
 - **Security:** Select a security option and enter your password.
 - **Auto reconnect:** Connect to this network automatically.
 - **Show advanced options:** Add advanced options, such as IP settings and Proxy settings.
5. Tap **Connect**.

Wi-Fi Preferences

Customize advanced Wi-Fi services.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Wi-Fi**, and then tap **On/Off** to turn on Wi-Fi.
3. Tap **Advanced**.
 - **Switch to mobile data:** Connect automatically to a mobile network connection when the Wi-Fi connection is unstable. When the Wi-Fi signal is strong, it will switch back to Wi-Fi connection.
 - **Turn on Wi-Fi automatically:** Enable Wi-Fi in frequently used locations.
 - **Wi-Fi power saving mode:** Reduce battery usage by analyzing Wi-Fi traffic patterns.
 - **Network notification:** Receive notifications when open networks in range are detected.

- **Manage networks:** View your saved Wi-Fi networks.
- **Wi-Fi control history:** View devices that have turned your Wi-Fi on or off.
- **WPS push button:** Connect to a Wi-Fi network by pressing the WPS button on a router.
- **WPS PIN entry:** Connect to a Wi-Fi network by entering your WPS PIN.
- **Keep Wi-Fi on during sleep:** Specify whether to disconnect from Wi-Fi when the device is asleep.
- **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 capability to share data between devices. A Wi-Fi network connection is not required.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Wi-Fi**, and then tap **On/Off** to turn on Wi-Fi.
3. Tap **Wi-Fi Direct**.
 - Your device scans for discoverable Wi-Fi Direct devices. To scan again, tap **Scan**.
4. Tap a device, and then follow the prompts to connect.

Share Data with Wi-Fi Direct

Share data with another device using Wi-Fi Direct.

1. From an app, tap  **Share**.

– or –

Tap  **More options** > **Share**.

2. Tap **Wi-Fi Direct** and follow the prompts.

Receive Data with Wi-Fi Direct

When another device attempts to send a file to your device using Wi-Fi Direct, your device begins downloading the file.

- ▶ To open the file, drag down the Notification panel and tap **File received**.

Disconnect from Wi-Fi Direct

Disconnect your device from a Wi-Fi Direct device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Wi-Fi** > **Wi-Fi Direct**.
3. Tap a device to disconnect it.

Bluetooth

Bluetooth allows you to pair your device to another Bluetooth-enabled device. Once a pairing is created, the devices continue to recognize their partnership and exchange information without having to re-enter a passcode.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Bluetooth**, and then tap **On/Off** to turn on Bluetooth.
 - Your device scans for discoverable Bluetooth devices. To scan again, tap **Scan**.
3. Tap a device, and follow the prompts to connect.

Rename a Paired Device

Rename a paired device to make it easier to recognize.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Bluetooth**, and then tap **On/Off** to turn off Bluetooth.
3. Tap  **Settings** next to the previously paired device, and then tap **Rename**.
4. Enter a new name, and tap **Rename**.

Share Data with Bluetooth

Use Bluetooth to transfer information to a paired device.

1. From an app, tap  **Share**.
– or –
Tap  **More options** > **Share**.
2. Tap **Bluetooth** and follow the prompts.

Receive Data with Bluetooth

When another device attempts to send a file to your device using Bluetooth, you will see a request to accept the file.

1. Tap **Accept**.
2. To open the file, drag down the Notification panel and tap **File received**.

Unpair from a Bluetooth Device

When you unpair from a Bluetooth device, the two devices no longer recognize each other. To connect again, you have to pair the devices.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Bluetooth**, and then tap **On/Off** to turn on Bluetooth.
3. Tap  **Settings** next to the paired device, and then tap **Unpair** to delete the paired device.

Phone Visibility

Allow other devices to find your mobile device and transfer files.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Phone visibility**, and then tap **On/Off**.

Data Usage

View your current mobile and Wi-Fi data usage.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Data usage**.

Monitor Wi-Fi Data

View your Wi-Fi data usage and set restrictions for Wi-Fi networks.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Data usage**. The following options are available:
 - **Wi-Fi data usage**: View data usage over Wi-Fi connections.
 - **Restrict networks**: Select networks to prevent apps that are running in the background from using them.

Airplane Mode

Airplane mode disconnects your device from all networks and turns off connectivity features.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Airplane mode**.
3. Tap **On/Off** to enable this feature.

NFC and Payment

NFC (Near Field Communication) allows data exchange when you touch your device with another compatible device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **NFC and payment**.
3. Tap **On/Off** to enable this feature.

Android Beam

Share content to another NFC-capable device by touching the backs of the devices.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **NFC and payment**, and then tap **On/Off** to enable NFC.
3. Tap **Android Beam**, and then tap **On/Off** to enable this feature.

Share Data with Android Beam

Use Android Beam to transfer information to another NFC-capable device.

1. From an app, tap  **Share**.
– or –
Tap  **More options** > **Share**.
2. Tap **Android Beam** and follow the prompts.

Tap and Pay

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **NFC and payment**, and then tap **On/Off** to enable NFC.
3. Tap **Tap and pay**, and tap an app to set it as the default payment method.
 - To specify when to use the default app, tap **If open app supports Tap and pay**.

Mobile Hotspot

Activate Mobile hotspot to allow other devices to use your device's Internet connection.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
3. Tap **On/Off** to turn on Mobile hotspot.
4. Activate Wi-Fi on the target device.
5. Scan for Wi-Fi hotspots and select your device's Mobile hotspot.
6. Enter your device's Mobile hotspot password on the target device.

Change the Mobile Hotspot Password

Change your Mobile Hotspot password.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
3. Tap the password and enter a new password.
4. Tap **Save**.

Allowed Devices List

Control which devices can connect to your Mobile hotspot.

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

Configure Mobile Hotspot Settings

Manage your Mobile hotspot security and connecting settings.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
3. Tap  **More options** > **Configure mobile hotspot** for the following settings:
 - **Network name:** View and change the name of your Mobile hotspot.
 - **Hide my device:** Prevent your Mobile hotspot from being discoverable by other devices.
 - **Security:** Choose the security level for your Mobile hotspot.
 - **Password:** If you choose a security level that uses a password, you can view or change it.

