



PNC660 Mission Critical Ruggedized Device User Manual

Preface

Welcome to the world of Hytera and thank you for purchasing this product. This manual includes a description of the functions and step-by-step procedures for use.

To avoid bodily injury or property loss caused by incorrect operation, please carefully read the *Safety Information Booklet* before use.

This manual is applicable to the following product:

PNC660 Mission Critical Ruggedized Device

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Documentation Information

This section describes the conventions of this document and device gestures.

Documentation Conventions

Instruction Conventions

| Icon | Description |
|--|--|
|  TIP | Indicates information that can help you make better use of your product. |
|  NOTE | Indicates references that can further describe the related topics. |
|  CAUTION | Indicates situations that could cause data loss or equipment damage. |
|  WARNING | Indicates situations that could cause minor personal injury. |
|  DANGER | Indicates situations that could cause major personal injury or even death. |

Notation Conventions

| Item | Description | Example |
|-----------------|---|--|
| Boldface | Denotes menus, tabs, parameter names, window names, dialog names, and hardware buttons. | To save the configuration, click Apply . |
| | | The Log Level Settings dialog appears. |
| | | Press the PTT key. |
| " " | Denotes messages, directories, file names, folder names, and parameter values. | The screen displays "Invalid Battery!". |
| | | Open "PSS.exe". |
| | | Go to "D:/opt/local". |
| | | In the Port text box, enter "22". |
| > | Directs you to access a multi-level menu. | Go to File > New . |
| <i>Italic</i> | Denotes document titles. | For details about using the UNM5800, refer to <i>UNM5800 Operation Guide</i> . |

Key Operations

| Operation | Description |
|----------------|---|
| Press | Press and release quickly. |
| Long press | Press and hold for the preset duration. |
| Double press | Press twice continuously and quickly. |
| Press and hold | Keep the key pressed. |

1. Packing List

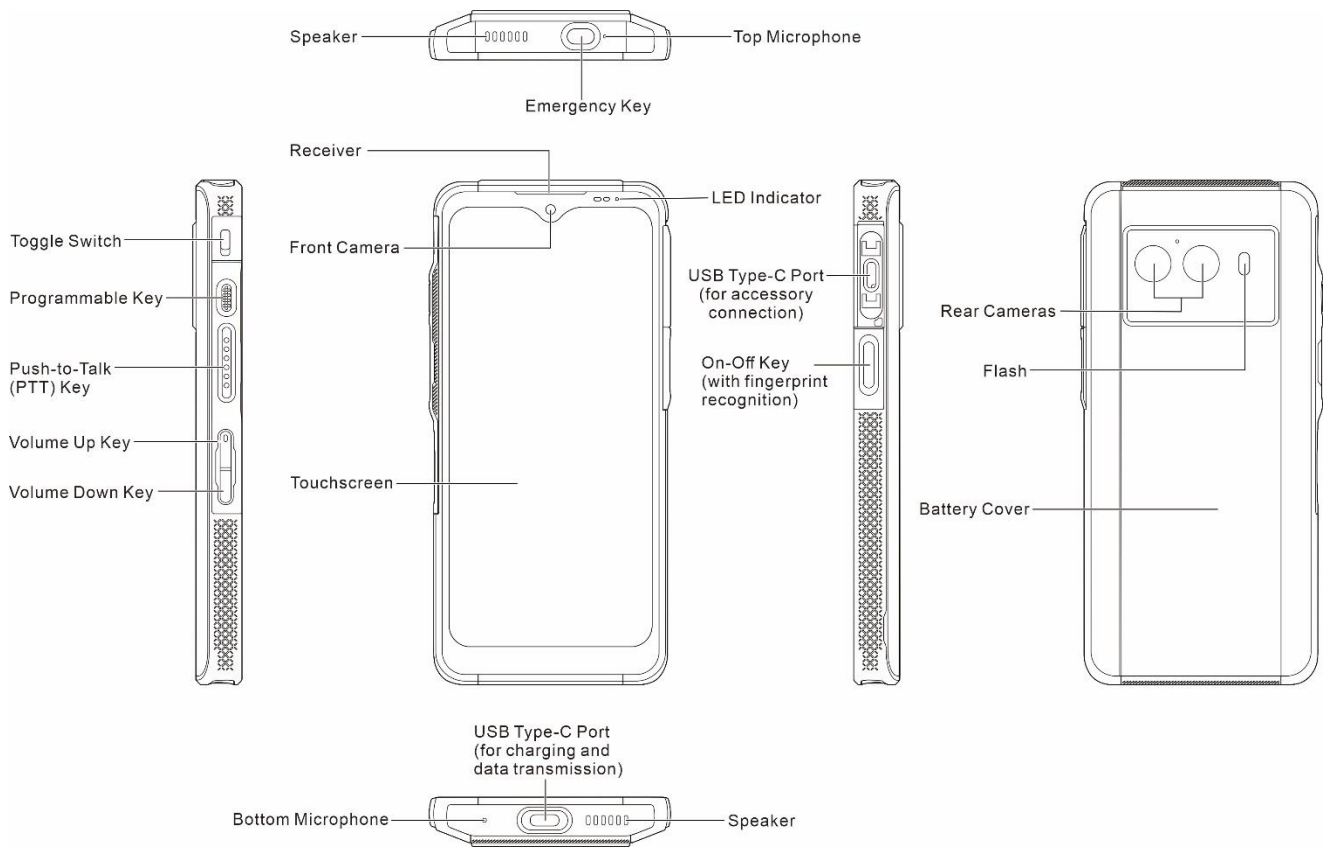
Unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

| Item | Quantity (PCS) | Item | Quantity (PCS) |
|---------------|----------------|-------------------|----------------|
| PNC660 | 1 | Battery Cover | 1 |
| Battery | 1 | Tempered Glass | 1 |
| Power Adapter | 1 | Documentation Kit | 1 |
| Data Cable | 1 | / | / |

 **NOTE**

- Figures in this manual are only for reference.
 - Check the label inside the battery slot to ensure that the purchased product is correct.
 - Use the original accessories in the packing list. Any change of the accessories (battery/data cable) may result in EMC failure.
-

2. Product Layout



3. Before Use

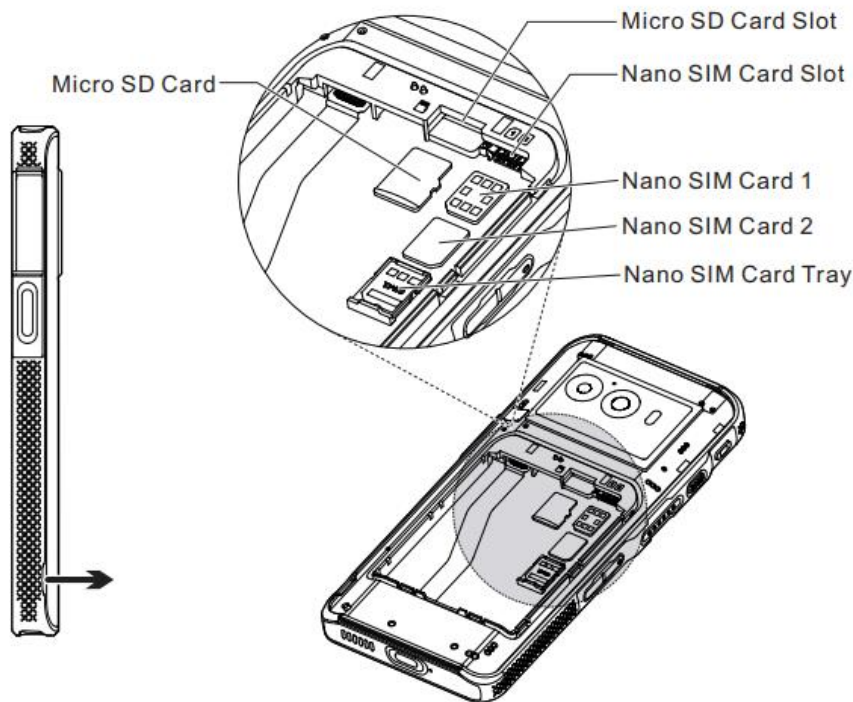
3.1 Install the Cards

Before installing the cards, remove the battery cover.

- Nano SIM Cards
 - a. Remove the Nano SIM card tray from the Nano SIM card slot.
 - b. Put the two Nano SIM cards into the tray, with their angled corners aligned with each side of the tray.
 - c. Insert the tray back into the Nano SIM card slot.

- Micro SD Card

Insert the Micro SD card into the Micro SD card slot.



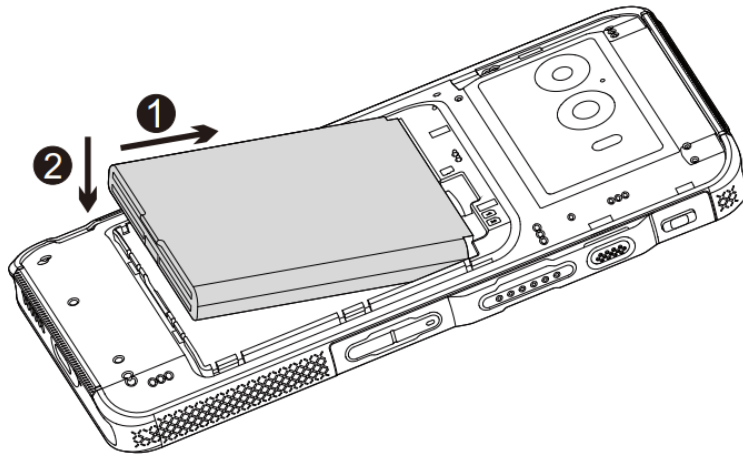
3.2 Attach the Battery

⚠ CAUTION

- Use the approved battery to avoid the risk of explosion.
- Dispose of the used battery according to "Precautions for Disposal" in the *Safety Information Booklet*.

-
- Turn off the device before replacing the battery to avoid data loss.
-

1. Remove the battery cover.
2. Align the contacts on the battery with those on the battery slot, and then slide the battery into the slot.
3. Put the battery cover back in place.



3.3 Charge the Battery

CAUTION


- Use the CE-approved power adapter and data cable to charge the battery.
 - Read the *Safety Information Booklet* before charging.
 - The remaining lithium-ion battery power is limited to 30% pursuant to the new lithium battery shipment regulation approved by the International Air Transport Association (IATA).
 - Do not use the USB Type-C port on the right side to charge the device or connect the device to the PC because this port is only for accessory connection.
 - After the charging finishes, disconnect the device from the power adapter promptly to avoid overcharging.
-

1. Connect one end of the data cable to the USB Type-C port at the bottom of the device.
2. Connect the other end of the data cable to the power adapter, power bank, or PC.

During charging, you can check the charging status through the battery icon or percentage on the touchscreen.


4. Basic Operations

4.1 Turn On or Off the Device

- To turn on the device, long press the **On-Off** key until the startup screen appears.
- To turn off the device, do either of the following.
 - Long press the **On-Off** key, and then select **Power off**.
 - Swipe down from the status bar, swipe down from the control center to unfold it, and then go to  > **Power off**.



4.2 Restart the Device

Do either of the following.


- Long press the **On-Off** key, and then select **Restart**.
- Swipe down from the status bar, swipe down from the control center to unfold it, and then go to  > **Restart**.

4.3 Set Auto Power On/Off

Scheduled Power On/Off

1. On the home screen, tap .
2. Go to **System** > **Scheduled power on/off**.
3. Tap  following **Scheduled power on** or **Scheduled power off**.
4. Tap **Power on time** or **Power off time** to set your device to turn on at a certain time.
5. Tap **Repeat** to select the days you want the device to turn on automatically.





Auto Power On While Charging

1. On the home screen, tap .
2. Go to **Display** > **Special settings**.
3. Tap  following **Auto power on while charging**.

The setting takes effect after you restart the device.

