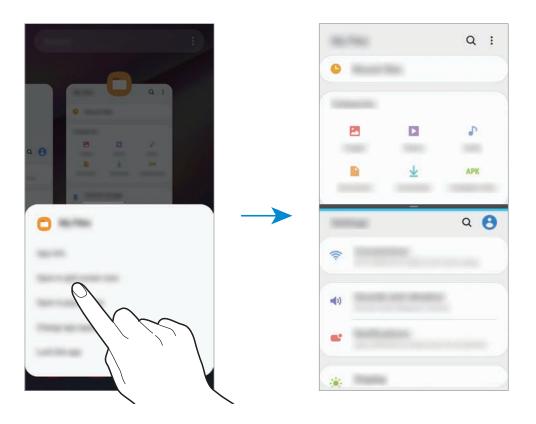
Split screen view

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



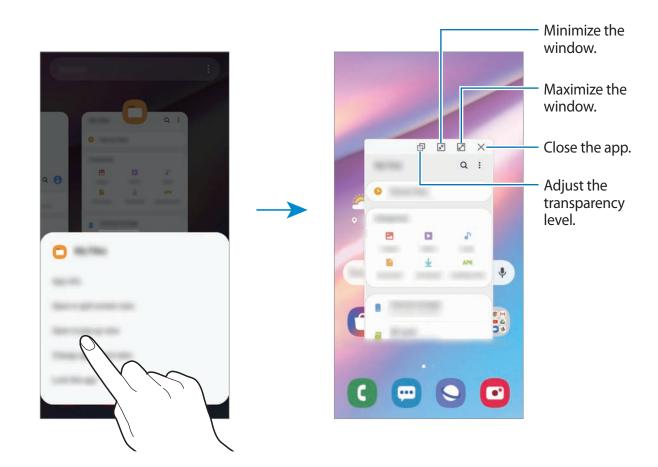
Adjusting the window size

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

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

Pop-up view

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



Moving pop-up windows

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

Samsung Members

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



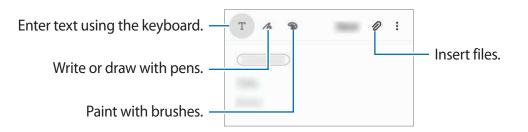
To submit your feedback or post your comments, you must sign in to your Samsung account. Refer to Samsung account for more information.

Samsung Notes

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

Creating notes

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



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

Deleting notes

- 1 Launch the **Samsung Notes** app.
- 2 Tap and hold a note to delete.

To delete multiple notes, tick more notes to delete.

3 Tap **Delete**.

Calendar

Manage your schedule by entering upcoming events or reminders in your planner.

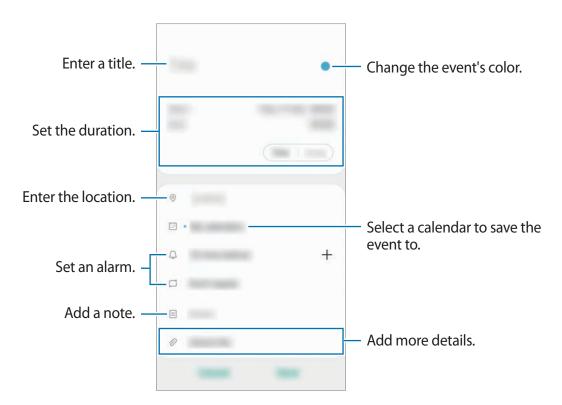
Creating events

- Launch the Calendar app and tap

 or double-tap a date.

 If the date already has saved events or tasks in it, tap the date and tap

 tap the date and tap
- 2 Enter event details.



3 Tap Save to save the event.

Creating reminders

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

Syncing events with your accounts

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

For the Samsung account, tap $\bullet \rightarrow$ Sync settings and tap the Calendar switch to activate it.

To add accounts to sync with, launch the **Calendar** app and tap $\equiv \rightarrow \diamondsuit \rightarrow \text{Add new}$ **account**. Then, select an account to sync with and sign in. When an account is added, a blue circle is displayed next to the account name.

Radio

Listening to the FM radio

Launch the Radio app.

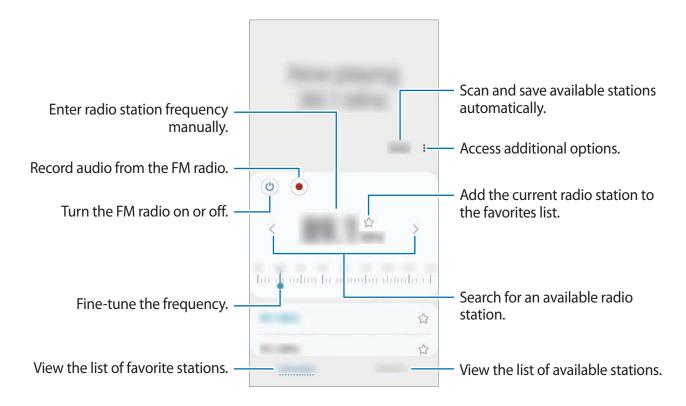
Before you use this app, you must connect an earphone, which serves as the radio antenna.



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

Apps and features

Select the radio station you want from the stations list.



Playing through the speaker

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

Tap $\bullet \rightarrow$ Play through speaker.

Scanning radio stations

Launch the Radio app.

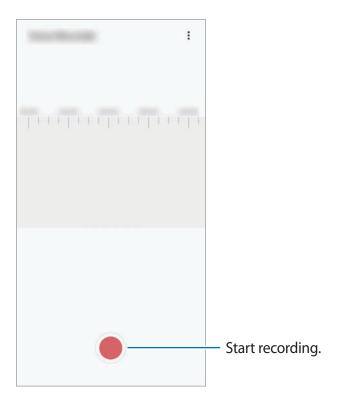
Tap Scan. The FM radio scans and saves available stations automatically.