- **Power saving mode:** Reduce battery usage by analyzing Mobile hotspot traffic.
- **Show advanced options:** Configure additional Mobile hotspot settings, including channels and frequency.

Wi-Fi Sharing

Share your device's Wi-Fi network with other devices, without having to enter the Wi-Fi password.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Mobile hotspot and tethering** > **Mobile hotspot**.
3. Tap **Wi-Fi sharing** to enable this feature.

Tethering

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

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

Location

Some apps may require one or more location services be turned on for full functionality.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Location**.
3. Tap **On/Off** to turn on Location services.
4. Tap **Locating method** to select how your location is determined:
 - **High accuracy:** Uses GPS, Wi-Fi, and mobile networks.
 - **Battery saving:** Uses Wi-Fi and mobile networks (no GPS).
 - **Phone only:** Uses GPS only.

5. 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.

Recent Location Requests

Apps that have requested your location are listed under Recent location requests.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Location**.
3. Tap **On/Off** to turn on Location services.
4. 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. Google apps can use this data to improve your search results based on places that you have visited.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **Location**.
3. Tap an entry under **Location services** to use as a location service.

Nearby Device Scanning

Scan for nearby devices to connect to and set them up easily. You receive a notification when there are available devices to connect to.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **Nearby device scanning**.
3. Tap **On/Off** to enable the feature.

Connect to a Printer

Connect your device to a printer on the same Wi-Fi network.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **Printing**.
3. Tap **Add service** and follow the prompts to add a print service.
4. Tap the print service, and then tap  **More options** > **Add printer**.

MirrorLink

Mirror your device's display on your car's entertainment and information screen using a USB connection.

To use this feature, your car system must support MirrorLink™. For more information, visit mirrorlink.com.

1. Connect your device to your car's system using the USB cable.
2. From a Home screen, swipe up to access **Apps**.
3. Tap  **Settings** > **Connections** > **More connection settings** > **MirrorLink**.
4. 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.

Note: Download booster uses mobile data services.

To turn on Download booster:

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **Download booster**.
3. Tap **On/Off** to enable Download booster.

Virtual Private Networks (VPN)

Set up and manage your Virtual Private Networks (VPNs). You must set a secured screen lock before setting up a VPN. For more information, see [“Set a Secure Screen Lock” on page 186.](#)

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **VPN**.
3. Tap  **Add VPN profile** and follow the prompts to set up your VPN.

Manage a VPN

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **VPN**.
3. Tap  **Settings** next to a VPN.
4. Edit the VPN and tap **Save**.
– or –
Tap **Delete** to delete the VPN.

Connect to a VPN

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **VPN**.
3. Tap a **VPN**, enter your log in information, and tap **Connect**.
 - To disconnect, tap the VPN, and then tap **Disconnect**.

Ethernet

Connect to a network using an Ethernet connection.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Connections** > **More connection settings** > **Ethernet**, and follow the prompts.

Sounds and Vibration

Configure the sounds and vibrations used to indicate notifications, screen touches, and other interactions.

Sound Mode

Switch between sound modes, while preserving the individual sound settings you have made.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **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.

Easy Mute

Mute sounds and videos by covering the screen or turning over the device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Easy mute**, and tap **On/Off** to enable.

Vibrations

Configure your device's vibrations.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration**.
3. Tap options to customize:
 - **Vibrate while ringing:** Set your device to vibrate in addition to ringing when you receive a call.
 - **Vibration intensity:** Set vibration intensity levels for calls, notifications, and feedback by dragging the sliders.
 - **Vibration pattern:** Choose from preset vibration patterns or create your own pattern.

Volume

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Volume**, and drag the sliders.

Note: You can also use the **Volume** key to adjust the volume. Tap  **More** to customize all volume options.

Use Volume Keys for Media

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration**.
3. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Volume**.
3. Tap  **More options** > **Media volume limiter**.
4. Tap **On/Off** 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

Choose from preset ringtones or add your own.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Ringtone**.
3. Tap a ringtone to hear a preview and select it.
– or –

Tap **Add** to use an audio file as a ringtone.

Notification Sounds

Customize notification sounds for certain apps or choose a default for all notifications.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Notification sounds** and tap an option to customize notifications.

Do Not Disturb

Set your device to mute all or some notifications and sounds during specific time periods.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Do not disturb** and configure the following:
 - **Turn on now:** Enable this option.
 - **Turn on as scheduled:** Configure **Days**, **Start time**, and **End time** to set up a do not disturb schedule.
 - **Allow exceptions:** Customize which notifications are allowed while your device is in Do not disturb mode.
 - **App rules:** Manage rules set by apps.
 - **Hide visual notifications:** Select options for preventing visual notifications for apps silenced by Do not disturb.

System Sounds

Set various other system sound options.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration**, and tap to enable each option:
 - **Touch sounds:** Play tones when you touch or tap the screen to make selections.
 - **Screen lock sounds:** Play a sound when you unlock the screen.
 - **Charging sound:** Play a sound when a charger is connected.
 - **Vibration feedback:** Enable vibration when the navigation keys are tapped.

Key-Tap Feedback

Play tones when keys are tapped.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration**, and then tap to enable each option:
 - **Dialing keypad tones:** Play a tone when the dialing keypad is tapped.
 - **Keyboard sound:** Play a sound when the Samsung keyboard is tapped.
 - **Keyboard vibration:** Enable vibrations when the Samsung keyboard is tapped.

Sound Quality and Effects

Choose from advanced sound options to customize your audio experience.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Sound quality and effects**. The following options are available:
 - **Dolby Atmos**: Transform your experience with audio that surrounds you.
 - **Equalizer**: Choose an audio preset that is customized to different genres of music.
 - **Advanced/Basic**: Manually adjust various sound qualities.
 - **UHQ upscaler**: Enhance the sound resolution of music and videos for a clearer listening experience.