4.4 Adjust the Volume

Through the Volume Key

| If You Want to... | Then... |
|-----------------------------------|--|
| Vibrate the call and notification | <ol style="list-style-type: none"> 1. Press the Volume Up key or Volume Down key. 2. Tap the upper icon on the volume bar, and then tap . |
| Mute the call and notification | <ol style="list-style-type: none"> 1. Press the Volume Up key or Volume Down key. 2. Tap the upper icon on the volume bar, and then select . |
| Unmute the call and notification | <ol style="list-style-type: none"> 1. Press the Volume Up key or Volume Down key. 2. Tap the upper icon on the volume bar, and then select . |
| Adjust the volume | <ol style="list-style-type: none"> 1. Press the Volume Up key or Volume Down key. 2. Tap the lower  icon on the volume bar, and then drag the Media volume, Call volume, Ring volume, Notification volume, and Alarm volume sliders. 3. Tap Done. |



Through the Sound Interface

1. On the home screen, tap .
2. Tap **Sound & vibration**.
3. Drag the **Media volume**, **Call volume**, **Ring volume**, **Notification volume**, and **Alarm volume** sliders.

4.5 Use the SIM Cards

The device supports Dual SIM Dual Standby, but cannot access voice services or data services provided by the two SIM cards simultaneously.

4.5.1 Turn On or Off the SIM Card


1. On the home screen, tap .
2. Go to **Network & internet > SIMs**.
3. Select a SIM card.
4. Tap  following **Use SIM**.

 **NOTE**

To custom the name and color of the SIM card, tap  in the upper right corner.



4.5.2 Set SIM Card Preferences

If you have inserted two SIM cards, you can set a SIM card as the default one for the Internet, calls, and messages.

1. On the home screen, tap .
2. Tap **Network & internet** > **SIMs**.
3. Select one SIM card.
4. Do any of the following.
 - Tap **Data preference**, and then select the SIM card, which you want to use to access the network.
 - Tap **Calls preference**, and then select the SIM card, which you want to use to make a call.
 - Tap **SMS preference**, and then select the SIM card, which you want to use to send a message.



4.5.3 Turn On Auto Switch Data SIM

With Auto Switch Data SIM turned on, the device can automatically switch to the data SIM with stronger network connection.

1. On the home screen, tap .
2. Go to **Network & internet** > **Adaptive network**.
3. Tap  following **Auto switch data SIM**.

4.5.4 Set eSIM Card

The device can switch between SIM 2 and eSIM. With an eSIM turned on, you can access network services, make calls, and send messages without the need for a physical SIM card when you are in another country or region.

1. On the home screen, tap .
2. Tap **Network & internet**.
3. Tap  following **Switch from SIM2 to eSIM**.
4. Tap **Yes**.



5. Go to **Network & internet > SIMs > Add SIM**.
6. Tap **Download a SIM instead?**.
7. Read the on-screen information, and then tap **Next**.
8. Scan the eSIM activation QR code provided by the carrier.
9. Follow the on-screen instructions to complete settings.


4.6 Manage the Battery

You can check the battery usage, turn on Battery Saver to extend the battery life, and set whether to display the battery percentage in the status bar.

4.6.1 Turn On or Off Battery Saver

Battery Saver can reduce power consumption. If turned on, Battery Saver switches the device to the dark theme, limits background activities, and more.

- Manually turn on or off Battery Saver
 - Swipe down from the status bar to enter the control center, and then tap **Battery Saver** to turn it on.
 - On the home screen, go to  > **Battery > Battery Saver**, and then tap  following **Use Battery Saver**.
- Automatically turn on Battery Saver
 - a. On the **Battery Saver** interface, tap **Set a schedule**.
 - b. Tap **Based on percentage**.
 - c. Drag the slider to set a percentage.



Once the battery level drops to the preset percentage, Battery Saver will be automatically turned on.
- Automatically turn off the Battery Saver
 - Tap  following **Turn off at 90%**.

When the battery level is over 90%, Battery Saver will be automatically turned off.

NOTE

During charging, Battery Saver cannot be turned on.

4.6.2 Display the Remaining Battery

1. On the home screen, tap .
2. Tap **Battery**.
3. Tap  following **Battery percentage**.

The remaining battery percentage will be displayed in the status bar.



4.6.3 Set the Battery High Temperature Shutdown

Battery Over-temperature Protection makes the device automatically shut down when its temperature reaches 65°C or higher.

1. On the home screen, tap .
2. Tap **Battery**.
3. Tap  following **Over-temperature protection**.

4.6.4 Turn On Display Saver



With Display Saver turned on, the screen dims to save battery.

1. On the home screen, tap .
2. Tap **Battery**.
3. Tap  following **Display saver**.

4.7 Manage the Storage

You can check the storage usage and free up space for better use.




To extend the storage space, install a Micro SD card in the device.

1. On the home screen, tap .
2. Tap **Storage**.
3. Do either of the following:
 - To manually free up the storage space, tap **Free up space**.
 - To automatically free up the storage space regularly, tap  following **Storage manager**, and then tap **OK**.

4.8 Manage the Notification

4.8.1 Turn On or Off the App Notification

You can turn on or off notifications from an app.

1. On the home screen, tap .
2. Go to **Notifications** > **App notifications**.
3. Tap  to turn it on or  to turn it off following the app.



NOTE

Notifications from some apps cannot be turned on or off.

4.8.2 Turn Off the Notification Dot

You can set no dot to be displayed on the app icon when the app receives notifications.

Notification Dot of an App


1. On the home screen, tap .
2. Tap **Notifications** > **App notifications**.
3. Tap the app.
4. Tap  following **Allow notification dot**.

Notification Dot of All Apps

- Method 1





1. On the home screen, tap .
2. Tap **Notifications**.
3. Below **General**, tap  following **Notification dot on app icon**.

- Method 2



1. On the home screen, touch and hold the blank area, and then select **Home settings**.
2. Tap **Notification dots**, and then tap  following **Notification dot on app icon** to turn off notifications dots on app icons.



4.8.3 Set the Notification

1. On the home screen, tap .
2. Tap **Notifications**.
3. On the **Notifications** interface, do any of the following:

- To view the conversation that you have set to priority or have changed the notification settings, tap **Conversations**.
- To allow some conversations to be displayed on top of other apps, tap **Bubbles**, and then tap  following **Allow apps to show bubbles**.
- To control which apps and devices can read notifications, tap **Device & app notifications**.
- To set how notifications are shown on the lock screen, tap **Notifications on lock screen**, and then select a method.
- To show sensitive content of the notifications when the screen is locked, tap  following **Sensitive notifications**.
- To flash the camera light or the screen when you receive notifications or when alarms sound, tap **Flash notifications**, and then set the flash.
- To hide silent notifications in the status bar, tap  following **Hide silent notifications in status bar**.
- To allow notification alert after the preset time, tap  **Allow notification snoozing**.


NOTE

After **Allow notification snoozing** is turned on, you can set the alert time. In the notification center, tap  to unfold an unread notification, and then tap  in the lower right corner of the notification.


- To allow the LED indicator to blink when the device receives notifications, tap  following **Blink light**.
- To show suggested actions, replies, and more, tap  following **Enhanced notifications**, read the on-screen instructions, and then tap **OK**.

4.9 Set the Programmable Key

After you assign a specific feature to the **Programmable Key**, you can short press, long press, or double press the **Programmable Key** to use the feature.

1. On the home screen, tap .
2. Tap **Programmable keys**.
3. Select **Long press**, **Short press**, or **Double press**, and then tap the feature that you want to assign to the key.

4.10 Check the Device Information

1. On the home screen, tap .
2. Tap **About phone**.

You can view the device name, security chip, SIM card status, legal information, International Mobile Equipment Identity (IMEI), model, Android™ 14, and more.

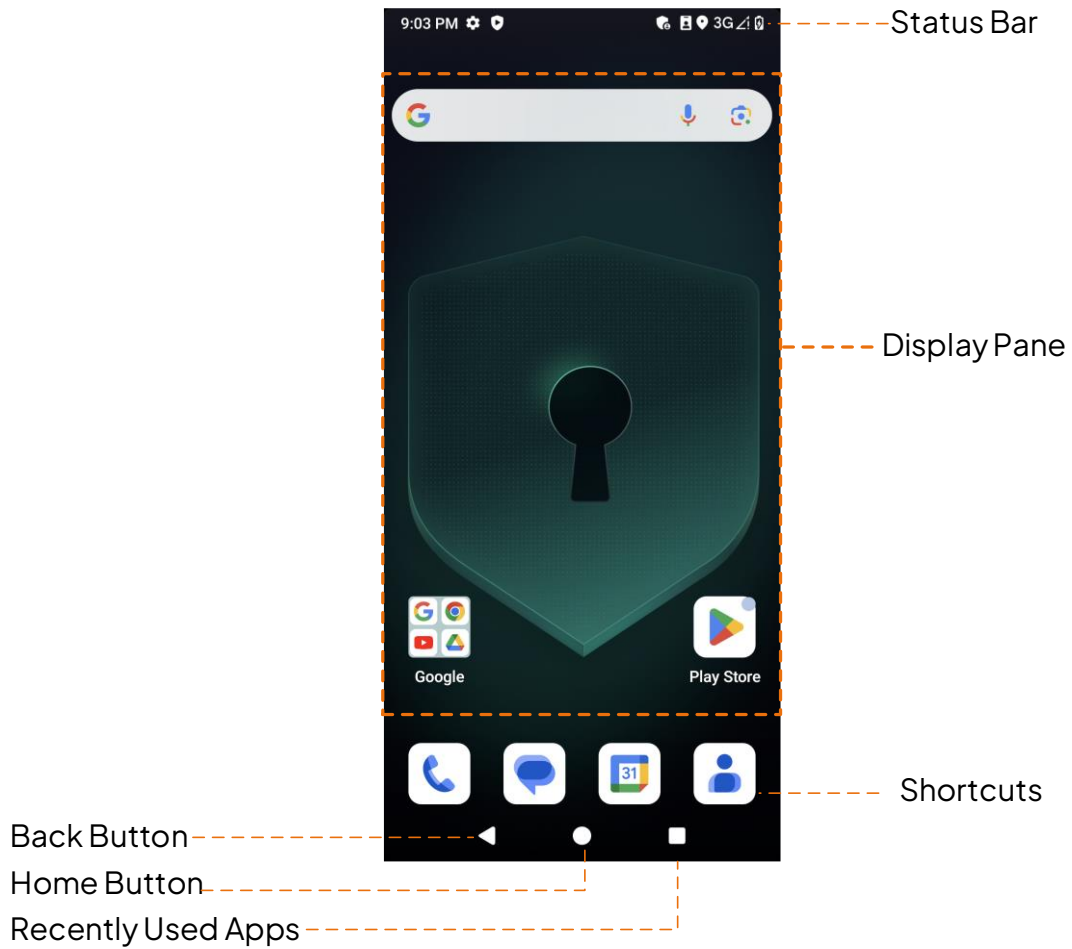
 **NOTE**

Android is the trademark of Google LLC.

4.11 Set the USB Connection Mode with PC





1. Connect the device to the PC through the USB data cable.
2. Swipe down from the status bar.
3. In the notification center, tap **Charging this device via USB**.
4. Tap **Tap for more options**.
5. On the **USB Preferences** interface, select one of the following options:
 - **File Transfer**: allows you to transfer files between the device and the PC.
 - **USB tethering**: allows you to share the network of the PC.
 - **MIDI**: allows you to use the device as a musical instrument digital interface (MIDI) input device and play music on the PC.
 - **PTP**: allows you to transfer pictures to the PC.
 - **No data transfer**: allows you to only charge the device by the PC.