Select the radio station you want from the stations list.

Voice Recorder

Use this app to record or play voice memos.

- 1 Launch the Voice Recorder app.
- 2 Tap () to start recording. Speak into the microphone.
 - Tap in to pause recording.
 - While making a voice recording, tap **BOOKMARK** to insert a bookmark.



- 3 Tap to finish recording.
- 4 Enter a file name and tap **Save**.

My Files

Access and manage various files stored in the device.

Launch the My Files app.

View files that are stored in each storage.

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

To search for files or folders, tap Q.

Clock

Introduction

Set alarms, check the current time in many cities around the world, time an event, or set a specific duration.

Alarm

Launch the Clock app and tap Alarm.

Setting alarms

Tap + in the alarms list, set an alarm time, select the days on which the alarm will repeat, set other various alarm options, and then tap **Save**.

To open the keypad to enter an alarm time, tap the time input field.

To activate or deactivate alarms, tap the switch next to the alarm in the alarms list.

Stopping alarms

Tap **Dismiss** to stop an alarm. If you have previously enabled the snooze option, tap **Snooze** to repeat the alarm after a specified length of time.

Deleting alarms

Tap and hold an alarm, tick alarms to delete, and then tap **Delete**.

Apps and features

World Clock

Launch the Clock app and tap World Clock.

Creating clocks

Tap +, enter a city name or select a city from the map, and then tap Add. To use the time zone converter, tap $• \rightarrow$ Time zone converter.

Deleting clocks

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

Stopwatch

- 1 Launch the **Clock** app and tap **Stopwatch**.
- 2 Tap **Start** to time an event.

To record lap times while timing an event, tap Lap.

- **3** Tap **Stop** to stop timing.
 - To restart the timing, tap **Resume**.
 - To clear lap times, tap **Reset**.

Timer

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

Calculator

Perform simple or complex calculations.

Launch the **Calculator** app.

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

Reminder

Create reminders to schedule to-do items or to view content later. You will receive notifications at the preset time or location for each reminder.

- To receive more accurate notifications, connect to a Wi-Fi or mobile network.
 - To fully use this feature, you must sign in to your Samsung account.
 - To use location reminders, the GPS feature must be activated.

Starting Reminder

Launch the **Calendar** app and tap $\equiv \rightarrow$ **Reminder**. The Reminder screen will appear and the **Reminder** app icon (()) will be added to the Apps screen.

Creating reminders

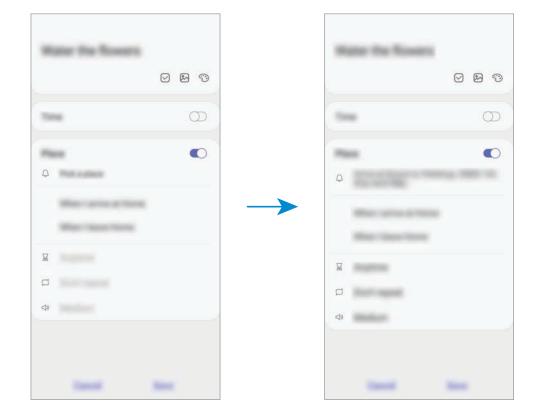
Create reminders with various methods. Reminder will alert you if you create a reminder with a specified time or location setting. You can also save various content, such as a single memo or webpage address, and view it later.

For example, create a reminder to alert you to 'Water the flowers when I get home'.

- 1 Launch the **Reminder** app.
- 2 Tap Write a reminder or + and enter 'Water the flowers'.

3 Tap Place \rightarrow Pick a place and set the location to home.

4 Tap When I arrive at \rightarrow Done.



5 Tap Save to save the reminder.

When you arrive at home, the 'Water the flowers' notification will appear.

Checking reminder notifications

At the preset time or location, a notification pop-up window will appear. Tap **Complete** or **Snooze**.

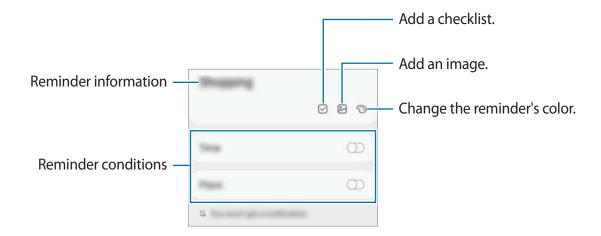
Viewing the reminders list

Launch the **Reminder** app to view your reminders list. To view reminder details, select a reminder.

Editing reminder details

Add or edit reminder details, such as frequency, date and time, or location.

- 1 On the reminders list, select a reminder to edit and tap **Edit**.
- 2 Edit the conditions and tap Save.



Completing reminders

Mark reminders that you do not need to be reminded of as complete.

On the reminders list, select a reminder and tap **Complete**. Alternatively, drag the reminder to the left.

Restoring reminders

Restore reminders that have been completed.

- 1 On the reminders list, tap \rightarrow **Completed** \rightarrow **Edit**.
- 2 Tick items to restore and tap **Restore**.

Reminders will be added to the reminders list and you will be reminded at the preset times.

Deleting reminders

To delete a reminder, drag the reminder to the right. To delete multiple reminders, tap and hold a reminder, tick reminders to delete, and then tap **Delete**.

Sharing content

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



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

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

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

Samsung Global Goals

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

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

Google apps

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

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



Some apps may not be available or may be labeled differently depending on the region or service provider.

Chrome

Search for information and browse webpages.

Gmail

Send or receive emails via the Google Mail service.

Maps

Find your location on the map, search the world map, and view location information for various places around you.