- **Tube Amp Pro**: Simulate the soft timbre of a tube amplifier.
- **Concert hall**: Simulate the reverb of a concert hall.
- **Adapt Sound**: Customize your sound settings.

Separate App Sound

You can choose to have an app play sound on a speaker or headphones separate from the rest of the sounds on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Sounds and vibration** > **Separate app sound**.
3. Tap **On/Off** to enable Separate app sound, and then set the following options:
 - **App**: Choose an app to play its sound on a separate audio device.
 - **Audio device**: Choose the audio device that you want the app's sound to be played on.

Notifications

Select which apps you want to receive alerts from. Alerts include notifications, sounds, and vibrations.

Manage Notifications

Allow or block notifications from apps and services.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Notifications**.
 - To customize App icon badges, tap **App icon badges**.
 - To enable notifications, tap **All apps**, or tap **On/Off** next to an app.
 - To configure additional notification settings, tap **Advanced**.
 - To customize individual notification settings, tap an app or service.

Smart Alert

Set the device to vibrate when you pick it up to notify you about missed calls and messages.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Smart alert**, and tap **On/Off** to enable.

Display

Configure your display's brightness, screen timeout delay, and other settings.

Screen Off Settings

Customize when the screen turns off.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display**.
3. Tap an option to customize:
 - **Screen timeout:** Turn the screen off after a set amount of time.
 - **Block accidental touches:** You can prevent the screen from turning on while the device is in a dark place, such as a pocket or a bag.
 - **Screen saver:** Display colors or images after the screen has turned off or while charging.

Screen Brightness

Adjust the screen brightness to suit your surroundings or personal preference. You may also want to adjust screen brightness to conserve battery power.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display**.
3. Customize options under Brightness:
 - Drag the **Brightness** slider to set a custom brightness level.
 - Tap **Auto brightness** to automatically adjust the screen brightness based on the lighting conditions.

Blue Light Filter

Use the Blue light filter at night to help you sleep better. You can set a schedule to automatically turn this feature on and off.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **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**.

Font and Screen Zoom

You can set the screen zoom level and the font size and style.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Font and screen zoom** for the following options:
 - Drag the **Screen zoom** slider to adjust the zoom level.
 - Drag the **Font size** slider to adjust the size of text.
 - Tap a font to select it, or tap  **Download fonts** to find new fonts from Galaxy Apps.
3. Tap **Apply** to set the screen zoom and font.

Screen Quality

Customize the screen mode and resolution to match your viewing preferences.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display**.
3. Tap an option to customize:
 - **Screen mode:** Choose Adaptive display or a specific type of screen mode based on what you are viewing.
 - **Screen resolution:** You can change the screen resolution level. All apps will close when you change the resolution.

Full Screen Apps

Choose which apps you want to use in the full screen aspect ratio.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **Full screen apps** and tap apps to enable this feature.

LED Indicator

Light up the LED indicator when charging, voice recording, or receiving notifications.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Display** > **LED indicator** to enable the feature.

Smart Stay

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Smart stay**, and tap **On/Off** to enable the feature.

One-Handed Mode

Change the screen layout to accommodate operating your device with one hand.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **One-handed mode**.
3. Tap **On/Off** 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:

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance**.
3. Tap **Optimize now**.

Battery

View how battery power is used for device activities.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Battery** for options:
 - **Battery usage**: View power usage by item.
 - **Power saving mode**: Select a power mode to extend battery life.
 - **App power monitor**: View power usage by app.
 - **Unmonitored apps**: Select apps to exclude from being put to sleep by the App power monitor.
 - **Always sleeping apps**: Select apps to put to sleep immediately when not being used.
 -  **More options** > **Advanced settings**: Configure advanced battery settings and notifications.

Performance Mode

Optimize your device's performance features to best fit your usage.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Performance mode**.
 - **Optimized (recommended)**: Balance battery life and screen resolution for everyday use.
 - **Game**: Enhance your gaming experience by making games run more smoothly.
 - **Entertainment**: Enjoy music and videos with ultra high quality sound and enhanced images.
 - **High performance**: Experience the highest quality display settings.

Storage

View the device memory and usage. Mount, unmount, or format an optional memory card (not included).

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Storage**.
 - To increase available memory, tap **Clean now**.

Memory Card (SD Card)

Once an optional memory card (not included) has been installed in your device, the card memory is displayed in the Storage setting.

For more information, see [“Install a SIM Card and Memory Card” on page 9.](#)

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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Storage**.
3. Tap  **More options** > **Storage settings**.
4. Under **Portable storage**, tap your SD card, and then tap **Mount**.

Remove a Memory Card

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Storage**.
3. Tap  **More options** > **Storage settings**.
4. Under **Portable storage**, tap your SD card, and then tap **Unmount**.
5. Remove your memory card from the device.

Format a Memory Card

Warning: 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 the stored data.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Storage**.
3. Tap  **More options** > **Storage settings**.
4. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Device maintenance** > **Memory**.
 - The used and available memory are shown.
3. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Language and input** > **Language**.
3. Tap  **Add language**, and select a language from the list.
4. Touch and hold  **Move** next to a language, and drag it to the top of the list to set it as the device language.
5. Tap **Apply**.

Default Keyboard

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Language and input**.
3. Tap **Default keyboard**, and select a keyboard.

Google Voice Typing

Speak rather than type your text entries using Google Voice™ typing.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Language and input**.
3. Tap **On-screen keyboard** > **Google voice typing**.
 - **Languages:** Select languages for Google voice typing.
 - **"Ok Google" detection:** Train Google Assistant to recognize your voice when you say "Ok Google".
 - **Hands-free:** Allow requests with the device locked.
 - **Speech output:** Select options for spoken feedback.

- **Offline speech recognition:** Download and install speech recognition engines, allowing you to use voice input while not connected to the network.
- **Block offensive words:** Hide search results that contain offensive words.
- **Bluetooth headset:** Records audio through a Bluetooth headset, if available.

Manage On-Screen Keyboards

Enable or disable on-screen keyboards.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Language and input**.
3. Tap **On-screen keyboard** > **Manage keyboards**.
4. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Language and input**.
3. 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 the navigation bar to quickly switch between keyboards.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General Management** > **Language and input**.
3. Tap **Show keyboard button** to enable this feature.