5. Screen

































5.1 Understand Screen Operations

| Operation | Illustration | Description | Example |
|----------------|--------------|--|--|
| Tap | | Touch an item once with your finger. | Tap to open the Camera app. |
| Touch and hold | | Touch an item with your finger and maintain contact. | Touch and hold until it jiggles. |
| Swipe | | Swipe your finger across the screen. | Swipe down from the top edge of any screen to access the notification panel. |

| Operation | Illustration | Description | Example |
|-----------|---|--|--|
| Drag |  | Touch and press an item, and then move it to a new position. | Touch and press  until it jiggles, and then drag it to the proper position. |
| Pinch |  | Move two fingers together on the screen. | Pinch a photo to zoom out. |
| Spread |  | Move two fingers apart on the screen. | Spread a photo to zoom in. |

5.2 Understand the Status Icons

| Icon | Description | Icon | Description |
|---|--|---|---|
|  | The device is connected to the WLAN. |  | The device works in Vibration mode. |
|  | The SIM card is not inserted. |  | The BT is connected. |
|  | The device has registered in the cellular network. |  | The BT feature is turned on. |
|  | The device has not registered in the cellular network. |  | An earpiece is connected. |
|  | The WLAN hotspot is turned on. |  | The Alarm feature is turned on. |
|  | The device is in the work domain. |  | The device is in Covert mode. |
|  | The device is in the life domain. |  | The device is in Confidential mode. |
|  | The Man Down feature is turned on. |  | With the Location feature turned on, the device obtains valid location information. |
|  | The Lone Worker feature is turned on. |  | With the Location feature turned on, the device does not obtain valid location information. |
|  | The battery power is full. |  | The device works in Do Not Disturb mode. |

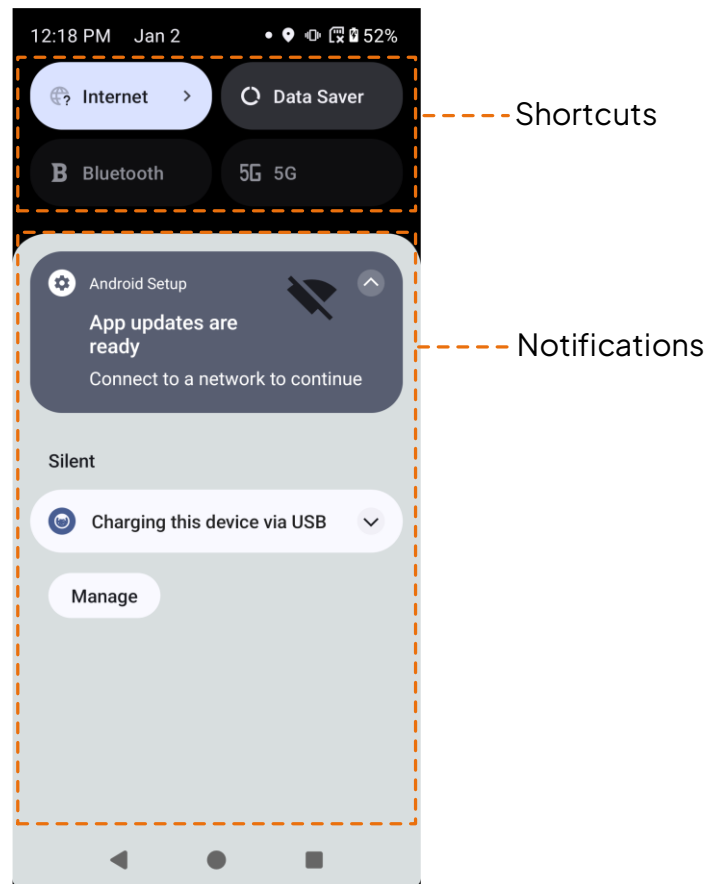
| Icon | Description | Icon | Description |
|---|--------------------------------------|---|------------------------------------|
|  | The battery is being charged |  | There is/are (a) new message(s). |
|  | The battery power is low. |  | There is/are (a) missed call(s). |
|  | The Battery Saver mode is turned on. |  | The device is downloading file(s). |
|  | The device works in Silence mode. |  | The device is uploading file(s). |
|  | The device works in Airplane mode. |  | The device has downloaded file(s). |

5.3 Understand and Manage the Control and Notification Center

5.3.1 Understand the Control and Notification Center

The control and notification center allows you to instantly access frequently used features and settings by using shortcut switches, adjust the screen brightness, and view or clear the notifications.


- To access the control center, swipe down from the status bar.
- To view all shortcuts, swipe down from the control center.



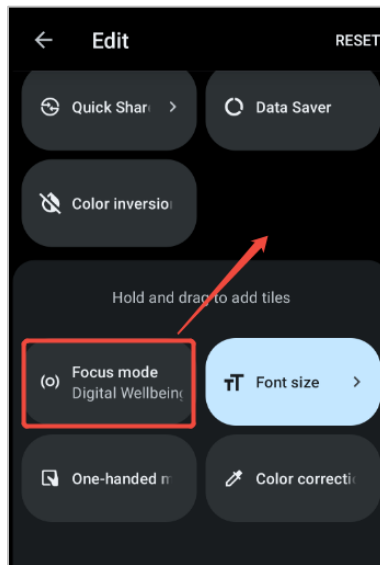
5.3.2 Manage the Control and Notification Center

Add a Shortcut to the Control Center

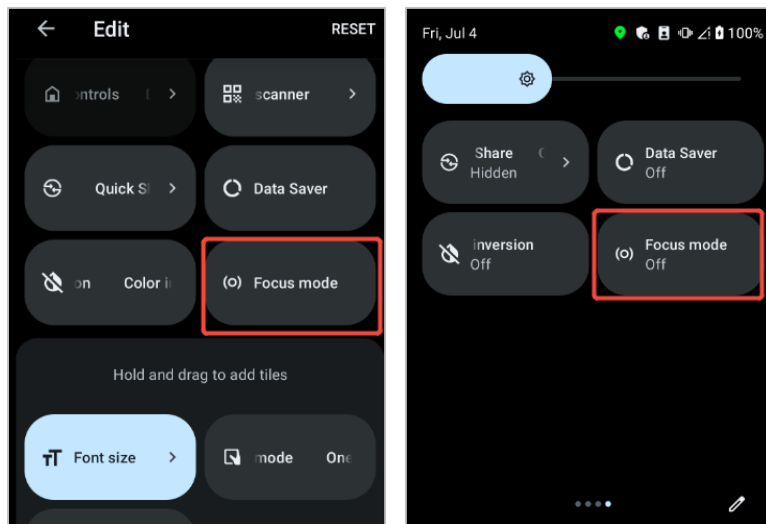
If a shortcut is not available in the control center, you need to add it to the control center first.

1. Swipe down from the status bar.
2. Swipe down from the control center to unfold it.
3. Tap .
4. Swipe up to the bottom, below **Hold and drag to add tiles**, hold and drag a shortcut to the upper area.


The following takes the Focus mode shortcut as an example.



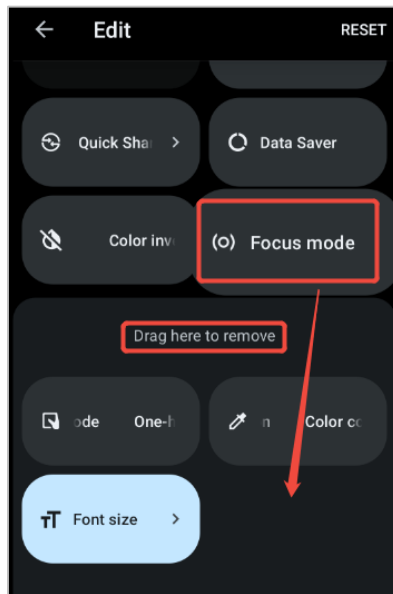
The Focus mode shortcut is added.



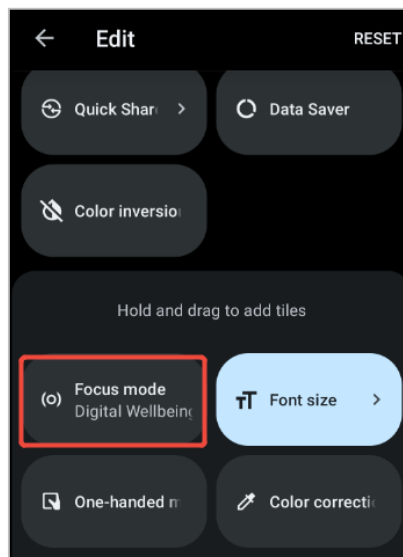
Remove a Shortcut from the Control Center

1. Swipe down from the status bar.
2. Swipe down from the control center to unfold it.
3. Tap .
4. Touch and hold a shortcut, and then drag it to the area below **Drag here to remove**.

The following takes the Focus mode shortcut as an example.

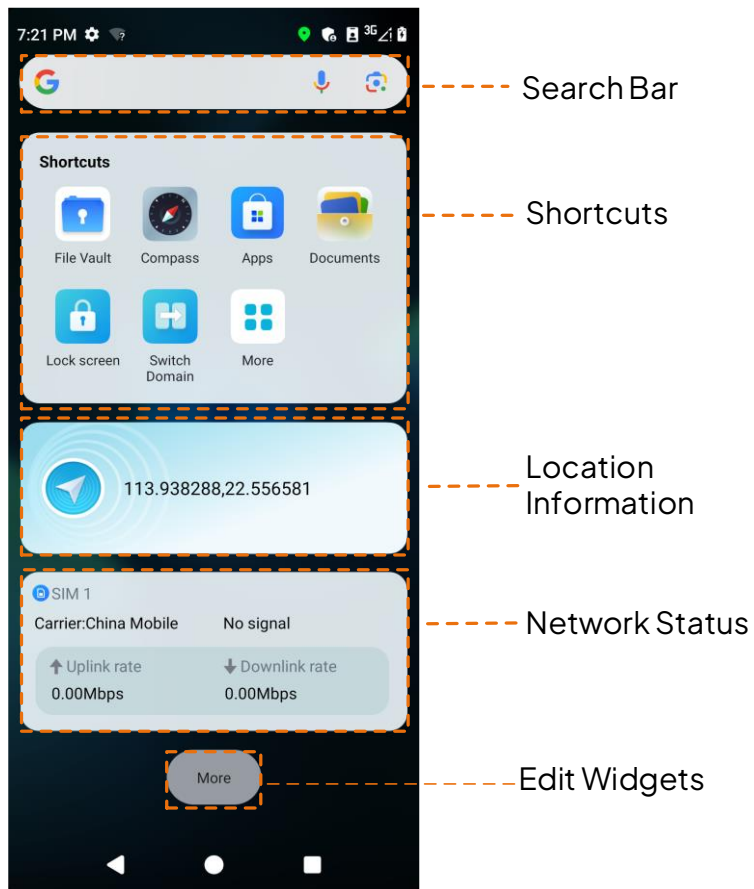


The Focus mode shortcut is removed.




5.4 Set the Quick Access Screen

The Quick Access screen allows you to quickly open apps, search for specific content, turn on or off switches, and have a glimpse of network status and location information.



| If You Want to... | Then... |
|--------------------------------|--|
| Access the Quick Access screen | Swipe right from the left edge of the home screen. |
| Edit the Quick Access screen | Tap More in the lower part of Quick Access. <ul style="list-style-type: none"> ● Touch and hold to drag a widget to adjust the widget order. ● Tap the toggle following a widget to add or remove the widget. |
| Search for specific content | Tap the search bar, and enter the keywords. |
| Open recently used apps | Tap the search bar. Under the search bar, the recently used apps appear. |
| Manage shortcuts | Tap More in the Shortcuts widget. <ul style="list-style-type: none"> ● To add a shortcut, tap + in the upper right corner of a shortcut. |


| If You Want to... | Then... |
|-------------------|--|
| | <ul style="list-style-type: none"> To remove a shortcut, tap  in the upper right corner of a shortcut. |

5.5 Manage Widgets

The widgets allow you to quickly access apps.

- To add a widget, do the following:
 - On the home screen, touch and hold the blank area, and then select **Widgets**.
 - In the app list, tap an app.
 - Touch and hold a widget, and then drag it to the blank area on the home screen.
- To move the widget, drag it to a new location.
- To remove a widget, drag it to **Remove** at the top.

5.6 Capture the Screen

- Method 1
 - Press the **On-Off** key and the **Volume Down** key simultaneously.
 - (Optional) To view the screenshot, on the home screen, tap .
- Method 2
 - Swipe down from the status bar.
 - Swipe down from the control center to unfold it.
 - (Optional) Swipe left to find **Screenshot**.
 - Tap **Screenshot**.
- Method 3



Press the programmable key with the screenshot feature assigned to it. For details, see [4.9 Set the Programmable Key](#).
- Method 4

With the Three-finger Screenshot feature turned on, swipe down on the screen with three fingers to capture the screen. For details, see [15.8 Set the Three-finger Screenshot](#).


5.7 Record the Screen

Screen Record allows you to record all the activities on the screen and save the recording as a video.

Start Recording





1. Swipe down from the status bar.
2. Swipe down from the control center to unfold it.
3. (Optional) Swipe left to find **Screen record**.
4. Tap **Screen record**.
5. On the **Start Recording?** dialog, set screen recording parameters.
 - (Optional) Tap **Record audio** to choose the audio source between **Device audio** and **Microphone**, and then tap  following **Record audio**.
 - (Optional) Tap  following **Show touches on screen** to show finger touches when recording on the device.
6. Tap **Start**.