YT Music

Discover, listen to, and share music on your device. You can upload music collections stored on your device to the cloud and access them later.

Apps and features

Play Movies & TV

Purchase or rent videos, such as movies and TV programs, from Play Store.

Drive

Store your content on the cloud, access it from anywhere, and share it with others.

YouTube

Watch or create videos and share them with others.

Photos

Search for, manage, and edit all your photos and videos from various sources in one place.

Google

Search quickly for items on the Internet or your device.

Duo

Make a simple video call.

Settings

Introduction

Customize device settings. You can make your device more personalized by configuring various setting options.

Launch the **Settings** app.

To search for settings by entering keywords, tap Q.

Connections

Options

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

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

- Wi-Fi: Activate the Wi-Fi feature to connect to a Wi-Fi network and access the Internet or other network devices. Refer to Wi-Fi for more information.
- **Bluetooth**: Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices. Refer to Bluetooth for more information.
- Flight mode: Set the device to disable all wireless functions on your device. You can use only non-network services.



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

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

You can also activate the data saver feature to prevent some apps running in the background from sending or receiving data. Refer to Data saver for more information.

- SIM card manager (dual SIM models): Activate your SIM or USIM cards and customize the SIM card settings. Refer to SIM card manager (dual SIM models) for more information.
- **Mobile Hotspot and Tethering**: Use the device as a mobile hotspot to share the device's mobile data connection with other devices when the network connection is not available. Connections can be made via Wi-Fi, USB, or Bluetooth. Refer to Mobile Hotspot and Tethering for more information.
- More connection settings: Customize settings to control other features. Refer to More connection settings for more information.

Wi-Fi

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

Connecting to a Wi-Fi network

- 1 On the Settings screen, tap **Connections** \rightarrow **Wi-Fi** and tap the switch to activate it.
- 2 Select a network from the Wi-Fi networks list.

Networks that require a password appear with a lock icon. Enter the password and tap **Connect**.

- Once the device connects to a Wi-Fi network, the device will reconnect to that network each time it is available without requiring a password. To prevent the device connecting to the network automatically, tap **\$** next to the network and tap **Forget**.
 - If you cannot connect to a Wi-Fi network properly, restart your device's Wi-Fi feature or the wireless router.

Wi-Fi Direct

Wi-Fi Direct connects devices directly via a Wi-Fi network without requiring an access point.

1 On the Settings screen, tap **Connections** \rightarrow **Wi-Fi** and tap the switch to activate it.

2 Tap Wi-Fi Direct.

The detected devices are listed.

If the device you want to connect to is not in the list, request that the device turns on its Wi-Fi Direct feature.

3 Select a device to connect to.

The devices will be connected when the other device accepts the Wi-Fi Direct connection request.

Sending and receiving data

You can share data, such as contacts or media files, with other devices. The following actions are an example of sending an image to another device.

- 1 Launch the **Gallery** app and select an image.
- 2 Tap $\ll \rightarrow$ Wi-Fi Direct and select a device to transfer the image to.
- **3** Accept the Wi-Fi Direct connection request on the other device.

If the devices are already connected, the image will be sent to the other device without the connection request procedure.

Ending the device connection

- 1 On the Settings screen, tap **Connections** \rightarrow **Wi-Fi**.
- 2 Tap Wi-Fi Direct.

The device displays the connected devices in the list.

3 Tap the device name to disconnect the devices.

Bluetooth

Use Bluetooth to exchange data or media files with other Bluetooth-enabled devices.



- Samsung is not responsible for the loss, interception, or misuse of data sent or received via Bluetooth.
- Always ensure that you share and receive data with devices that are trusted and properly secured. If there are obstacles between the devices, the operating distance may be reduced.
- Some devices, especially those that are not tested or approved by the Bluetooth SIG, may be incompatible with your device.
- Do not use the Bluetooth feature for illegal purposes (for example, pirating copies of files or illegally tapping communications for commercial purposes). Samsung is not responsible for the repercussion of illegal use of the Bluetooth feature.

Pairing with other Bluetooth devices

- On the Settings screen, tap Connections → Bluetooth and tap the switch to activate it. The detected devices will be listed.
- 2 Select a device to pair with.

If the device you want to pair with is not on the list, set the device to enter Bluetooth pairing mode. Refer to the other device's user manuals.



Your device is visible to other devices while the Bluetooth settings screen is open.

3 Accept the Bluetooth connection request on your device to confirm.

The devices will be connected when the other device accepts the Bluetooth connection request.

Sending and receiving data

Many apps support data transfer via Bluetooth. You can share data, such as contacts or media files, with other Bluetooth devices. The following actions are an example of sending an image to another device.

- 1 Launch the **Gallery** app and select an image.
- 2 Tap $\ll \rightarrow$ Bluetooth and select a device to transfer the image to.

If the device you want to pair with is not in the list, request that the device turns on its visibility option.

3 Accept the Bluetooth connection request on the other device.

Unpairing Bluetooth devices

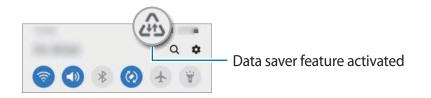
- On the Settings screen, tap Connections → Bluetooth.
 The device displays the paired devices in the list.
- 2 Tap 🏟 next to the device name to unpair.
- **3** Tap **Unpair**.

Data saver

Reduce your data usage by preventing some apps running in the background from sending or receiving data.

On the Settings screen, tap **Connections** \rightarrow **Data usage** \rightarrow **Data saver** and tap the switch to activate it.

When the data saver feature is activated, the 🕰 icon will appear on the status bar.





To select apps to use data without restriction, tap **Allow app while Data saver on** and select apps.