Autofill Service

Save time entering information using autofill services.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General Management** > **Language and input**.
3. Tap **Autofill service** and select your preferred service.

Text-to-Speech Options

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **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:** Select a default 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Language and input**.
3. Under **Pointer speed**, drag the slider to the right to go faster or to the left to go slower.

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.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Date and time**. The following options are available:
 - **Automatic date and time:** Receive date and time updates from your wireless network. When Automatic date and time is disabled, the following options are available:
 - **Set date:** Enter the current date.
 - **Set time:** Enter the current time.
 - **Select time zone:** Choose a new time zone.
 - **Use 24-hour format:** Set the format for displaying time.

Report Diagnostic Information

This feature sends diagnostic information about your device when you are having technical problems.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Report diagnostic information**.
3. Read and accept the consent information to enable this feature.

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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Reset** > **Reset settings**.
3. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** **General Management** > **Reset** > **Reset network settings**.
3. Tap **Reset settings**, and confirm when prompted.

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. For more information, see [“Factory Reset Protection” on the next page.](#)

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.

Warning: 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Reset** > **Factory data reset**.
3. Tap **Reset** and follow the prompts to perform the reset.
4. 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. For more information, see [“Factory Data Reset” on the previous page](#).

Caution: Before shipping your device back to Samsung or taking it to your nearest Samsung-authorized service center, you should remove your Google Account before resetting the device back to factory settings. 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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **Accounts** > **[Google account]**.
3. Tap **Remove account**.

Auto Restart

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **General management** > **Reset** > **Auto restart**.
3. Tap **On/Off** to activate Auto restart, and then set the following parameters:
 - **Time:** Set the time of day to restart your device.
 - **Day:** Select the day of the week to automatically restart your device.

Software Update

Check for and install available software updates for your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Software update** for the following options:
 - **Download updates manually:** Check for software updates.
 - **Download updates automatically:** Update software automatically.
 - **Scheduled software updates:** Install software updates at a time you set.
 - **Last update information:** View information about the last software update.

Lock Screen and Security

Secure your device and protect your data with Lock Screen and Security settings.

Screen Lock Types

The various Screen lock types offer high, medium, or no security. Choose from the following: Swipe, Pattern, PIN, Password, and None.

Set a Secure Screen Lock

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Screen lock type** and tap a secure screen lock (**Pattern**, **PIN**, or **Password**).
3. Tap **On/Off** to enable showing notifications on the lock screen. The following options are available:

- **Hide content:** Enable to hide the content of notifications.
 - **Notification icons only:** Enable to hide notification details and show only the icon.
 - **Transparency:** Adjust the transparency of notifications.
 - **Auto-reverse text color:** Reverse the color of notification text automatically based on the background color.
4. Tap **Done** when finished.
 5. 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.

Biometric Locks

The following biometric lock types are available:

- **Intelligent scan:** Combine face and iris recognition to unlock your device. For more information, see [“Intelligent Scan” on page 49.](#)
- **Face recognition:** Use facial recognition to unlock your device. For more information, see [“Face Recognition” on page 44.](#)
- **Iris scanner:** Use iris recognition to unlock the screen. For more information, see [“Iris Scanner” on page 45.](#)
- **Fingerprint scanner:** Use fingerprint recognition to unlock the screen. For more information, see [“Fingerprint Scanner” on page 47.](#)

Lock Screen and AOD Settings

Configure display settings for the Lock screen.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** for options:
 - **Clock and FaceWidgets:** Customize the clock, FaceWidgets, and contact information that displays on the Lock screen and Always On Display screen.
 - **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.

Google Play Protect

Configure app safety checks from Google Play.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Google Play Protect**.
3. Tap options to customize security.

Find My Mobile

Protect your device from loss or theft allowing your device to be locked, tracked, and for your data to be deleted remotely. For more information, visit samsung.com/us/support/owners/app/find-my-mobile.

You must sign up for a Samsung account and enable Google location service to use Find My Mobile.

To access your device remotely, visit findmymobile.samsung.com.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Find My Mobile**.
3. Enter your Samsung account password or, if you are not logged in to your Samsung account, tap **Add account** and follow the prompts. The following options are available:

- **Remote controls:** Activate or deactivate Remote controls, which allows you to access your device remotely.
- **Google location service:** Activate or deactivate Google location service. This service must be on in order to find your device.
- **Send last location:** Allow your device to send its last location to the Find My Mobile server when the battery falls below a certain level.

Security Update

The Security update field shows the date of the last software security update.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Security update**.
3. Follow the prompts to check for software updates.

Samsung Pass

Use Samsung Pass to access your favorite services with biometric data. For more information, visit samsung.com/us/support/owners/app/samsung-pass.

You must sign in to your Samsung account to use Samsung Pass.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Samsung Pass**.
3. Follow the prompts to sign in to your Samsung account and add your biometric data.

Secure Folder

Lock your private content and apps to enhance security. You must sign in to your Samsung account in order to use Secure Folder. You must also set a secure lock for your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Secure Folder** and follow the prompts to secure content on your device.

App Permission Monitor

Get notified when permissions you select are being used by apps running in the background.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **App permission monitor**.
3. Tap **On/Off** next to the apps you want to be notified about when they use certain permissions.

Secure Startup

Protect your device by requiring a numeric PIN, pattern, or password to be entered before it starts up. You must have a secured screen lock for this option to be available.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Secure startup** and select an option.

Encrypt SD Card

Protect your optional memory (not included) card by encrypting its data.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Encrypt SD card**.
3. Tap **Encrypt SD card** and follow the prompts to encrypt all data on your memory card.

View Passwords

Display password characters briefly as you type them.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Other security settings** > **Make passwords visible** to enable the feature.

Security Update Service

Automatically receive security updates.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Other security settings** for the following Security update service options:
 - **Security policy updates:** Automatically or manually check for security policy updates.
 - Automatic updates can also be limited to only when your device is connected to a Wi-Fi network.
 - **Send security reports:** Use Wi-Fi to send security reports to Samsung for threat analysis.