Stop Recording

1. Swipe down from the status bar.
2. In the notification center, tap **Stop**.
3. (Optional) To view the recording, do either of the following:
 - In the notification center, tap **Screen recording saved**.
 - On the home screen, tap  > **Movies**.

5.8 Cast the Screen Wirelessly



The Cast feature allows you to project the device screen wirelessly to a large display.

1. Turn on the WLAN.
 - On the home screen, go to  > **Network & internet** > **Internet** > **WLAN**, and then tap  following **WLAN**.
 - Swipe down from the status bar to enter the control center, and then tap **WLAN**.
2. Enter the **Cast** interface.
 - On the home screen, go to  > **Connected devices** > **Connection preference** > **Cast**.
 - Swipe down from the status bar to enter the control center, swipe left to find **Screen Cast**, tap **Screen Cast**, and then tap **Settings**.
3. In the upper right corner, tap , and then select **Enable wireless display**.


4. Select a display you want to cast from the list of available devices.
5. When the display accepts the request, on the **Invitation to connect** dialog, enter the PIN code.
6. Tap **ACCEPT**.

5.9 Auto-Rotate the Screen

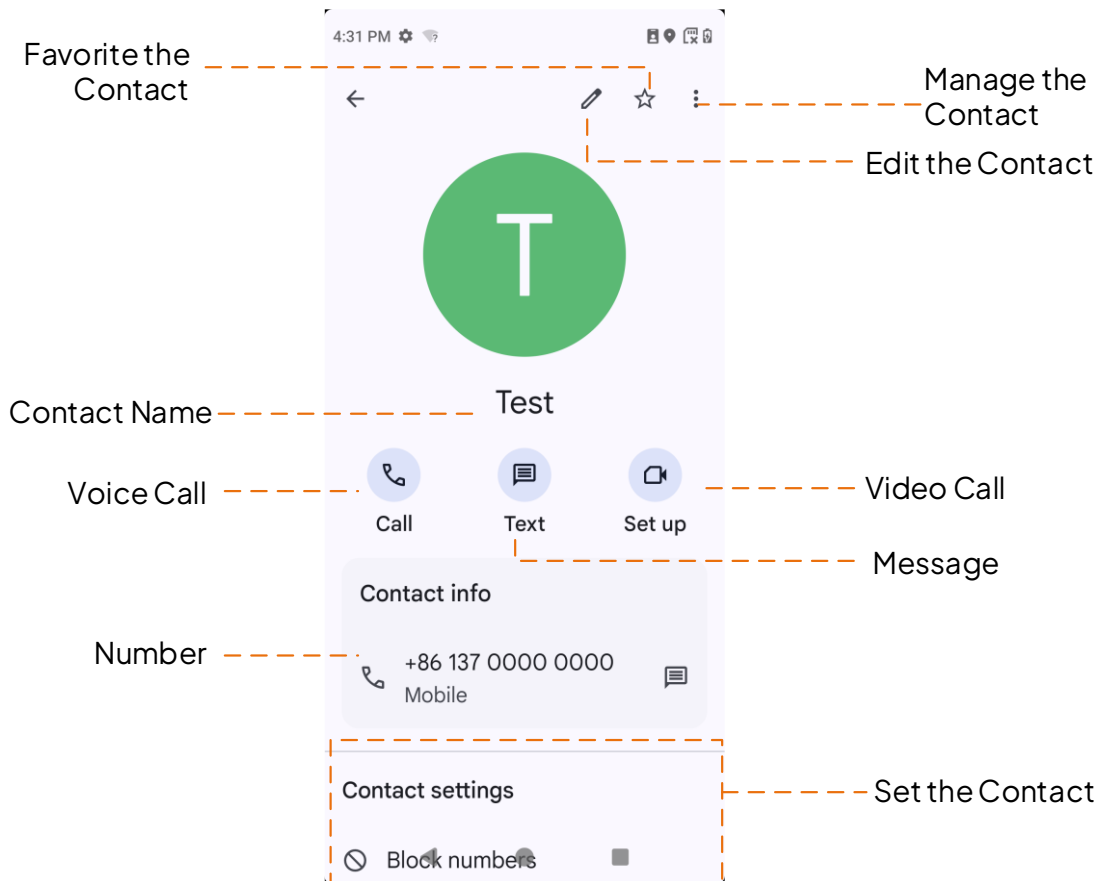
Auto-Rotate Screen allows the device to automatically switch between portrait and landscape orientations when you rotate the device.

- Method 1
 - a. Swipe down from the status bar.
 - b. Swipe down from the control center to unfold it.
 - c. (Optional) Swipe left to find **Auto-rotate**.
 - d. Tap **Auto-rotate**.
- Method 2
 - a. On the home screen, tap .
 - b. Tap **Display**.
 - c. Tap  following **Auto-rotate screen**.



6. Contacts

You can use the Contacts app  to manage your contact information, such as phone numbers, emails, and addresses.



6.1 Understand the Contact Interface





6.2 Add a New Contact

1. On the home screen, tap .
2. In the lower right corner, tap .
3. Set the contact information including name, phone number, and email address.
4. In the upper right corner, tap **Save**.

6.3 Add a Contact to Favorites





1. On the home screen, tap .
2. Tap a contact to enter the details interface.
3. In the upper right corner, tap .

6.4 Search for a Contact



1. On the home screen, tap .
2. In the  **Search contacts** field, enter the keywords.



The device displays the search results below the search box.

6.5 Share a Contact



- Method 1
 - a. On the home screen, tap .
 - b. Touch and hold the contact.
 - c. (Optional) Tap other contacts you want to share.
 - d. In the upper right corner, tap .
 - e. Select a sharing method.
- Method 2
 - a. On the home screen, tap .
 - b. Tap the contact you want to share.
 - c. In the upper right corner, tap .
 - d. Tap **Share**, select the option, and then tap **Continue**.
 - e. Select a sharing method.

6.6 Delete a Contact


- Method 1
 - a. On the home screen, tap .
 - b. Tap the contact you want to delete.
 - c. Tap .
 - d. Select **Delete**.

- e. Tap **Delete**.
- Method 2
 - a. On the home screen, tap .
 - b. Touch and hold the contact.
 - c. In the upper right corner, tap .
 - d. Tap **Delete**.


6.7 Create a Contact Label

1. On the home screen, tap .
2. On the left of the upper search box, tap .
3. Tap **New label**.

6.8 Manage the Contacts in SIM Card

1. On the home screen, tap .
2. On the bottom bar, tap **Organize**.
3. Tap **Manage SIM**.

6.9 Set the Contacts

1. On the home screen, tap .
2. In the lower right corner, tap **Organize**.

You can set the contact ringtones, import or export contacts, block a number, and more.

7. PoC Services

The push-to-talk over cellular (PoC) service allows you to make call services such as group or private voice calls over the public network or WLAN.

NOTE

- Install the PoC app on your device properly.
 - Make sure that your device has been connected to mobile network or WLAN.
-

7.1 Initiate a Group Call


1. On the home screen, open the PoC app.
2. From the group call list, select a group to initiate a group call.
3. On the main interface of the PoC app, press and hold the **PTT** key to speak.
4. After speech, release the **PTT** key.

7.2 Initiate a Private Call



1. On the home screen, open the PoC app.
2. From the contact list, select a contact to initiate a private call.
3. After the call is initiated, do either of the following:
 - Half-duplex call: Press and hold the **PTT** key to speak, and release the **PTT** key after the speech.
 - Full-duplex call: Speak directly without pressing the **PTT** key.

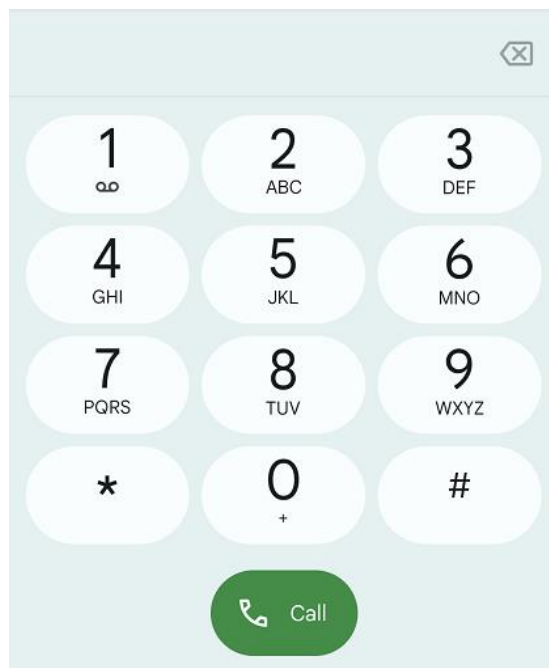
8. Calls


8.1 Make a Call

After the device with a SIM card has been registered with the carrier network, you can use the Phone app  to make and receive phone calls or emergency calls.



Through the Dialpad

1. On the home screen, tap .
2. Tap .





3. On the dialpad, enter the phone number.
4. Tap .

Through the Favorites or Contact List

1. On the home screen, tap .
2. Do either of the following:
 - On the bottom bar, tap **Favorites**, and then tap the contact.
 - On the bottom bar, tap **Contacts**, tap a phone contact to enter the details interface, and then tap .

Through the Call Log


1. On the home screen, tap .

2. On the bottom bar, tap **Recents**.
3. Tap .

8.2 Receive or Decline a Call

When a phone call is coming in, tap **Answer** to receive it or tap **Decline** to decline it.


8.3 View a Missed Call

If there is a missed call, you can see  in the status bar.

Swipe down from the status bar.

You can see the missed call notification.





8.4 End a Call

To end a phone call, tap .



8.5 Make an Emergency Call

If the device is within the network coverage of the carrier, you can initiate an emergency phone call even without the SIM card installed.

Do either of the following:

- On the unlocked screen, go to  > , enter the emergency number, and then tap .
- On the locked screen, swipe up and then tap **Emergency**, enter the emergency number, and then tap .

8.6 Set a Call






1. On the home screen, tap .
2. On the right of the upper search box, tap .
3. Select **Settings**.

You can set caller ID & spam, accessibility, blocked numbers, display options, quick responses, sounds and vibration, voicemail, and more.



9. Messages

You can use the Messages app  to send and receive text or multimedia messages.



9.1 Send a Message

1. On the home screen, tap .
2. In the lower-right corner, tap **Start chat**.
3. In the **To** field, enter the contact name, phone number or email, or select a contact from the list.
4. (Optional) To send a message to multiple contacts, tap  **Create group**.
5. Tap the **Text message** field, and then enter the content.
 - To send a picture, tap .
 - To send an emoji, location, contact, or file, tap .
6. To send the message, tap .


9.2 Search for a Message


1. On the home screen, tap .
2. Tap .
3. In the **Search messages** field, enter the keywords.
4. (Optional) To sort messages by unread, known, known, started, images, videos, places, or links, tap the corresponding tab.

9.3 Delete a Conversation







1. On the home screen, tap .
2. Touch and hold the conversation.
3. Tap .
4. Tap **Delete**.

9.4 Block the Message from a Contact


1. On the home screen, tap .
2. Touch and hold the conversation.

3. Tap .
4. (Optional) Read on-screen instructions, and then select or deselect **Report as spam**.
5. Tap **Yes**.

9.5 Manage the Message

1. On the home screen, tap .
2. Tap a conversation.
3. Touch and hold a message text, and do any of the following:
 - To copy and paste the text message, tap .
 - To delete the message, tap .
 - To star the message, tap .
 - To share the message, tap , and then tap **Share**.
 - To view the message details, tap , and then tap **View details**.

9.6 Set the Messages App

1. On the home screen, tap .
2. In the upper-right corner, tap the profile photo or icon.
3. Tap **Messages settings**.





You can set the message notification, theme, swipe actions, and more.
4. (Optional) Tap **Advanced** for more settings.

10. Connectivity


10.1 Mobile Network


10.1.1 Turn On the Mobile Network








Before accessing the cellular network services, ensure that you have properly installed the SIM card. If the cellular network services are not in use, you can turn off it to reduce data usage and extend battery life.

- Method 1
 - a. On the home screen, tap .
 - b. Go to **Network & internet > SIMs**.
 - c. Select a SIM card.
 - d. Tap  following **Use SIM**.
 - e. Tap  following **Mobile data**.
- Method 2
 - a. Swipe down from the status bar.
 - b. Swipe down from the control center to unfold it.
 - c. (Optional) Swipe right to find **Internet**, and then tap it.
 - d. Tap  following a carrier to turn on mobile data.