Mobile data only apps

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

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

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



You may incur additional charges when using this feature.

SIM card manager (dual SIM models)

Activate your SIM or USIM cards and customize the SIM card settings. Refer to Using dual SIM or USIM cards (dual SIM models) for more information.

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

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



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

Mobile Hotspot and Tethering

Use the device as a mobile hotspot to share the device's mobile data connection with other devices when the network connection is not available. Connections can be made via Wi-Fi, USB, or Bluetooth.

On the Settings screen, tap **Connections** \rightarrow **Mobile Hotspot and Tethering**.



You may incur additional charges when using this feature.

- **Mobile Hotspot**: Use the mobile hotspot to share the device's mobile data connection with computers or other devices.
- **Bluetooth tethering**: Use Bluetooth tethering to share the device's mobile data connection with computers or other devices via Bluetooth.
- USB tethering: Use USB tethering to share the device's mobile data connection with a computer via USB. When connected to a computer, the device is used as a wireless modem for the computer.

Using the mobile hotspot

Use your device as a mobile hotspot to share your device's mobile data connection with other devices.

- 1 On the Settings screen, tap Connections → Mobile Hotspot and Tethering → Mobile Hotspot.
- 2 Tap the switch to activate it.

The 🛜 icon appears on the status bar. Other devices can find your device in the Wi-Fi networks list.

To set a password for the mobile hotspot, tap $\bullet \rightarrow$ Configure Mobile Hotspot and select the level of security. Then, enter a password and tap Save.

Settings

3 On the other device's screen, search for and select your device from the Wi-Fi networks list.

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



If the mobile hotspot is not found, on your device, tap $\bullet \rightarrow \bullet$ Configure Mobile Hotspot and deselect Hide my device.

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

More connection settings

Customize settings to control other connection features.

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

- Nearby device scanning: Set the device to scan for nearby devices to connect to.
- **Printing**: Configure settings for printer plug-ins installed on the device. You can search for available printers or add one manually to print files. Refer to Printing for more information.
- VPN: Set up virtual private networks (VPNs) on your device to connect to a school or company's private network.
- **Private DNS**: Set the device to use the security enhanced private DNS.

Printing

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



Some printers may not be compatible with the device.

Adding printer plug-ins

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

1 On the Settings screen, tap Connections \rightarrow More connection settings \rightarrow Printing \rightarrow Download plugin.

Settings

- 2 Search for a printer plug-in in **Play Store**.
- 3 Select a printer plug-in and install it.
- 4 Select the installed printer plug-in.

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

5 Select a printer to add.



To add printers manually, tap $\bullet \rightarrow \mathbf{Add} \ \mathbf{printer}$.

Printing content

While viewing content, such as images or documents, access the options list, tap **Print** $\rightarrow \blacksquare$ **All printers...**, and then select a printer.



Printing methods may vary depending on the content type.

Sounds and vibration

Options

Change settings for various sounds on the device.

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

- Sound mode: Set the device to use sound mode, vibration mode, or silent mode.
- Vibrate while ringing: Set the device to vibrate and play a ringtone for incoming calls.
- Temporary mute: Set the device to use silent mode for a certain period.
- **Ringtone**: Change the call ringtone.
- Notification sounds: Change the notification sound.
- Volume: Adjust the device's volume level.

- Vibration pattern: Select a vibration pattern.
- System sound: Set the device to sound for actions, such as controlling the touchscreen.
- Sound quality and effects: Set the device's sound quality and effects. Refer to Dolby Atmos (surround sound) for more information.

Dolby Atmos (surround sound)

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

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



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

Notifications

Change the notification settings.

On the Settings screen, tap Notifications.

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

Display

Options

Change the display and the Home screen settings.

On the Settings screen, tap Display.

- Brightness: Adjust the brightness of the display.
- Adaptive brightness: Set the device to save power by adjusting the brightness of the display automatically.
- **Dark mode**: Reduce eye strain by applying the dark theme when using the device at night or in a dark place. Refer to Dark mode for more information.
- Font size and style: Change the font size and style.
- Screen zoom: Change the screen zoom setting.
- Full screen apps: Select apps to use with the full screen aspect ratio. You can also set the device to hide the front camera from the screen.
- Screen timeout: Set the length of time the device waits before turning off the display's backlight.
- Home screen: Configure settings for the Home screen, such as the screen grid or layout.
- **Easy mode**: Switch to easy mode to display larger icons and apply a simpler layout to the Home screen.
- Navigation bar: Change the navigation bar settings. Refer to Navigation bar (soft buttons) for more information.
- Accidental touch protection: Set the device to prevent the screen from detecting touch input when it is in a dark place, such as a pocket or bag.
- Screensaver: Set the device to launch a screensaver when the device is charging. Refer to Screensaver for more information.

Dark mode

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



- The dark theme may not be applied in some apps.
- 1 On the Settings screen, tap **Display** → **Dark mode** and tap the **Turn on now** switch to activate it.
- 2 To set the schedule to apply dark mode to the screen, tap the **Turn on as scheduled** switch to activate it and select an option.
 - Sunset to sunrise: Set the device to turn on dark mode at night and turn it off in the morning based on your current location.
 - Custom schedule: Set a specific time to turn on and off dark mode.

Screensaver

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

- 1 On the Settings screen, tap $Display \rightarrow Screensaver$.
- 2 Select an option.

If you select **Photo Frame** or **Photos**, a slideshow with selected images will start. If you select **Photo Table**, selected images will appear as small cards and overlap.

- 3 Tap 🔹 to select albums for displaying images.
- 4 When you are finished, tap the Back button.

To preview the selected option, tap **Preview**.



When you tap the screen while your screensaver is displayed, the screen will turn on.