Device Administration

Manage your device administrators and application installation privileges.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Other security settings** > **Device admin apps**.
3. Tap an option to enable it as a device administrator.

Credential Storage

Manage your security certificates. You can disable or remove certificates.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen 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.
 - **Install from device storage:** Install a new certificate from storage.
 - **Clear credentials:** Erase the credential contents from the device and reset the password.

Advanced Security Settings

Use these options to configure advanced security settings.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Lock screen and security** > **Other security settings** for the following advanced options:
 - **Trust agents:** Perform selected actions when trusted devices are connected.
 - This option is only displayed when a lock screen is enabled. For more information, see ["Set a Secure Screen Lock" on page 186.](#)
 - **Pin windows:** Pin an app on your device screen, preventing access to other features of your device.

- **Usage data access:** View the applications that can access your device's usage history.
- **Notification access:** View the applications that can access notifications you receive on your device.
- **Do not disturb permission:** View which apps have permission to change the Do not disturb settings.

Accounts

Set up and manage accounts, including your Google Account, Samsung account, email, and social networking accounts.

Samsung Cloud

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 a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **Samsung Cloud**.
 - If a Samsung account has not been added, follow the prompts to add one.
3. Once a Samsung account is configured, you can view and manage items stored in the Samsung Cloud.

Add an Account

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **Accounts** >  **Add account**.
3. Tap one of the account types.
4. Follow the prompts to enter your credentials and set up the account.

Account Settings

Each account has its own set of settings. In addition, you can configure common settings for all accounts of the same type.

Account settings and available features vary between account types and service providers. Contact your service provider for more information on your account's settings.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings > Cloud and accounts > Accounts > [Account type]**.
3. Tap an account to configure that account's sync settings.
4. Tap other available options for the account type.

Remove an Account

You can remove accounts from your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings > Cloud and accounts > Accounts > [Account type]**.
3. Tap the account and then tap **Remove account**.

Backup and Restore

Configure your device to backup data to your personal accounts.

Samsung Account

Enable backup of your information to your Samsung account.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **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

Enable backup of your information to your Google account.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Cloud and accounts** > **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. When enabled, backed-up settings are restored when you reinstall an application.

Google Settings

Configure your device's Google settings. Available options depend on your Google account.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Google**, and select an option to customize.

Accessibility

Accessibility services are special features that make using the device easier for those with certain physical disabilities.

For more information about Accessibility for Samsung products, please contact us at accessibility@sea.samsung.com.

Vision

You can turn on Accessibility features to assist with visual aspects of the device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Accessibility** > **Vision**, and then tap an option:

- **Voice Assistant:** Give spoken feedback to assist blind and low-vision users.
 - Voice Assistant can collect all of the text you enter, except passwords, including personal data and credit card numbers. It may also log your user interface interactions with the device.
- **Voice Assistant help:** View help on using Voice Assistant.
- **Dark screen:** Keep the screen turned off at all times for privacy.
- **Rapid key input:** Release your finger to enter selection instead of double tapping.
- **Voice Label:** Write voice recordings to NFC tags to provide information about nearby objects.
- **Font and screen zoom:** Configure the screen zoom level and font size and style.
- **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.
- **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:** Enable a large pointer for a connected mouse or touchpad.
- **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 are color blind or have difficulty reading the display because of the screen color.
- **Color lens:** Adjust the screen colors if you have difficulty reading the text.

Hearing

You can turn on Accessibility features to assist with audio aspects of the device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Accessibility** > **Hearing**, and tap an option:
 - **Sound detectors:** Receive alerts when the device detects a baby crying or a doorbell.
 - **Flash notification:** Set the camera light or screen to blink whenever you receive a notification.
 - **Mute all sounds:** Turn off all notifications and audio for privacy.
 - **Hearing aids:** Improve the sound quality for use with hearing aids.
 - **Samsung subtitles (CC):** Use Samsung subtitles with multimedia files when available.

- **Google subtitles (CC):** Use Google subtitles with multimedia files when available.
- **Left/right sound balance:** Use the slider to set the left and right balance when using a stereo device.
- **Mono audio:** Switch audio from stereo to mono for use with one earphone.

Dexterity and Interaction

You can turn on Accessibility features to assist with dexterity and interaction aspects of the device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings > Accessibility > Dexterity and interaction**, and tap an option:
 - **Universal switch:** Control your device with your customized switches.
 - **Assistant menu:** Improve the device accessibility for users with reduced dexterity.
 - **Easy screen turn on:** Turn on the screen without having to press any buttons.
 - **Touch and hold delay:** Select a time interval for this action.

- **Click after pointer stops:** Automatically click on an item after the pointer stops over it.
- **Interaction control:** Customize interactable or non-interactable areas, hardkeys, and the keyboard.

More Accessibility Settings

Customize additional accessibility features for your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Accessibility**, and tap an option:
 - **Text-to-speech:** Set your preferred TTS engine and options. For more information, see [“Text-to-Speech Options” on page 178.](#)
 - **Direction lock:** Unlock the screen by swiping in a series of directions.
 - **Direct access:** Open your accessibility settings by pressing the Volume up key and the Power key together.
 - **Accessibility shortcut:** Quickly enable accessibility features using the Volume keys.

- **Notification reminder:** Beep at set intervals to remind you of any unread notifications.
- **Answering and ending calls:** Select shortcuts for answering and ending calls.
- **Single tap mode:** Dismiss or snooze alarms, calendar events, and timer alerts, and answer or reject incoming calls with a single tap.
- **Accessibility settings backup:** Import and export your accessibility settings, or share them with other devices.

Accessibility Services

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

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Accessibility**.
3. Other installed accessibility services may be listed and configured under Services.

Other Settings

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

Help

View the user manual on your device.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Help**.

Manage Game Features

Automatically arranges all your games in one place.
For more information on Game Launcher, visit samsung.com/us/support/owners/app/game-launcher.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Games** > **Game Launcher**.
3. Tap **On/Off** to enable Game Launcher.