10.1.2 Set the Mobile Network

1. On the home screen, tap .
2. Go to **Network & internet > SIMs**.
3. Select a SIM card.
4. Do any of the following:

| If You Want to... | Then... |
|----------------------|---|
| Turn on data roaming | Tap  following Roaming . You can access data services when you are outside the service area of your carrier. |
| Turn on 5G | <ul style="list-style-type: none"> ● Method 1 |

| | |
|---|---|
| | <p>Tap  following Use 5G.</p> <ul style="list-style-type: none"> ● Method 2 <ul style="list-style-type: none"> a. Swipe down from the status bar. b. Tap the 5G shortcut switch. <p> NOTE</p> <p>Before accessing the 5G network services, ensure that you have installed the SIM card with 5G services enabled.</p> |
| Set the preferred network type, including the 2G, 3G, 4G, or 5G network | <p>Tap Preferred network type.</p> <p> NOTE</p> <p>To use 5G network, enable 5G services first.</p> |
| Turn on WLAN calling | <ol style="list-style-type: none"> 1. Tap WLAN calling. 2. Tap  following Use WLAN calling. |
| Turn on carrier video calling | <p>Tap  following Carrier video calling.</p> |
| Turn on auto-switch network between dual SIM cards | <p>Tap  following Automatically select network.</p> |
| Manage the APN | <ol style="list-style-type: none"> 1. Tap Access Point Names. 2. Do either of the following: <ul style="list-style-type: none"> ➤ To edit the parameters of an APN, tap the APN, and then enter the parameters. ➤ To add an APN, in the upper right corner, tap , and then enter the parameters. |
| Set the PLMN | <ol style="list-style-type: none"> 1. Tap User Controlled PLMN. 2. Tap NEW PLMN. 3. Enter the network ID and priority, and then select the network mode. |


10.1.3 Monitor the Data Usage



1. On the home screen, tap .

2. Go to **Network & internet > SIMs**.
3. Select a SIM card.
4. Tap **App data usage**.

You can see the data usage of every app.

10.1.4 Limit the Data Usage



1. On the home screen, tap .
2. Go to **Network & internet > SIMs**.
3. Select a SIM card.
4. Tap **Data warning & limit**.
5. Do any of the following:

| If You Want to... | Then... |
|--|---|
| Specify a date when the mobile data usage resets | <ol style="list-style-type: none"> 1. Tap Mobile data usage cycle. 2. Set the usage cycle reset date. |
| Turn on data warning | Tap  following Set data warning . |
| Set the threshold for data warning | <ol style="list-style-type: none"> 1. Tap Data warning. 2. Enter the threshold value for data warning. 3. (Optional) Select MByte or GByte from the drop-down list. 4. Tap Set. |
| Turn on the data limit | <ol style="list-style-type: none"> 1. Tap  following Set data limit. 2. Read the on-screen instructions, and then tap OK. |
| Set the threshold for the data limit | <ol style="list-style-type: none"> 1. Tap Data limit. 2. Enter the threshold value for the data limit. 3. (Optional) Select MByte or GByte from the drop-down list. 4. Tap Set. |


| | |
|--|---|
| | Your PNC660 will turn off mobile data once it reaches the data limit you set. |
|--|---|

10.1.5 Turn On the Data Saver

Data Saver prevents apps from using data in the background.


- Method 1
 - a. On the home screen, tap .
 - b. Go to **Network & internet > Data Saver**.
 - c. Tap  following **Use Data Saver**.
- Method 2
 - a. Swipe down from the status bar.
 - b. Swipe down from the control center to unfold it.
 - c. (Optional) Swipe left to find **Data Saver**, and then tap it
 - d. Read the on-screen instructions, and then tap **Turn on**.

10.1.6 View the Network Information

1. On the home screen, swipe right from the left.
2. On the Quick Access screen, tap **More**.
3. Tap  following the **Network** to add the **Network** widget to Quick Access.

You can view network information such as the carrier, signal strength, uplink rate, and downlink rate.


10.1.7 View the Mobile Plan

1. On the home screen, tap .
2. Go to **Network & internet > Mobile plan**.

You can see the carrier information and mobile plan of the SIM card.

10.1.8 Turn On Private DNS


Private DNS allows the device to access the Internet through a web address instead of an IP address.

1. On the home screen, tap .

2. Go to **Network & internet** > **Private DNS**.
3. Select any of the following:
 - **Off**
 - **Automatic**
 - **Private DNS provide hostname:** You need to enter the hostname of the DNS provider.
4. Tap **Save**.

10.1.9 Turn On Auto Switch to Mobile Network




With Auto Switch to Mobile Network turned on, the device can automatically switch to mobile network when WLAN connection is unstable, and will switch back to WLAN when the connection restores stability.

1. On the home screen, tap .
2. Go to **Network & internet** > **Adaptive Network**.
3. Tap  following **Auto switch to mobile network**.


10.2 WLAN




10.2.1 Connect to the WLAN

With a successful WLAN connection, you can visit the Internet or shared media with other devices under the same network.

1. Turn on WLAN.
 - On the home screen, go to  > **Network & internet** > **Internet**, and then tap  following **WLAN**.
 - Swipe down from the status bar to enter the control center, touch and hold **Internet**, and then tap  following **WLAN**.
2. Select a network from the list.
 - If you select an open network, the device automatically connects to it.
 - If you select a secured network, you need to enter the password before connection.
 - If no network in the list, do the following:
 - i. Tap **Add network**.
 - ii. Enter the network name or scan the QR code to add the network.



10.2.2 Set the WLAN

1. On the home screen, tap .
2. Go to **Network & internet** > **Internet**.
3. Do any of the following:





| If You Want to... | Then... |
|---|--|
| Turn on automatic WLAN connection when a high-quality public network is available | <ol style="list-style-type: none"> 1. Tap Network preferences. 2. Tap  following Turn on WLAN automatically. |
| Receive a notification when a high-quality public network is available | <ol style="list-style-type: none"> 1. Tap Network preferences. 2. Tap  following Notify for public networks. |
| Turn on automatic switch to mobile data when WLAN has no Internet access | <ol style="list-style-type: none"> 1. Tap Network preferences. 2. Tap  following Switch to mobile data automatically. |
| View saved networks | Tap Saved networks . |
| Delete saved networks | <ol style="list-style-type: none"> 1. Tap Saved networks. 2. Tap the WLAN. 3. Tap Forget. |
| Check non-carrier data usage | Tap Non-carrier data usage . |

10.2.3 Print Through WLAN

You can connect the device to a printer through WLAN and print pictures or files. The following takes picture printing as an example.

1. Add a printer.
 - a. On the home screen, tap .
 - b. Go to **Connected devices** > **Connection preference** > **Printing** > **Default Print Service**.
 - c. Tap  following **Use print service**.


The device searches for available printers automatically.

- d. Tap the printer name.
2. Print a picture.
 - a. On the home screen, tap .
 - b. Tap a picture.
 - c. In the upper right corner, tap .
 - d. Tap  Print.
 - e. Go to  > **All printers...** to select a printer.
 - f. Follow the on-screen instructions to print the picture.

10.3 Ethernet

You can connect the device to Ethernet through a USB to Ethernet adapter.



To set the Ethernet, do the following:








1. On the home screen, tap .
2. Go to **Connected devices** > **Connection preferences**.
3. Tap **Configuring Ethernet** > **Configuring Ethernet**.
4. Below **Connection type**, select **Automatic IP** or **Static IP** according to your need.

10.4 Hotspot and Tethering

Hotspot and Tethering allows the device to share the mobile network connection with nearby devices.

1. On the home screen, tap .
2. Go to **Network & internet** > **Hotspot & tethering**.
3. Do any of the following:



| If You Want to Share Mobile Network... | Then... |
|--|---|
| Through WLAN hotspot | <ol style="list-style-type: none"> 1. Tap WLAN hotspot. 2. Tap  following Use WLAN hotspot. 3. Set the hotspot name, security, password., and AP band. <p> NOTE</p> |

| | |
|----------------------------|---|
| | To turn on the saved hotspot, you can tap Hotspot in the control center. |
| Through USB tethering | <ol style="list-style-type: none"> 1. Connect the device to the PC through the USB cable. 2. Tap  following USB tethering. |
| Through BT tethering | <ol style="list-style-type: none"> 1. Tap  following BT tethering. 2. Tap  twice back to the Settings interface. 3. Go to Connected devices. 4. Tap the connected device. 5. Tap  following Internet access. <p> NOTE</p> <p>Before BT tethering, pair and connect the device with and to peripheral BT devices. For details, see 10.5.1 Pair a Peripheral BT Device.</p> |
| Through Ethernet tethering | <p>Tap  following Ethernet tethering.</p> <p> NOTE</p> <p>Before Ethernet tethering, connect the device to Ethernet through the Ethernet adapter.</p> |

10.5 BT

BT allows the device to exchange files with another BT-enabled device over short distances.

10.5.1 Pair a Peripheral BT Device


1. Turn on BT.
 - On the home screen, go to  > **Connected devices** > **Connection preference** > **BT**, and then tap  following **Use BT**.
 - Swipe down from the status bar to enter the control center, and then tap **BT**.

The device automatically detects available BT devices, and can be detected by other BT devices.


2. Tap **Pair new device**.
3. From the **Available devices** list, tap a device to pair, and then tap **OK**
4. Tap **Pair**.
5. Wait for the BT device to respond to the BT pairing request.

After the peripheral BT device accepts the BT pairing request, the device can exchange files with the peripheral BT device.



NOTE

To forget the paired device, tap  following the device under the **Saved devices** list, and then tap **Forget**.

10.5.2 Share a File Through BT

Many apps allow the device to exchange data with other devices through the BT. The following takes the Photos app  as an example.

To send photos or videos through the BT, do the following:

1. On the home screen, tap .
2. Touch and hold the picture or video.
3. Tap .
4. Select **B**.
5. Tap the peripheral BT device from the **Available devices** list.

When the peripheral BT device accepts the request, the device will send the file to the peripheral BT device.

10.5.3 Rename the Device

The device name for BT connection is the device model by default.


1. On the home screen, tap .
2. Go to **Connected devices > Connection preference > BT > Pair new device**, tap **Device name**.
3. Enter a new name.

4. Tap **Rename**.

10.6 Quick Share

Quick Share allows you to share files with nearby devices.

10.6.1 Turn on Quick Share

1. On the home screen, tap .
2. Go to **Connected devices** > **Connection preferences** > **Quick Share**.
3. Tap **Who can share with you**.
4. Tap following **Visible to nearby devices**.
5. Choose who can share with you:
 - **Your devices**: Your device is visible to your other devices with the same Google Account, even when the screen is off.
 - **Contacts**: Your device is visible to your nearby contacts while your screen is on and unlocked.
 - **Everyone**: Your device is visible to anyone who is nearby while your screen is on and unlocked.
Only for 10 minutes: To protect your privacy, your visibility will automatically switch back to your previous selection after 10 minutes.

NOTE

Make sure that the BT is turned on. For details, see [10.5.1 Pair a Peripheral BT Device](#).

10.6.2 Rename the Device



You can change the device name. The default name is the device model.

1. On the **Quick Share** interface, tap **Device name**.
2. Enter a new name.
3. Tap **Save**.

10.7 NFC

Near Field Communication (NFC) allows the device to exchange data with other devices with a quick touch.

- Method 1


- a. On the home screen, tap .
 - b. Go to **Connected devices > Connection preference > NFC**.
 - c. Tap  following **NFC**.
- Method 2
 - a. Swipe down from the status bar.
 - b. Swipe down from the control center to unfold it.
 - c. (Optional) Swipe left to find **NFC**, and then tap it

10.8 VPN

A virtual private network (VPN) extends a private network across a public network. Apps running across the VPN can benefit from the functionality, security, and management of the private network.



NOTE

- Before setting up a VPN, you must set the screen lock (pattern or password).
- For detailed configuration, consult your dealer.

1. On the home screen, tap .
2. Go to **Network & internet > VPN**.
3. Tap **+**.
4. Edit the VPN profile such as VPN name, server address, username, and password.
5. Tap **Save**.