Wallpapers

Change the wallpaper settings for the Home screen and the locked screen.

On the Settings screen, tap Wallpapers.

Themes

Change the wallpaper settings for the Home screen and the locked screen or apply various themes to the device.

On the Settings screen, tap Themes.

- Themes: Change the device's theme.
- Wallpapers: Change the wallpaper settings for the Home screen and the locked screen.
- Icons: Change the icon style.

Lock screen

Options

Change the settings for the locked screen.

On the Settings screen, tap Lock screen.



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

- Screen lock type: Change the screen lock method.
- Smart Lock: Set the device to unlock itself when trusted locations or devices are detected. Refer to Smart Lock for more information.
- Secure lock settings: Change screen lock settings for the selected lock method.
- Clock style: Change the type and color of the clock on the locked screen.
- Roaming clock: Change the clock to show both the local and home time zones on the locked screen when roaming.

- FaceWidgets: Change the settings of the items displayed on the locked screen.
- **Contact information**: Set the device to show contact information, such as your email address, on the locked screen.
- Notifications: Set how to show notifications on the locked screen.
- Shortcuts: Select apps to display shortcuts to them on the locked screen.
- **Dynamic Lock screen**: Select an image pack from various categories and use it as a lock screen wallpaper.
- About Lock screen: View the Lock screen version and legal information.

Smart Lock

You can set the device to unlock itself and remain unlocked when trusted locations or devices are detected.

For example, if you have set your home as a trusted location, when you get home your device will detect the location and automatically unlock itself.

- This feature will be available to use after you set a screen lock method.
- If you do not use your device for four hours or when you turn on the device, you must unlock the screen using the pattern, PIN, or password you set.
- 1 On the Settings screen, tap Lock screen \rightarrow Smart Lock.
- 2 Unlock the screen using the preset screen lock method.
- **3** Select an option and follow the on-screen instructions to complete the setup.

Biometrics and security

Options

Change the settings for securing the device.

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

- Face recognition: Set the device to unlock the screen by recognizing your face. Refer to Face recognition for more information.
- Biometrics preferences: Change the settings for biometric data.
- **Google Play Protect**: Set the device to check for harmful apps and behavior and warn about potential harm and remove them.
- Find My Mobile: Activate or deactivate the Find My Mobile feature. Access the Find My Mobile website (findmymobile.samsung.com) to track and control your lost or stolen device.
- Security update: View the version of your device's software and check for updates.
- Google Play system update: View the Google Play system version and check for updates.
- Install unknown apps: Set the device to allow the installation of apps from unknown sources.
- Encrypt or decrypt SD card: Set the device to encrypt files on a memory card.



If you reset your device to the factory defaults with this setting enabled, the device will not be able to read your encrypted files. Disable this setting before resetting the device.

• Other security settings: Configure additional security settings.

Face recognition

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

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

Precautions for using face recognition

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

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

For better face recognition

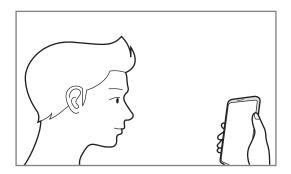
Consider the following when using face recognition:

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

Registering your face

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

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



6 Position your face inside the frame on the screen.

The camera will scan your face.



If unlocking the screen with your face is not working properly, tap **Remove face data** to remove your registered face and register your face again.

Deleting the registered face data

You can delete face data that you have registered.

- 1 On the Settings screen, tap **Biometrics and security** \rightarrow **Face recognition**.
- 2 Unlock the screen using the preset screen lock method.
- 3 Tap Remove face data \rightarrow Remove.

Once the registered face is deleted, all the related features will also be deactivated.

Unlocking the screen with your face

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

- 1 On the Settings screen, tap **Biometrics and security** \rightarrow **Face recognition**.
- 2 Unlock the screen using the preset screen lock method.
- **3** Tap the **Face unlock** switch to activate it.
- If you want to set the device to unlock the screen without swiping on the locked screen after recognizing your face, tap the Stay on Lock screen switch to deactivate it.
- If you want to reduce the possibility of recognizing faces in photos or videos, tap the Faster recognition switch to deactivate it. This may decrease the face recognition speed.
- If you want to increase the recognition rate in a dark place, tap the **Brighten screen** switch to activate it.
- 4 On the locked screen, look at the screen.

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

Privacy

Change the settings for privacy.

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

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

Location

Change settings for location information permissions.

On the Settings screen, tap Location.

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

Settings

Accounts and backup

Options

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

On the Settings screen, tap Accounts and backup.

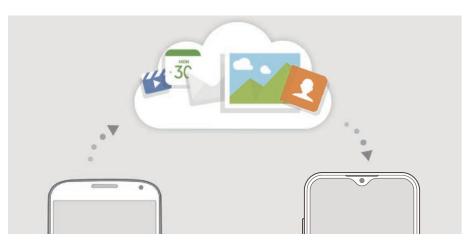
- Accounts: Add your Samsung and Google accounts, or other accounts, to sync with.
- **Backup and restore**: Keep your personal information, app data, and settings safe on your device. You can back up your sensitive information and access it later. You must sign in to your Google or Samsung account to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



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

Samsung Cloud

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





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

Syncing data

You can sync data saved in your device with Samsung Cloud and access it from other devices.

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



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

Backing up data

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

- 1 On the Settings screen, tap Accounts and backup → Samsung Cloud → Back up this phone.
- 2 Tick items you want to back up and tap **Back up**.
- 3 Tap Done.
- Some data will not be backed up. To check which data will be backed up, on the Settings screen, tap Accounts and backup → Samsung Cloud → Back up this phone.
- To view the backup data for other devices in your Samsung Cloud, on the Settings screen, tap Accounts and backup → Samsung Cloud → Restore data → ▼, and then select a device you want.