Device Assistance App

Device assistance apps help you by gathering information from the screen currently shown.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Device assistance app**.
3. Tap an option to customize:
 - **Device assistance app**: Select your default assistance app.
 - **Analyze on-screen text**: Analyze text shown on the screen to provide related content.
 - **Analyze on-screen images**: Take and analyze images of the screen.

Dual Messenger

Use two separate accounts for the same app.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **Advanced features** > **Dual messenger**.
3. Tap **On/Off** next to supported apps to enable the feature for each app.
 - To select which contacts have access to the secondary messenger app, tap **Select separate contacts for your second app**.

About Phone

View information about your device, including current status, legal information, hardware and software versions, and more.

1. From a Home screen, swipe up to access **Apps**.
2. Tap  **Settings** > **About phone**, and then view your phone number, model number, serial number, and IMEI information.
3. Tap additional items to view more information about your device.

Getting Help

Additional resources
for your device.

Videos

samsung.com/spsn

Smart Simulator

samsungsimulator.com

Tips & Tricks

samsung.com/us/support/tips/galaxy

Samsung Care

samsung.com/us/support

Legal

View legal information
for your device.

Legal Information

READ THIS INFORMATION BEFORE USING YOUR MOBILE DEVICE.

Arbitration Agreement – This Product is subject to a binding arbitration agreement between you and SAMSUNG ELECTRONICS AMERICA, INC. (“Samsung”). You can opt out of the agreement within 30 calendar days of the first consumer purchase by emailing optout@sea.samsung.com or calling 1-800-SAMSUNG (726-7864) and providing the applicable information. For complete terms and conditions that bind you and Samsung, refer to the “Arbitration Agreement” section of the Terms & Conditions, included with the Product.

Find Legal Information Online

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

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

Phone:

- English: samsung.com/us/Legal/Phone-HSGuide
- 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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- 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.

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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.

Warning! 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.**
- To maintain the water-resistant and dust-resistant features of your device, if an S Pen is available for use, verify it is securely inserted prior to any exposure to liquids.
- 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.

Samsung Electronics America, Inc.

Address:

85 Challenger Road
Ridgefield Park
New Jersey 07660

Phone: 1-800-SAMSUNG (726-7864)

Internet: samsung.com

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Some multimedia (audio/video) files contain Digital Rights Management (DRM) technology to verify you have the right to use the files. Preloaded apps on your device may not be compatible with DRM-protected files.

Screen images are simulated. Appearance of device may vary.

The actual available capacity of the internal memory is less than the specified capacity because the operating system and default applications occupy part of the memory. The available capacity may change when you upgrade the device.

Please check with your service provider to verify qualifying services/features.

Terms & Conditions / Health & Safety Information

Read this document before operating the mobile device, accessories, or software (defined collectively and individually as the "Product") and keep it for future reference. This document contains important Terms and Conditions. Electronic acceptance, opening the Product packaging, use of the Product, or retention of the Product constitutes acceptance of these Terms and Conditions.

Revised 7/18/2017

- Arbitration Agreement
- Standard Limited Warranty
- End User License Agreement (EULA)
- Health & Safety Information

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

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- **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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<http://opensource.samsung.com>

Samsung Knox

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- 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.



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Samsung Electronics America, Inc.

85 Challenger Road

Ridgefield Park, NJ 07660

Phone: 1-800-SAMSUNG (726-7864)

Internet: www.samsung.com

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The arbitration shall be conducted according to the American Arbitration Association (AAA) Commercial Arbitration Rules applicable to consumer disputes. The AAA Rules are available online at **adr.org** or by calling the AAA at 1-800-778-7879. This Agreement is entered into pursuant to the Federal Arbitration Act. The laws of the State of Texas, without reference to its choice of law principles, shall govern the interpretation of the Agreement and all disputes that are subject to this Agreement. The arbitrator shall decide all issues of interpretation and application of this Agreement.



For any arbitration in which your total damage claims, exclusive of attorney fees and expert witness fees, are \$5,000.00 or less ("Small Claim"), the arbitrator may, if you prevail, award your reasonable attorney fees, expert witness fees and costs as part of any award, but may not grant Samsung its attorney fees, expert witness fees or costs unless it is determined that the claim was brought in bad faith. In a Small Claim case, you shall be required to pay no more than half of the total administrative, facility and arbitrator fees, or \$50.00 of such fees, whichever is less, and Samsung shall pay the remainder of such fees. Administrative, facility and arbitrator fees for arbitrations in which your total damage claims, exclusive of attorney fees and expert witness fees, exceed \$5,000.00 ("Large Claim") shall be determined according to AAA rules. In a Large Claim case, the arbitrator may grant to the



prevailing party, or apportion among the parties, reasonable attorney fees, expert witness fees and costs to the extent allowed by the applicable law. Judgment may be entered on the arbitrator's award in any court of competent jurisdiction.

This Agreement also applies to claims against Samsung's employees, representatives, parents and other affiliates if any such claim relates in any way to or arises in any way from the Standard Limited Warranty or the Product's sale, condition or performance.

You may opt out of this Agreement by providing notice to Samsung no later than 30 calendar days from the date of the first consumer purchaser's purchase of the Product. To opt out, you must send notice by e-mail to optout@sea.samsung.com, with the subject line: "Arbitration Opt Out." You must include in the opt-out email (a) your name and address; (b) the date on which the Product was purchased; (c) the Product model name or model number; and (d) the IMEI or MEID or Serial Number, as applicable, if you have it (the IMEI or MEID or Serial Number can be found (i) on the Product box; (ii) on the Product information screen which can be found under "Settings;" (iii) on a label on the back of the Product beneath the battery, if the battery is removable; and (iv) on the outside of the Product if the battery is not removable).

Alternatively, you may opt out by calling 1-800-SAMSUNG (726-7864) no later than 30 calendar days from the date of the first consumer purchaser's purchase of the Product and providing the same information.



These are the only two forms of notice that will be effective to opt out of this Agreement. Opting out of this Agreement will not affect in any way the benefits to which you would otherwise be entitled, including the benefits of the Standard Limited Warranty.