10.9 Airplane Mode

When you are on an airplane or in an area with radio restrictions, you may need to turn on airplane mode on your device. In airplane mode, you cannot use voice or data services. However, you can use services over the WLAN network or BT, initiate narrowband services, and use apps that require no cellular data connection.

- Method 1
 - a. On the home screen, tap .
 - b. Tap **Network & internet**.
 - c. Tap  following **Airplane mode**.
- Method 2



- a. Swipe down from the status bar.
- b. Swipe down from the control center to unfold it.
- c. (Optional) swipe left to find **Airplane mode**, and then tap it.

11. Safety and Security

11.1 Use the Location Services


The Location feature allows the device to acquire its location information with WLAN, cellular network, BT, and GPS.


Turn on the Location Services

- Method 1
 - a. On the home screen, tap .
 - b. Tap **Location**.
 - c. Tap  following **Use location**.
- Method 2
 - a. Swipe down from the status bar.
 - b. Swipe down from the control center to unfold it.
 - c. Tap **Location**.

Set the Location Services

With the Location feature, you can do any of the following:


| If You Want to... | Then... |
|---|---|
| Set the positioning system | <ol style="list-style-type: none"> 1. Tap Positioning system. 2. Select Satellite positioning or BDS only. <p> NOTE</p> <p>You need to restart the device for the new settings to take effect.</p> |
| Turn on or off an app's permission to access the location information | <ol style="list-style-type: none"> 1. Tap App location permissions, and then tap the app. 2. Below Location access for this app, select Allow only while using the app, Ask every time, or Don't allow. |

| | |
|---|--|
| <p>Turn on or off Earthquake Alerts, Emergency Location Service, Location Accuracy, Google Location History, Google Location Sharing, WLAN Scanning, or BT Scanning</p> | <ol style="list-style-type: none"> 1. Tap Location services. 2. Tap a location service you want to turn on or off. 3. Tap  following the corresponding location service. |
| <p>Check the current location</p> | <ul style="list-style-type: none"> ● Method 1 Below Current location, you can see the latitude and longitude . ● Method 2 On the home screen, swipe right to open the Quick Access screen. You can see current location in the Location widget. |

11.2 Set the Screen Unlock Mode

When the screen is not in use, you can lock it to avoid unintended operations, protect privacy, and extend battery life. When the screen is locked, you can still initiate emergency calls, answer calls, open the camera, and receive messages and notifications.


11.2.1 Set the Pattern or Password Unlock

1. On the home screen, tap .
2. Go to **Security & privacy > Device unlock > Screen lock**.
3. Tap **Pattern, PIN, or Password**.
4. Set the pattern, pin, or password, and then tap **Next**.
5. Follow the on-screen instructions to draw the pattern or enter the pin or password again, and then tap **Confirm**.

 **NOTE**

For more settings, tap  following **Screen lock**.



11.2.2 Set the Fingerprint Unlock

1. On the home screen, tap .

2. Go to **Security & privacy > Device unlock > Face & Fingerprint Unlock > Fingerprint**.
3. Read the on-screen instructions and swipe up the screen, and then tap **I agree**.
4. Repeatedly put and lift different parts of your finger on the **On-Off** key until the device collects your fingerprint.
5. Tap **Done**.
6. (Optional) To add another fingerprint, tap **Add another**.

Touch to Unlock Anytime

If you want to unlock the screen by touching the **On-Off** key even when the screen is off, do the following:


1. On the home screen, tap .
2. Go to **Security & privacy > Device unlock > Face & Fingerprint Unlock > Fingerprint**.
3. Tap  following **Touch to unlock anytime**.

NOTE


With this feature turned on, accidental unlocking is more likely to happen.

Set Fingerprint Data Permissions

To set that the fingerprint data can be used to unlock your device or verify it's you in apps, do the following:

1. Go to **Security & privacy > Device unlock > Face & Fingerprint Unlock**.
2. Tap  following **Unlock your phone** or **Verify it's you in apps** according to your need.


11.2.3 Set the Face Unlock

1. On the home screen, tap .
2. Go to **Security & privacy > Device unlock > Face & Fingerprint Unlock > Face Unlock**.
3. Read the on-screen instructions and swipe up the screen, and then tap **I agree**.
4. Tap **Start**.
5. Face the front camera until the device finishes collecting face data.

Set Face Data Permissions


To set that the face data can be used to unlock your device or verify it's you in apps, do the following.

1. Go to **Security & privacy > Device unlock > Face & Fingerprint Unlock**.

2. Tap  following **Unlock your phone** or **Verify it's you in apps** according to your need.


11.3 Set the Extend Unlock

The Extend Unlock feature allows you to keep the device unlocked while it is on you, at specific places that you trust, or near your trusted devices.

1. On the home screen, tap .
2. Go to **Security & privacy > More security & privacy > Extend Unlock**.
3. (Optional) Enter your password.
4. Read the on-screen instructions, and then tap **GOT IT**.
5. Set **On-body detection**, **Trusted places**, or **Trusted devices**.



11.4 Set the Safe Browsing

Safe Browsing detects unsafe website and notifies you of potential harm.

1. On the home screen, tap .
2. Go to **Security & privacy > More security & privacy > Android Safe Browsing**.
3. Do any of the following:
 - Below **Supported apps**, view apps that support Safe Browsing.
 - Tap the  following **Use live threat protection** to use Safe Browsing with more accurate threat detection.



11.5 Set the Device Admin Apps

The Device Admin Apps feature allows you to clear all app data, change ways to lock the screen, set the password, and more.

1. On the home screen, tap .
2. Go to **Security & privacy > More security & privacy > Device admin apps**.
3. Tap  following **DevicePolicyServer**, **Find My Device**, or **Quick Access**.
4. Read the on-screen instructions and swipe up the screen, and then tap **Activate this device admin app**.


11.6 Turn On the SIM Lock

SIM Lock protects your SIM card from unauthorized use by a SIM PIN, which is required when the device turns on.

1. On the home screen, tap .
2. Go to **Security & privacy** > **More security & privacy** > **SIM lock**.
3. Tap  following **Lock SIM**.
4. Enter a SIM PIN.
5. Tap **OK**.
6. (Optional) To change the PIN, tap **Change SIM PIN**.

11.7 Set Encryption and Credentials

The Encryption and Credentials feature prevents the device from eavesdropping and information leakage. When the device is lost, the device data can be deleted remotely to ensure data security.

1. On the home screen, tap .
2. Go to **Security & privacy** > **More security & privacy** > **Encryption & credentials**.
3. Do any of the following.
 - Below **Encryption**, check whether the device is encrypted.
 - To view the trusted credentials, tap **Trusted credentials**.
 - To view the user credentials, tap **User credentials**.
 - To install certificates, tap **Install a certificate**.
 - To clear credentials, tap **Clear credentials**.

11.8 Turn On the Trust Agents

A trust agent lets a feature bypass the screen lock when the trust agent verifies that it can trust the device environment.


NOTE



You can turn on or off the trust agents only when you have set a screen lock.

1. On the home screen, tap .
2. Go to **Security & privacy** > **More security & privacy** > **Trust agents**.

3. Tap  following a trust agent.




11.9 Set the Privacy

1. On the home screen, tap .
2. Go to **Security & privacy > Privacy**.
3. Do one of the following.

| If You Want to... | Then... |
|---|--|
| Set the app's access to data | Tap Permission manager . |
| Check apps that used permissions in the last 24 hours | Tap Privacy dashboard . |
| Manage device data used to show you ads. | Tap Ads . |
| Manage the health data and app access to the health data | <ol style="list-style-type: none"> 1. Tap Health Connect. 2. Tap Get started. |
| Review apps that changed the way they may share your location data | Tap Data sharing updates for location . |
| Set the device to display a message when apps access text, image, or other copied content | Tap  following Show clipboard access . |
| Set the device to display password characters briefly as you type it | Tap  following Show passwords . |
| View which app accesses location | Tap Location access . |
| Choose the activities and info you allow Google to save | Tap Activity controls . |



More Privacy Settings

1. On the home screen, tap .
2. Go to **Security & privacy > More security & privacy**.
3. Do one of the following.

| If You Want to... | Then... |
|---|--|
| Allow apps to send content to the Android system | Tap  following App content . |
| Get suggestions based on the people, apps, and content you interact with | Tap Android System Intelligence . |
| Use autofill service from Google when entering saved passwords, credit card, or addresses | <ol style="list-style-type: none"> 1. Tap Autofill service from Google. 2. Tap  following Use Autofill with Google. |
| Turn on or off data sharing with Android | <ol style="list-style-type: none"> 1. Tap Usage & diagnostics. 2. Tap  following Usage & diagnostics. |



11.10 Confirm SIM Deletion


You can delete an eSIM.

1. On the home screen, tap .
2. Go to **Security & privacy > More security & privacy**.
3. Tap  following **Confirm SIM deletion**.
4. (Optional) If it is required a password to verify that it is the device owner to delete the eSIM, enter the password.


11.11 Lock the App

You can set a password to lock apps to prevent unauthorized access.

- To add a lock for an app, do the following:
 1. On the home screen, tap .
 2. Go to **Security & privacy > More security & privacy > App lock**.
 3. Enter the password twice.
 4. Swipe the screen to find the app you want to lock.
 5. Tap  following the app.
- On the **App lock** interface, you can also change the app lock password as follows:

1. On the upper-right of the interface, tap .
2. Tap **Change password**.
3. Enter the new password twice.


11.12 Set the Emergency Information

1. On the home screen, tap .
2. Tap **Safety & emergency**.
3. Do any of the following:

| If You Want to... | Then... |
|--------------------------------|--|
| Add medical information | <ol style="list-style-type: none"> 1. Tap Medical information. 2. (Optional) Sign in to your Google account. 3. Tap Name, Blood type, Allergies, Medications, Address, and More respectively, and then enter the information. |
| Add emergency contacts | <ol style="list-style-type: none"> 1. Tap Emergency contacts. 2. Tap Add contact. 3. Enter the information following on-screen instructions. 4. Tap Save. 5. Tap a contact |
| Turn on Emergency SOS services | <ol style="list-style-type: none"> 1. Tap Emergency SOS. 2. Read the on-screen instructions, and then tap Start setup. 3. Tap Start. 4. Set the emergency number, and then tap Next. 5. Follow the on-screen instructions to complete setting. <p>When in emergency, quickly press the On-Off key for five consecutive times, and the device will dial the emergency number automatically.</p> |


| | |
|--|---|
| | 6. (Optional) If you want to specify the actions to start an emergency call, on the Emergency SOS interface, tap Touch & hold to start emergency actions . |
| Turn on emergency alerts and set alert types | <ol style="list-style-type: none"> 1. Tap Wireless emergency alerts. 2. Tap <input type="checkbox"/> following Allow alerts. 3. Below Alerts, tap Extreme threats, Severe threats, AMBER alerts, or Test alerts to turn on the corresponding alert. |

11.13 Manage Passwords and Accounts

1. On the home screen, tap .
2. Tap **Passwords & accounts**.
3. Do any of the following.
 - To manage the password, tap the app below **Passwords**.
 - To use autofill service with Google, tap the app below **Autofill service**, tap **Google**, and then tap **OK**.
 - To create an account for work domain, tap **Add account**.
 - To let apps refresh data automatically, tap following **Automatically sync app data**, and then tap **OK**.

11.14 Set Emergency Alarm

Emergency Alarm allows you to seek help from your companion or the control center in case of an emergency.

1. On the home screen, tap .
2. Go to **Alarms > Emergency Alarm**.
3. Select the emergency alarm type.

The following table describes different types of emergency alarm services that you can use.

| Type | Description |
|------------------|---|
| Alarm with siren | The device with the PoC app sends the emergency status message to the control center, and then emits a siren. |

| Type | Description |
|------------|---|
| Siren only | The device keeps emitting a siren. |
| Alarm only | The device with the PoC app sends the emergency status message to the control center. |
| Silent | The device with the PoC app gives no visible or audible indication when sending the emergency status message to the control center. |

11.15 Set Man Down


Man Down allows the device to automatically enter the emergency mode in either of the following scenarios:

- The device is inclined by an angle greater than the preset angle.
- The device keeps motionless longer than the preset time.

To exit the emergency mode, do any of the following:

- Place the device upright or move it.
- Charge the device.

To turn on the Man Down feature, do any of the following:

- On the home screen, go to  > **Alarms** > **Man down**.
- Swipe down from the status bar to enter control center, and then tap **Man down**.
- Press the programmable **Man Down** key.