Restoring data

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

- 1 On the Settings screen, tap Accounts and backup \rightarrow Samsung Cloud.
- 2 Tap **Restore data** $\rightarrow \mathbf{v}$ and select a device you want.
- **3** Tick items you want to restore and tap **Restore**.

Google

Configure settings for some features provided by Google. On the Settings screen, tap **Google**.

Advanced features

Options

Activate advanced features and change the settings that control them.

On the Settings screen, tap Advanced features.



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

• **Smart pop-up view**: Select apps to view their notifications via pop-up windows. When using this feature, you can quickly view the contents via pop-up windows by tapping the icon on the screen.



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

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



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

- **Dual Messenger**: Install the second app and use two separate accounts for the same messenger app. Refer to Dual Messenger for more information.
- Send SOS messages: Set the device to send help messages by pressing the Power key three times.

Motions and gestures

Activate the motion feature and configure settings.

On the Settings screen, tap Advanced features \rightarrow Motions and gestures.

- **Double tap to wake**: Set the device to turn on the screen by double-tapping anywhere on the screen while the screen is turned off.
- **Easy mute**: Set the device to mute incoming calls or alarms by facing the device's screen downwards.
- Swipe to call or send messages: Set the device to make a call or send a message when you swipe to the right or left on a contact or a phone number in the Phone or Contacts app.

Dual Messenger

Install the second app and use two separate accounts for the same messenger app.

- On the Settings screen, tap Advanced features → Dual Messenger.
 Supported apps will appear.
- 2 Tap the switch of an app to install the second app.

The second app will be installed. The second app's icon will be displayed with **6**. When you receive notifications from the second app, the notifications will be displayed with **6** to distinguish them from the first app's notifications.



- The Dual Messenger feature may not be available depending on the app.
 - Some features of the app may be limited for the second app.

Settings

Uninstalling a second app

- 1 On the Settings screen, tap Advanced features \rightarrow Dual Messenger.
- 2 Tap the switch of the app you want to uninstall and tap Disable or Uninstall.All data related to the second app will be deleted.



If you uninstall the first app, the second app will also be deleted.

Digital wellbeing & parental controls

Options

View the history of your device usage and use features to prevent your device from interfering with your life. You can also set up parental controls for your children and manage their digital use.

On the Settings screen, tap **Digital wellbeing & parental controls**.

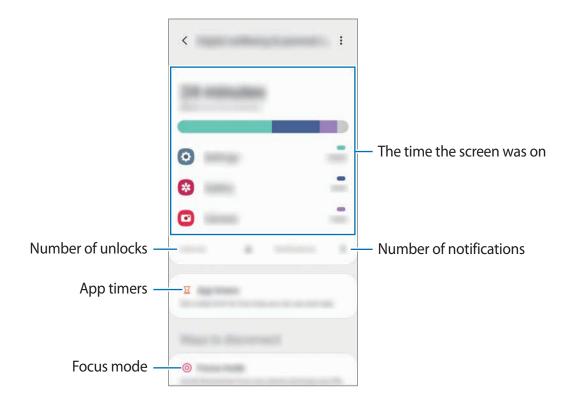
- **Digital wellbeing**: View the daily usage history of your device. Refer to Digital wellbeing for more information.
- Parental controls: Manage your children's digital use.

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Settings
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Digital wellbeing

View the daily usage history of your device. You can also limit usage time or change the notification settings for each app.

On the Settings screen, tap **Digital wellbeing & parental controls** \rightarrow **See your data**.



Setting timers for apps

You can limit the daily usage time for each app by setting a timer. When you reach the limit, the app will be deactivated and you cannot use it.

- 1 On the Settings screen, tap **Digital wellbeing & parental controls** \rightarrow **App timers**.
- 2 Tap **No timer** next the app you want and set the time.

Activating wind down mode

You can activate wind down mode to reduce eye strain before sleeping and prevent your sleep from being disturbed.

- 1 On the Settings screen, tap **Digital wellbeing & parental controls** \rightarrow **Wind down** \rightarrow **Turn on now**.
- 2 To set the schedule to activate wind down mode, tap **Turn on as scheduled**, tap the switch to activate it, and then set the days and time.

Device care

Introduction

The device care feature provides an overview of the status of your device's battery, storage, memory, and system security. You can also automatically optimize the device with a tap of your finger.

	<	• I
Battery —	·	_
Storage —	- C	_
Memory —		
Security —	• •	

Optimizing your device

On the Settings screen, tap **Device care** \rightarrow **Go**.

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

- Clearing some memory.
- Deleting unnecessary files and closing apps running in the background.
- Managing abnormal battery usage.
- Scanning for crashed apps and malware.

Using the auto optimization feature

You can set the device to perform auto optimization when your device is not in use. Tap $\bullet \to$ **Advanced** \to **Auto optimization** and tap the switch to activate it. If you want to set the time to perform auto optimization, tap **Time**.

Battery

Check the remaining battery power and time to use the device. For devices with low battery levels, conserve battery power by activating power saving features.

On the Settings screen, tap **Device care** \rightarrow **Battery**.

- The usage time left shows the time remaining before the battery power runs out. Usage time left may vary depending on your device settings and operating conditions.
 - You may not receive notifications from some apps that use power saving mode.

Power mode

Select a power mode that suits your device usage purposes.

Tap **Power mode** and select an option.

- **Optimized**: Optimized for a balance between the device's performance and battery usage.
- Medium power saving: Activate power saving mode to extend the battery's usage time.
- **Maximum power saving**: In maximum power saving mode, the device decreases battery consumption by activating dark mode and limiting the apps and features available. Network connections, except for the mobile network, will be deactivated.