Section 2: Standard Limited Warranty

The full Standard Limited Warranty for your device is available online and on the device:

Online:

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

On the device:

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

Section 3: End User License Agreement

The full End User License Agreement (EULA) for your device can be found online and on the device:

Online:

- English: www.samsung.com/us/Legal/SamsungLegal-EULA4
- Spanish: www.samsung.com/us/Legal/SamsungLegal-EULA4/#SPANISH

The full End User License Agreement (EULA) is 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” or “About tablet” 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”



Section 4: Health & Safety Information

This section outlines important safety precautions associated with using your device. The terms “device” or “mobile device” or “cell phone” are used in this section to refer to your device. **Read this information before using your mobile device.**

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.

Maintaining Dust and Water Resistance



This device is rated IP68 using the Ingress Protection rating system. The 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, the 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 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 the device gets wet, dry it thoroughly with a clean, soft cloth.
- 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.

WARNING! 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.





Iris Scanner

WARNING! Some people may have dizziness, seizures, epileptic seizures or blackouts triggered by light flashes or patterns, even if they have never had a seizure or blackout before. Anyone who has had a seizure, loss of awareness, or other symptoms linked to an epileptic condition, or has a family history of such symptoms or conditions, should see a doctor before using the Iris Scanner.

DO NOT stare directly into the infrared iris recognition LED as prolonged use can cause eye-strain. Do not stare at the iris recognition LED when your eyes are less than 20 cm (~8 inches) away from the device.



For best results:



- Keep your eyes 25-35 cm (~10-14 inches) away from the device for optimum recognition.
- Remove eye glasses and sun glasses. Tinted contact lenses and surgically repaired/replaced iris lenses may interfere with operation of the Iris Scanner.
- Don't use the Iris Scanner in bright sunlight or areas with excessive reflected light (ex: by the pool or seashore).
- Don't use the Iris Scanner in low light.
- Look straight at the device (not up, down or sideways); and hold your head still for the scan.
- Don't walk or operate a vehicle while using the Iris Scanner.

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- Please follow all instructions for use of this feature. For more information, visit <http://www.samsung.com/us/irisscanner>

Note: The Iris Scanner is not intended to be used as a medical device. Biometric data collected and stored locally by the mechanism is not intended to be used for any diagnostic, therapeutic, or preventative purposes.

Heart Rate Sensor

Caution! 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. Please refer to the User Manual for more information on proper wear and use, or see www.samsung.com/us/heartratesensor



Specific Absorption Rate (SAR) Certification Information

Your device is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for Radio Frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government.

These FCC RF exposure limits are derived from the recommendations of two expert organizations: the National Council on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy.

The RF exposure limit set by the FCC for wireless mobile devices employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR is a measure of the rate of absorption of RF energy by the human body expressed in units of watts per kilogram (W/kg). The FCC SAR limit incorporates a substantial margin of safety to give additional protection to the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified





power level, the actual SAR level of the device while operating can be well below the maximum reported value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output of the device.

For more information about SAR, visit:

- <https://www.fcc.gov/general/radio-frequency-safety-0>
- www.fcc.gov/encyclopedia/specific-absorption-rate-sar-cellular-telephones



Before a new model device is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the SAR limit established by the FCC. Tests for each model are performed in positions and locations (for example, at the ear, worn on the body, or worn on the wrist) as required by the FCC. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.



For typical operation, this device has been tested and meets FCC SAR guidelines. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines.

SAR values for body-worn operations are measured when used with an accessory that contains no metal and that positions the device a minimum of 1.5 cm from the body.

The FCC safety limit for body-worn SAR is 1.6 watts per kilogram (1.6 W/kg).

This device has FCC ID: A3LSMG960U and Model Number: SM-G960U1. The FCC ID is also printed somewhere on the mobile device. Depending on the device, you may need to remove the battery to find the FCC ID.

SAR information for this and other devices can be found on the FCC website at: www.fcc.gov/oet/ea/

Follow the instructions on the website to use the FCC ID to find SAR values for the device.

SAR information for this device can also be found on Samsung's website at: www.samsung.com/sar

FCC Part 15 Information and Notices

Note: Any device that uses Bluetooth or Wi-Fi is subject to FCC Part 15. Any device with a power supply is subject to Part 15 which also covers both intentional radiators (Bluetooth and Wi-Fi) and unintentional radiators (such as emissions from power supplies and circuit boards).

Pursuant to Part 15.21 of the FCC Rules, you are cautioned that changes or modifications not expressly approved by Samsung could void your authority to operate the device. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Notice

The device may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the mobile device if such interference cannot be eliminated.



Samsung Mobile Products and Recycling

WARNING! Never dispose of batteries in a fire because they may explode.

Samsung cares for the environment and encourages its customers to properly dispose of Samsung Mobile Devices and Samsung accessories in accordance with local regulations. In some areas, disposal of these items in household or business trash may be prohibited.

Proper disposal of your Mobile Device and its battery is not only important for safety, it benefits the environment. We've made it easy for you to recycle your old Samsung Mobile Devices and batteries by working with respected take-back companies in every state in the country.

Help us protect the environment - recycle!

For battery and cell phone recycling, go to **call2recycle.org** or call 1-800-822-8837.



In addition, most carriers will provide a take-back option for proper disposal of products when purchasing new products.

Dispose of other unwanted electronics through an approved recycler. To find the nearest recycling location, go to our website:

www.samsung.com/recyclingdirect or call 1-877-278-0799.



GPS & AGPS

Certain Samsung Mobile Devices can use a Global Positioning System (GPS) signal for location-based applications. GPS uses satellites controlled by the U.S. Government that are subject to changes implemented in accordance with the Department of Defense policy and the 2008 Federal Radio navigation Plan (FRP). Changes may affect the performance of location-based technology on your mobile device.

Certain Samsung Mobile Devices can also use an Assisted Global Positioning System (AGPS), which obtains information from the cellular network to improve GPS performance. AGPS uses your wireless service provider's network and therefore airtime, data charges, and/or additional charges may apply in accordance with your service plan. Contact your wireless service provider for details.