11.16 Set Lone Worker


Lone Worker allows the device to automatically send an emergency alarm to your companion or the control center in either of the following scenarios:

- You do not operate the device within the preset time.
- The device does not transmit voice within the preset time.

To exit the emergency mode, do as follows:



- Long press the **Emergency** key.
- Charge the device.

To turn on the Lone Worker feature, do any of the following:

- On the home screen, go to  > **Alarms** > **Lone worker**.
- Swipe down from the status bar to enter control center, and then tap **Lone worker**.
- Press the programmable **Lone worker** key.

11.17 Set Covert Mode

Covert Mode allows you to keep low profile during secret mission. In this mode, the device goes silent, keeps the screen extra dim, outputs sound through accessories, and turns off the flashlight.

1. On the home screen, tap .
2. Tap **Covert mode**.
3. Tap  following **Covert mode**.
4. Tap **OK**.


You can also swipe down from the status bar to tap **Covert mode**, or directly press the programmable key to turn on the covert mode.

NOTE



The Covert mode is applicable to the device only in work domain.

11.18 Set Confidential Mode

Confidential Mode prevents eavesdropping in meetings and protects your activities from being tracked.

1. On the home screen, tap .
2. Tap **Confidential mode**.
3. Select a mode and turn it on or off.

| Mode | Description | Operation |
|--------------|--|---|
| Meeting mode | With this mode turned on, the device prohibits microphone, camera, location, and keyboard. | <ul style="list-style-type: none"> ● To turn on this mode, toggle the Toggle Switch up. ● To turn off this mode, toggle the Toggle Switch down. |

| Mode | Description | Operation |
|--------------|--|--|
| Track mode | With this mode turned on, only apps in the allow list stored in the system can access the device location information. | To turn on or off this mode, tap  following Track mode . |
| Private mode | With this mode turned on, only apps in the allow list stored in the system can access clipboard and run in the background. | To turn on or off this mode, tap  following Private mode . |

 **NOTE**

The Covert mode and Confidential mode cannot be turned on simultaneously.



11.19 Use the Dual Domain

Dual Domain allows the device to separate your work and life spaces, with apps and data kept apart in each domain, improving work-life balance and productivity.

 **NOTE**


If the Confidential Mode is turned on, you cannot switch the domain.

11.19.1 Turn On or Off the Dual Domain

1. On the home screen, tap .
2. Tap **Dual Domain**.
3. Tap  following **Use Dual Domain**.


11.19.2 Add the Life Domain

For initial use, the device is in the work domain by default. Thus, you need to add the life domain before using Dual Domain.


1. On the home screen, tap .

2. Tap **Dual Domain**.
3. Tap **Add life domain**.
4. (Optional) To use the life domain, tap **Life Domain**, and then select a screen lock method from **Pattern**, **PIN**, or **Password**.

11.19.3 Delete the Life Domain


1. On the home screen, tap .
2. Tap **Dual Domain**.
3. Tap **Delete life domain**.
4. Tap **Yes**.

11.19.4 Auto-switch to the Life Domain

1. On the home screen, tap .
2. Tap **Dual Domain**.
3. Tap **Scheduled life domain**.
4. Tap following **Scheduled life domain**.
5. Tap **Start time**, set the start time, and then tap **OK**.
6. Tap **End time**, set the end time, and then tap **OK**.

11.19.5 Manually Switch the Domain


- Method 1

1. On the home screen, swipe left to enter the Quick Access screen.
2. Tap .

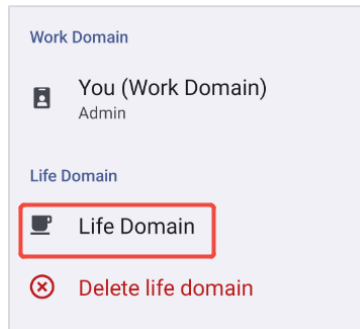
The device quickly switches to the other domain.

3. (Optional) Enter the password, PIN, or pattern to unlock the device.

- Method 2

1. On the home screen, tap .
2. Tap **Dual Domain**.
3. Do either of the following:

- To switch to the life domain, Tap **Life Domain**.







- To switch to the work domain, Tap **Work Domain**.



4. (Optional) Enter the password, PIN, or pattern to unlock the device.

11.20 Use the Protection Storage




You can use Protection Storage to back up applications and files. Data in Protection Storage will not be erased even after factory reset.

1. On the home screen, tap .
2. In the upper left corner, tap , and then view files by type.
3. Touch and hold the file until it is selected, or tap to select more files.
4. In the upper right corner, tap .
5. Tap **Copy to...**
6. Go to  > **Protection Storage**.
7. Select a file folder.
8. Tap **COPY**.

12. Personalization

12.1 Turn Off Media Sound in Silence Mode

You can set that when the device is in Silence Mode, media sound is turned off.

1. On the home screen, tap .
2. Tap **Sound & vibration**.
3. Tap  following **Silent mode** to turn on Silence Mode.
4. Tap  following **Silence media in silent mode**.


12.2 Turn On Do Not Disturb

Do Not Disturb makes the device silent and the screen dark when the device receives a call or notification.


Through the Control Center

1. Swipe down from the status bar.
2. Swipe down from the control center to unfold it.
3. (Optional) Swipe left to find **Do Not Disturb**, and then tap it.

Through the Sound & Vibration Interface


1. On the home screen, tap .
2. Tap **Sound & vibration**.
3. Tap **Do Not Disturb**.
4. Tap **Turn on now**.
5. (Optional) To set Do Not Disturb, do any of the following:
 - To set people, apps, alarms or others that can interrupt Do Not Disturb, respectively tap **People, Apps, and Alarms & other interruptions**.
 - To set the start time for Do Not Disturb mode, tap **Schedules**.
 - To set how long Do Not Disturb lasts after you turn it on through the shortcut, tap **Duration for Quick Settings**.
 - To set whether to hide notification alerts in the Do Not Disturb mode, tap **Display options for hidden notifications**.

Through the Notification Interface

1. On the home screen, tap .
2. Tap **Notifications**.
3. Below **General**, tap **Do Not Disturb**.
4. Perform the same actions detailed in 4 to 5 in [Through the Sound & Vibration Interface](#).







12.3 Set the Display

12.3.1 Enter Sleep Mode

- Manually enter the sleep mode
 - Press the **On-Off** key.
 - On the home screen, swipe left to enter the Quick Access screen, and then tap the **Lock screen** shortcut.
- Automatically enter the sleep mode
 - a. On the home screen, tap .
 - b. Go to **Display > Screen timeout**.
 - c. Set the automatic sleep time.

When the screen is idle for the preset time, the screen automatically sleeps.

12.3.2 Wake the Screen

- Manual wakeup
 - Press the **On-Off** key.
 - To wake the screen by double-tapping the screen, go to  > **Display**, and then tap  following **Double tap to wake screen**.
 - To wake the screen by lifting the device up, go to  > **Display**, and then tap  following **Lift to wake screen**.
- Automatic wakeup
 - a. On the home screen, tap .
 - b. Go to **Display > Lock screen**.
 - c. Tap  following **Wake screen for notifications**.


In sleep mode, if the device receives a notification, the screen will wake up.

12.3.3 Adjust the Screen Brightness

You can adjust the screen brightness according to ambient light conditions or personal preference.

- Manually adjust the brightness



- Method 1

- i. On the home screen, tap .
- ii. Go to **Display > Brightness Level**.
- iii. Drag the slider right or left to adjust the brightness.

- Method 2

- i. Swipe down from the status bar.
- ii. Swipe down from the control center to unfold it.
- iii. Drag the slider right or left to adjust the brightness.

- Automatically adjust the brightness

- a. On the home screen, tap .
- b. Tap **Display**
- c. Tap  following **Adaptive brightness**.

The device automatically adjusts screen brightness based on current lighting conditions.



12.3.4 Turn On the Night Light

In Night Light mode, the screen automatically turns amber to help reduce your eye strain and fatigue in low-light conditions.

- Method 1


- a. Swipe down from the status bar.
- b. Swipe down from the control center to unfold it.
- c. Swipe left to find **Night Light**, and tap it

- Method 2

- a. On the home screen, tap .
- b. Go to **Display > Night Light**.
- c. Tap  following **Use Night Light**.

- d. (Optional) To set the night light start time, tap **Schedule**, and then select **None**, **Turns on at custom time**, or **Turns on from sunset to sunrise**.
- e. (Optional) To adjust the color intensity, drag the slider below **Intensity**.

12.3.5 Set the Color Intensity





1. On the home screen, tap .
2. Go to **Display > Colors**.
3. Select **Natural**, **Boosted**, or **Adaptive**.

12.3.6 Set the Color Temperature

1. On the home screen, tap .
2. Go to **Display > Color temperature**.
3. Drag the slider to adjust the color between a cooler tone and a warmer tone.



12.3.7 Set the Auto-rotate screen

Auto-rotate Screen allows the screen to automatically adjust and rotate depending on how you hold it.

- Method 1
 - a. On the home screen, tap .
 - b. Tap **Display**.
 - c. Tap  following **Auto-rotate screen**.
- Method 2
 - a. On the home screen, tap .
 - b. Go to **Accessibility > System controls**.
 - c. Tap  following **Auto-rotate screen**.

12.3.8 Set the Dark Theme



Dark Theme helps reduce your eye strain and fatigue in dark environments.

1. On the home screen, tap .
2. Go to **Display > Dark theme**.
3. Tap  following **Use Dark theme**.

- (Optional) To set the dark theme start time, tap **Schedule**, and then select **None**, **Turns on at custom time**, **Turns on from sunset to sunrise**, or **Turns on at bedtime**.



12.3.9 Use the Glove Mode

Glove Mode allows you to use the device even when you are wearing gloves. With this mode turned on, the touchscreen sensitivity is increased.


- On the home screen, tap .
- Go to **Display > Special settings**.
- Tap  following **Glove mode**.


12.3.10 Set Quick PTT



Quick PTT allows you to quickly make a call by pressing the PTT key when the screen is locked.

- On the home screen, tap .
- Go to **Display > Special settings**.
- Tap  following **Quick PTT**.

12.3.11 Set the Wallpaper


- Enter the wallpaper gallery by either of the following:
 - On the home screen, touch and hold the blank area, and then select **Wallpapers**.
 - On the home screen, tap , and then tap **Wallpaper**.
- Go to **Wallpaper & style**
- Do either of the following:



| If You Want to.. | Then... |
|----------------------|---|
| Change the wallpaper | <ol style="list-style-type: none"> Tap Change wallpaper. Tap On-device wallpaper or My photos. Select Home screen or Lock screen. Select a wallpaper. Tap . Select Lock screen or Home and lock screen. |

| If You Want to.. | Then... |
|--------------------------|---|
| Set the wallpaper colors | <ol style="list-style-type: none"><li data-bbox="453 331 932 367">1. Tap Lock screen or Home screen.<li data-bbox="453 389 979 425">2. Tap a wallpaper style, such as .<li data-bbox="453 456 1011 492">3. (Optional) For more settings, tap . |


13. Accessibility




13.1 Set the Text and Display



1. On the home screen, tap .
2. Go to **Accessibility > Display size and text**.
3. Do any of the following:

| If You Want to... | Then... |
|---|---|
| Adjust the font size | Below Font size , drag the slider left or right to make the font size smaller or larger. |
| Adjust the display size | Below Display size , drag the slider left or right to make the display size smaller or larger. |
| Use bold text | Tap  following Bold text . |
| Adjust the font outline and the background contrast | Tap  following High contrast text . |

13.2 Set the Color and Motion




1. On the home screen, tap .
2. Go to **Accessibility > Color and motion**.
3. Do any of the following:

| If You Want to... | Then... |
|--|--|
| Adjust how colors display on your device | <ol style="list-style-type: none"> 1. Tap Color correction. 2. Tap  following Use color correction. 3. Select a correction mode. |
| Turn on color inversion mode | <ol style="list-style-type: none"> 1. Tap Color inversion. 2. Tap  following Use color inversion. |
| Turn on dark theme | Tap  following Dark theme . |



| | |
|--|--|
| Remove animation effects on the screen | Tap  following Remove animations . |
| Use a larger mouse pointer | Tap  following Large mouse pointer . |



13.3 Set the Extra Dim Screen


You can set the screen to extra dim so it is more comfortable to read.