Adaptive power saving

You can set the device to activate power saving mode automatically based on your usage patterns and the remaining battery power.

Tap **Power mode** and tap the **Adaptive power saving** switch to activate it. Your device will activate power saving mode based on the situation to extend the battery's usage time.

Managing battery usage for each app

You can save battery power by preventing apps that are running in the background from using battery power when they are not being used. Tap **Battery usage**, select apps from the apps list, and then tap the **Put app to sleep** switch to activate the feature.

Storage

Check the status of the used and available memory.

On the Settings screen, tap **Device care** \rightarrow **Storage**.

- The actual available capacity of the internal memory is less than the specified capacity because the operating system and default apps occupy part of the memory. The available capacity may change when you update the device.
- You can view the available capacity of the internal memory in the Specification section for your device on the Samsung website.

Managing the memory

To delete residual files, such as cache, tap **Clean now**. To delete files or uninstall apps that you do not use any more, select a category. Then, tick items to select and tap **Delete**.

Memory

On the Settings screen, tap **Device care** \rightarrow **Memory**.

To speed up your device by stopping apps running in the background, tick apps from the apps list, and tap **Clean now**.

Security

Check the device's security status. This feature scans your device for malware.

On the Settings screen, tap **Device care** \rightarrow **Security** \rightarrow **Scan phone**.

Apps

Manage the device's apps and change their settings. You can view the apps' usage information, change their notification or permission settings, or uninstall or disable unnecessary apps.

On the Settings screen, tap Apps.

General management

Customize your device's system settings or reset the device.

On the Settings screen, tap General management.

- Language and input: Select device languages and change settings, such as keyboards and voice input types. Some options may not be available depending on the selected language. Refer to Adding device languages for more information.
- Date and time: Access and alter the settings to control how the device displays the time and date.



If the battery remains fully discharged, the time and date is reset.

- **Contact us**: Ask questions or view frequently asked questions. Refer to Samsung Members for more information.
- **Reset**: Reset your device's settings or perform a factory data reset. You can reset all your settings, or only network settings, or accessibility settings. You can also set the device to restart at a preset time for device optimization.

Adding device languages

You can add languages to use on your device.

1 On the Settings screen, tap General management \rightarrow Language and input \rightarrow Language \rightarrow Add language.

To view all the languages that can be added, tap $\bullet \rightarrow All$ languages.

Settings

- 2 Select a language to add.
- **3** To set the selected language as the default language, tap **Set as default**. To keep the current language setting, tap **Keep current**.

The selected language will be added to your languages list. If you changed the default language, the selected language will be added to the top of the list.

To change the default language from your languages list, select a language. Then, tap **Apply**. If an app does not support the default language, the next supported language in the list will be used.

Accessibility

Configure various settings to improve accessibility to the device.

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

- Screen reader: Activate Voice Assistant, which provides voice feedback. To view help information to learn how to use this feature, tap **Tutorial**.
- Visibility enhancements: Customize the settings to improve accessibility for visually impaired users.
- Hearing enhancements: Customize the settings to improve accessibility for users with hearing impairment.
- Interaction and dexterity: Customize the settings to improve accessibility for users who have reduced dexterity.
- Advanced settings: Configure settings for Direct access and notification features.
- Installed services: View accessibility services installed on the device.
- About Accessibility: View the Accessibility information.
- Contact us: Ask questions or view frequently asked questions.

Software update

Update your device's software via the firmware over-the-air (FOTA) service. You can also schedule software updates.

On the Settings screen, tap Software update.



If emergency software updates are released for your device's security and to block new types of security threats, they will be installed automatically without your agreement.

- Download and install: Check for and install updates manually.
- Auto download over Wi-Fi: Set the device to download updates automatically when connected to a Wi-Fi network.
- Last update: View information about the last software update.

Security updates information

Security updates are provided to strengthen the security of your device and protect your personal information. For security updates for your model, visit security.samsungmobile.com.



The website supports only some languages.

User manual

View help information to learn how to use the device and apps or configure important settings.

On the Settings screen, tap User manual.

About phone

Access your device's information.

On the Settings screen, tap About phone.

To change your device's name, tap Edit.

- Status: View various device information, such as the SIM card status, IMEI information, Wi-Fi MAC address, and serial number.
- Legal information: View legal information related to the device, such as safety information and the open source license.
- Software information: View the device's software information, such as its operating system version and firmware version.
- Battery information: View the device's battery status and information.

Checking your device's IMEI information

The International Mobile Equipment Identity (IMEI) is a unique number assigned to your device. You can check whether your device was reported as stolen or lost prior to buying it using the IMEI number.

To view your device's IMEI number, enter *#06# on the dialing keypad or access your device's Settings app.



This feature may not be supported by some devices.

Appendix

Troubleshooting

Before contacting a Samsung Service Center, please attempt the following solutions. Some situations may not apply to your device.

When you turn on your device or while you are using the device, it prompts you to enter one of the following codes:

- Password: When the device lock feature is enabled, you must enter the password you set for the device.
- PIN: When using the device for the first time or when the PIN requirement is enabled, you must enter the PIN supplied with the SIM or USIM card. You can disable this feature by using the Lock SIM card menu.
- PUK: Your SIM or USIM card is blocked, usually as a result of entering your PIN incorrectly several times. You must enter the PUK supplied by your service provider.
- PIN2: When you access a menu requiring the PIN2, you must enter the PIN2 supplied with the SIM or USIM card. For more information, contact your service provider.

Your device displays network or service error messages

- When you are in areas with weak signals or poor reception, you may lose reception. Move to another area and try again. While moving, error messages may appear repeatedly.
- You cannot access some options without a subscription. For more information, contact your service provider.