Your Location

Location-based information includes information that can be used to determine the approximate location of a mobile device. Mobile devices which are connected to a wireless network transmit location-based information. Additionally, if you use applications that require location-based information (e.g., driving directions), such applications transmit location-based information. The location-based information may be shared with third-parties, including your wireless service provider, applications providers, Samsung, and other third-parties providing services.





Use of AGPS in Emergency Calls

When you make an emergency call, the cellular network may activate AGPS technology in your mobile device to tell the emergency responders your approximate location.

AGPS has limitations and **might not work in your area.**

Therefore:

- Always tell the emergency responder your location to the best of your ability; and
- Remain on the mobile device for as long as the emergency responder instructs you.

Navigation

Maps, directions, and other navigation data, including data relating to your current location, may contain inaccurate or incomplete data, and circumstances can and do change over time. In some areas, complete information may not be available. **Therefore, you should always visually confirm that the navigational instructions are consistent with what you see before following them. All users should pay attention to road conditions, closures, traffic, and all other factors that may impact safe driving or walking. Always obey posted road signs.**

Commercial Mobile Alerting System (CMAS)

This device is designed to receive wireless emergency alerts from the Commercial Mobile Alerting System ("CMAS"; which may also be known as the Personal Localized Alerting Network ("PLAN")). If your wireless provider has chosen to



participate in CMAS/PLAN, alerts are available while in the provider's coverage area. If you travel outside your provider's coverage area, wireless emergency alerts may not be available. For more information, please contact your wireless provider.

Emergency Calls



This device, like any wireless mobile device, operates using radio signals, wireless and landline networks, as well as user-programmed functions, which cannot guarantee connection in all conditions, areas, or circumstances. Therefore, you should never rely solely on any wireless mobile device for essential communications (medical emergencies, for example). Before traveling in remote or underdeveloped areas, plan an alternate method of contacting emergency services personnel. Remember, to make or receive any calls, the mobile device must be switched on and in a service area with adequate signal strength.



Emergency calls may not be possible on all wireless mobile device networks or when certain network services and/or mobile device features are in use. Check with local service providers. If certain features are in use (call blocking, for example), you may first need to deactivate those features before you can make an emergency call. Consult your User Manual and your local cellular service provider. When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your mobile device may be the only means of communication at the scene of an accident; do not end the call until given permission to do so.



To make an emergency call:

1. If the mobile device is not on, turn it on.
2. Open the phone dialer.
3. Enter the emergency number for your current location (for example, 911 or other official emergency number), then tap Call/Send.
Emergency numbers vary by location.

FCC Hearing Aid Compatibility (HAC) Regulations for Wireless Devices

The U.S. Federal Communications Commission (FCC) has established requirements for digital wireless mobile devices to be compatible with hearing aids and other assistive hearing devices.



When individuals employing some assistive hearing devices (hearing aids and cochlear implants) use wireless mobile devices, they may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and mobile devices also vary in the amount of interference they generate.



The wireless telephone industry has developed a rating system for wireless mobile devices to assist hearing device users find mobile devices that may be compatible with their hearing devices. Not all mobile devices have been rated. Mobile devices that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss.



If your hearing device happens to be vulnerable to interference, you may not be able to use a rated mobile device successfully. Trying out the mobile device with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Wireless mobile devices rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than mobile devices that are not labeled. M4 is the better/higher of the two ratings. M-ratings refer to enabling acoustic coupling with hearing aids that do not operate in telecoil mode.

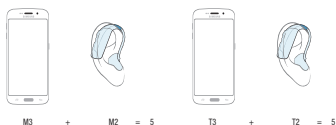
T-Ratings: Mobile devices rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than mobile devices that are not labeled. T4 is the better/higher of the two ratings. T-ratings refer to enabling inductive coupling with hearing aids operating in telecoil mode.

Hearing devices may also be rated. Your hearing aid manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. Under the current industry standard, American National Standards Institute (ANSI) C63.19, the hearing aid and wireless mobile device rating values are added together to indicate how usable they are together. For example, if a hearing aid meets the M2 level rating and the wireless mobile device meets the M3 level rating, the sum of the two values equals M5.



Under the standard, this should provide the hearing aid user with normal use while using the hearing aid with the particular wireless mobile device. A sum of M6 or more would indicate excellent performance.

However, these are not guarantees that all users will be satisfied. T-ratings work similarly.

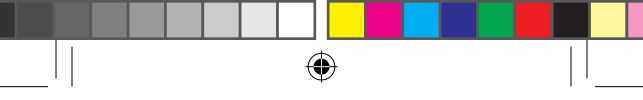


The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

HAC for Newer Technologies

This device has been tested and rated for use with hearing aids for some of the wireless technologies that it uses. However, there may be some newer wireless technologies used in this device that have not been tested yet for use with hearing aids.

It is important to try the different features of this device thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this device for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or device retailer.



Card Tray Removal Tool

Caution! Exercise care when using the card tray removal tool to eject the internal card tray.

Device Temperature

Caution! Some applications or prolonged usage may increase device temperature. Prolonged skin contact with a device that is hot to the touch may produce skin discomfort or redness, or low temperature burns. If the device feels hot to the touch, discontinue use and close all applications or turn off the device until it cools.



Always ensure that the device has adequate ventilation and air flow. Covering the device can significantly affect air flow, may affect the performance of the device, and poses a possible risk of fire or explosion, which could lead to serious bodily injuries or damage to property. Covering the device can trap any dissipating heat and redirect it back to the device while it's active. Although the device might not currently be in full use, background applications and functions can generate heat that can accidentally be trapped when covered.





Sound and Hearing

Caution! Avoid potential hearing loss by not exposing yourself to loud sounds for a prolonged period of time. The risk of hearing loss increases as sound is played louder and for longer durations. The amount of sound produced by a portable audio device (including headsets, earbuds, and Bluetooth® or other wireless devices) varies depending on the nature of the sound, the device settings, and the headphones that are used. As a result, there is no single volume setting that is appropriate for everyone or for every combination of sound, settings and equipment.

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 mobile device bill.

Keep the device and all its parts and accessories out of the reach of small children.



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