Your device does not turn on

When the battery is completely discharged, your device will not turn on. Fully charge the battery before turning on the device.

The touchscreen responds slowly or improperly

- If you attach a screen protector or optional accessories to the touchscreen, the touchscreen may not function properly.
- If you are wearing gloves, if your hands are not clean while touching the touchscreen, or if you tap the screen with sharp objects or your fingertips, the touchscreen may malfunction.
- The touchscreen may malfunction in humid conditions or when exposed to water.
- Restart your device to clear any temporary software bugs.
- Ensure that your device software is updated to the latest version.
- If the touchscreen is scratched or damaged, visit a Samsung Service Center.

Your device freezes or encounters a fatal error

Try the following solutions. If the problem is still not resolved, contact a Samsung Service Center.

Restarting the device

If your device freezes or hangs, you may need to close apps or turn off the device and turn it on again.

Forcing restart

If your device is frozen and unresponsive, press and hold the Power key and the Volume Down key simultaneously for more than 7 seconds to restart it.

Resetting the device

If the methods above do not solve your problem, perform a factory data reset.

Launch the **Settings** app and tap **General management** \rightarrow **Reset** \rightarrow **Factory data reset** \rightarrow **Reset** \rightarrow **Delete all**. Before performing the factory data reset, remember to make backup copies of all important data stored in the device.

Calls are not connected

- Ensure that you have accessed the right cellular network.
- Ensure that you have not set call barring for the phone number you are dialing.
- Ensure that you have not set call barring for the incoming phone number.

Others cannot hear you speaking on a call

- Ensure that you are not covering the built-in microphone.
- Ensure that the microphone is close to your mouth.
- If using an earphone, ensure that it is properly connected.

Sound echoes during a call

Adjust the volume by pressing the Volume key or move to another area.

A cellular network or the Internet is often disconnected or audio quality is poor

- Ensure that you are not blocking the device's internal antenna.
- When you are in areas with weak signals or poor reception, you may lose reception. You
 may have connectivity problems due to issues with the service provider's base station.
 Move to another area and try again.
- When using the device while moving, wireless network services may be disabled due to issues with the service provider's network.

The battery does not charge properly (For Samsung-approved chargers)

- Ensure that the charger is connected properly.
- Visit a Samsung Service Center and have the battery replaced.

The battery depletes faster than when first purchased

- When you expose the device or the battery to very cold or very hot temperatures, the useful charge may be reduced.
- Battery consumption will increase when you use certain features or apps, such as GPS, games, or the Internet.
- The battery is consumable and the useful charge will get shorter over time.

Error messages appear when launching the camera

Your device must have sufficient available memory and battery power to operate the camera app. If you receive error messages when launching the camera, try the following:

- Charge the battery.
- Free some memory by transferring files to a computer or deleting files from your device.
- Restart the device. If you are still having trouble with the camera app after trying these tips, contact a Samsung Service Center.

Photo quality is poorer than the preview

- The quality of your photos may vary, depending on the surroundings and the photography techniques you use.
- If you take photos in dark areas, at night, or indoors, image noise may occur or images may be out of focus.

Error messages appear when opening multimedia files

If you receive error messages or multimedia files do not play when you open them on your device, try the following:

- Free some memory by transferring files to a computer or deleting files from your device.
- Ensure that the music file is not Digital Rights Management (DRM)-protected. If the file is DRM-protected, ensure that you have the appropriate license or key to play the file.
- Ensure that the file formats are supported by the device. If a file format is not supported, such as DivX or AC3, install an app that supports it. To confirm the file formats that your device supports, visit www.samsung.com.
- Your device supports photos and videos captured with the device. Photos and videos captured by other devices may not work properly.
- Your device supports multimedia files that are authorized by your network service provider or providers of additional services. Some content circulated on the Internet, such as ringtones, videos, or wallpapers, may not work properly.

Bluetooth is not working well

If another Bluetooth device is not located or there are connection problems or performance malfunctions, try the following:

- Ensure that the device you wish to connect with is ready to be scanned or connected to.
- Ensure that your device and the other Bluetooth device are within the maximum Bluetooth range (10 m).
- On your device, launch the **Settings** app, tap **Connections**, and then tap the **Bluetooth** switch to re-activate it.
- On your device, launch the Settings app, tap General management → Reset → Reset network settings → Reset settings → Reset to reset network settings. You may lose registered information when performing the reset.

If the tips above do not solve the problem, contact a Samsung Service Center.

A connection is not established when you connect the device to a computer

- Ensure that the USB cable you are using is compatible with your device.
- Ensure that you have the proper driver installed and updated on your computer.
- If you are a Windows XP user, ensure that you have Windows XP Service Pack 3 or higher installed on your computer.

Your device cannot find your current location

GPS signals may be obstructed in some locations, such as indoors. Set the device to use Wi-Fi or a mobile network to find your current location in these situations.

Data stored in the device has been lost

Always make backup copies of all important data stored in the device. Otherwise, you cannot restore data if it is corrupted or lost. Samsung is not responsible for the loss of data stored in the device.

A small gap appears around the outside of the device case

- This gap is a necessary manufacturing feature and some minor rocking or vibration of parts may occur.
- Over time, friction between parts may cause this gap to expand slightly.

There is not enough space in the device's storage

Delete unnecessary data, such as cache, using the device care feature or manually delete unused apps or files to free up storage space.

The Home button does not appear

The navigation bar containing the Home button may disappear while using certain apps or features. To view the navigation bar, drag upwards from the bottom of the screen.

The screen brightness adjustment bar does not appear on the notification panel

Open the notification panel by dragging the status bar downwards, and then drag the notification panel downwards. Tap \Rightarrow **Quick panel layout** and tap the **Show brightness on top** switch to activate it.

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