1. On the home screen, tap .
2. To turn on Extra Dim, do either of the following.
 - Go to **Accessibility > Extra dim > Make screen extra dim**.
 - Swipe down from the status bar, and then swipe left to find and tap **Extra dim**.
3. (Optional) On the **Extra dim** interface, do any of the following:
 - To set the dim degree, drag the slider under **Intensity**.
 - To keep the screen extra dim after the device restarts, tap  following **Keep on after device restarts**.
 - To add the shortcut of the extra dim switch to the lower right corner of the screen, tap  following **Extra dim shortcut**.

13.4 Use the Magnifier

1. On the home screen, tap .
2. Go to **Accessibility > Magnification**.
3. To add the shortcut of the magnification switch to the lower right corner of the screen, tap  following **Magnification shortcut**.
4. Read the on-screen instructions, and then tap **Got it**.

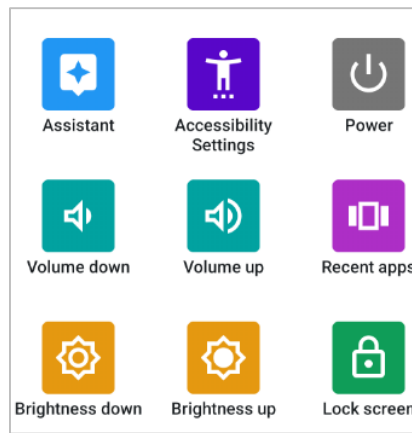
The magnifier shortcut  is added to the lower right corner of the screen.
5. Set the magnifier type.
 - a. Tap **Magnification type**.
 - b. Select **Magnify full screen**, **Magnify part of screen**, or **Switch between full and partial screen**.
 - c. Tap **Save**.
6. To use the magnifier, tap .


- To magnify the screen, tap anywhere on the screen or spread two fingers apart on the screen.
- To stop using the magnifier, tap  again.

13.5 Set the Accessibility Shortcuts

13.5.1 Set the Accessibility Menu Shortcut


The Accessibility Menu provides a large on-screen menu to control the device. With the menu, you can lock the device, control volume and brightness, take screenshots, and more.





- On the home screen, tap .
- Go to **Accessibility > Accessibility menu**.
- Tap following **Accessibility menu shortcut**.
- Read the on-screen instructions, and then tap **Allow**.
- Read the on-screen instructions, and then tap **Got it**.

The accessibility menu shortcut is added to the lower corner of the screen.



- (Optional) Do any of the following.

| If You Want to... | Then... |
|--|--|
| Set how to unfold the accessibility menu | <ol style="list-style-type: none"> Tap Accessibility menu shortcut, and then select Tap accessibility button or Hold volume keys, or select both. Unfold the menu. <ul style="list-style-type: none"> If you select Tap accessibility button, tap  in the lower-right corner of the screen. |


| | |
|---|--|
| | <ul style="list-style-type: none"> ➤ If you select Hold volume keys, long press the Volume Up key and the Volume Down key for a few seconds. ➤ If you select both Tap accessibility button or Hold volume keys, you can unfold the menu with both ways. |
| Use the larger buttons in the accessibility menu | <ol style="list-style-type: none"> 1. Tap Settings. 2. Tap  following Large buttons. |
| Use accessibility shortcuts when the screen is locked | <ol style="list-style-type: none"> 1. Go to Accessibility > Accessibility shortcuts. 2. Tap  following Shortcut from lock screen. |

13.5.2 Set the Accessibility Button


The Accessibility Button  allows you to quickly access the accessibility menu from any screen.

1. Enter the **Accessibility button** interface by doing either of the following.
 - On the **Accessibility Menu** interface, go to **Accessibility menu shortcut > More options**.
 - On the home screen, go to  **>Accessibility > Accessibility shortcuts > Accessibility button**.
2. Do any of the following.
 - To set where the button locates on the screen, tap **Location**.
 - To set the size of the button, tap **Size**.
 - To set the button to fade when not in use, tap  following **Fade when not in use**.
 - To adjust the transparency of the button when not in use, turn on **Fade when not in use** first, and then drag the slider below **Transparency when not in use**.




13.6 Set Timing Controls

1. On the home screen, tap .
2. Go to **Accessibility > Timing controls**.
3. Do any of the following:




| If You Want to... | Then... |
|-------------------|---------|
|-------------------|---------|

| | |
|--|---|
| Adjust the duration before your tap on the screen becomes a touch-and-hold operation | <ol style="list-style-type: none"> 1. Tap Touch & hold delay. 2. Select Short, Medium, or Long. |
| Set how long to show temporary messages that ask you to take actions | <ol style="list-style-type: none"> 1. Tap Time to take action (Accessibility timeout). 2. Select Default, 10 seconds, 30 seconds, 1 minute, or 2 minutes. <p> NOTE Some apps do not support this setting.</p> |
| Set the amount of time for auto click for a connected mouse | <ol style="list-style-type: none"> 1. Tap Autoclick (dwell timing). 2. Select Autoclick off, Short, Medium, Long, or Custom. |



13.7 Set System Controls

1. On the home screen, tap .
2. Go to **Accessibility > System controls**.
3. Do any of the following:
 - To set the navigation mode, see [15.4 Set the Navigation Mode](#).
 - To set the one-handed mode, see [15.6 Set the One-handed Mode](#).
 - To end a call by pressing the **On-Off** key, tap  following **Power button ends call**.
 - To turn on auto-rotate screen, tap  following **Auto-rotate screen**.

13.8 Set the Vibration and Haptic Strength



1. On the home screen, tap .
2. Go to **Accessibility > Vibration & haptics**.
3. Tap  following **Use vibration & haptics**.
4. Tap  following **Ring vibration, Vibrate in silent mode, Vibrate first then ring gradually, Notification vibration, Alarm vibration, Touch feedback, or Media vibration** to turn on or off the corresponding feature.

13.9 Set the Caption

1. On the home screen, tap .
2. Go to **Accessibility** > **Caption preferences**.
3. Tap  following **Show captions**.
4. Do either of the following:
 - To set the caption size and style, tap **Caption size and style**.
 - To set the caption language, go to **More options** > **Language**, and then select a language.

13.10 Set the Audio Description



The Audio Description allows you to hear an audio description of what is happening on the screen in supported media.

1. On the home screen, tap .
2. Go to **Accessibility**.
3. Tap  following **Audio description**.

NOTE

This setting only applies to the supported movies and shows.

13.11 Adjust Audio Volume



1. On the home screen, tap .
2. Go to **Accessibility** > **Audio adjustment**.
3. Do either of the following:
 - To turn on mono soundtrack when playing audio, tap  following **Mono audio**.
 - To adjust audio balance, drag the slider under **Audio balance**.

14. Apps

14.1 Manage the App

14.1.1 Close the Running App

You can close running apps in the background to release the memory.

1. At the bottom of the screen, tap .
2. Do either of the following:
 - Swipe left or right to choose an app, and swipe up to end it.
 - Tap  to close all running apps.

14.1.2 Install the App

CAUTION


- To protect the device from malware or viruses, download the trusted apps only.
- To avoid personal information leakage or misuse, read the instruction carefully and operate with caution when installing an app.


If the pre-installed apps cannot meet your needs, you can download third-party apps through the browser, computer, Micro SD card, or BT.

Open the installation package and follow the on-screen instructions to finish installation. After successful installation, the app icon appears on the home screen.


14.1.3 Uninstall the App

It is recommended to uninstall unused non-system apps to release the storage space and improve the system running speed.

- Method 1
 - a. On the home screen, tap .
 - b. Go to **Downloads > Installed**.
 - c. Select the app.
 - d. Tap **Uninstall**.
 - e. Tap **OK**.

- Method 2
 - a. On the home screen, tap .
 - b. Go to **Apps > See all apps**.
 - c. Tap the app.
 - d. Tap **UNINSTALL**.
 - e. Tap **OK**.
- Method 3
 - a. Touch and hold the app icon, and then tap **App info**.
 - b. Tap **UNINSTALL**.
 - c. Tap **OK**.

14.1.4 Force Stop or Reuse the App

- Method 1
 - a. On the home screen, tap .
 - b. Go to **Apps > See all apps**.
 - c. Tap the app.
 - d. Tap **Force stop** to force stop the app or **Open** to reuse the stopped app.
 - e. Tap **OK**.
- Method 2
 - a. Touch and hold the app icon, and then tap **App info**.
 - b. Tap **Force stop** to force stop the app or **Open** to reuse the stopped app.
 - c. Tap **OK**.

14.1.5 Manage the App Permission

When you open an app, the app may request the access to a specific function or information. You can tap **Allow** or **Don't allow** to accept or deny the request.


To view or change the permission settings of the third-party apps, do the following:

Through the Privacy Interface

1. On the home screen, tap .
2. Go to **Security & privacy > Privacy > Permission manager**.

3. Tap the app.
4. Select **Allow**, **Don't allow**, or other displayed options.

Through the Apps Interface






1. On the home screen, tap .
2. Go to **Apps > See all apps**.
3. Tap the app.
4. Tap **Permissions**.
5. Do either of the following:
 - To deny a permission type, select the permission type below **Allowed**, and then select **Don't Allow** or other displayed options.
 - To allow a permission type, select the permission type below **Not allowed**, and then select **Allow** or other displayed options.

NOTE

To set the special app access, on the **Apps** interface, tap **Special app access**.

14.1.6 Pin the App

App Pinning allows you to fix the current app interface so that you can focus on the current interface.

1. Turn on App Pining.
 - a. On the home screen, tap .
 - b. Go to **Security & privacy > More security & privacy > App pinning**.
 - c. Tap  following **Use app pinning**.
 - d. Tap **OK**.
2. Pin the app.
 - a. Open an app.
 - b. At the bottom, tap .
 - c. Touch and hold the upper app icon.
 - d. Tap **Pin**.
 - e. Read the on-screen instructions, and then tap **Got it**.
3. (Optional) To unpin the app, at the bottom, touch and hold  and  simultaneously.


14.2 Use the Google Apps

NOTE

Google, Google Chrome, Google Play, Google Drive, and other marks are trademarks of Google LLC.


A Google Account is required before you use the Google apps. Otherwise, the Google services may be totally or partially restricted.

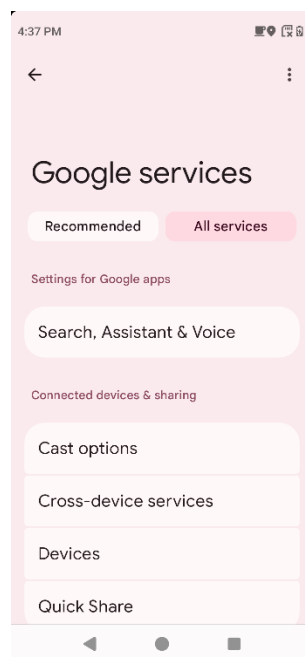
To create your Google Account, do the following:

1. On the home screen, tap .
2. Go to **Passwords & accounts > Add account > Google**.
3. Follow the on-screen instructions.

14.2.2 Settings

If your device uses Google Play Services, you can manage your Google apps and services in Google Settings.

1. On the home screen, tap .
2. Tap **Google**.
3. Set any item in the following figure.



For details, refer to **Manage your Google Account** at <https://support.google.com/accounts/?hl=en#topic>.

14.2.3 Google Chrome

Fast, easy and secure browsing with Google Chrome.

CAUTION

To protect your device from malware or viruses, visit trusted website only.

14.2.4 Google Drive

Google Drive is a smart online storage and backup that puts all your files within reach from any smartphone, tablet, or computer. Every file in Drive — like your photos, PDFs, and documents — is backed up safely so you can't lose it. You can even invite others to view, download, and collaborate on all the files you want.

14.2.5 Google Meet

Google Meet allows you to make video calls to friends and family, or create or join meetings.

14.2.6 Gmail

Gmail is an easy to use email app that saves you time and keeps your messages safe. Get your messages instantly via push notifications, read and respond online & offline, find any message quickly and lots more.

14.2.7 The Google app

The Google app keeps you in the know about the things you care about. Find quick answers, explore your interests, and get personalized updates in your Google feed. The more you use the Google app, the better it gets.

14.2.8 Google Maps

Explore and navigate your world with Google Maps. Find places you will love, connect with businesses you are interested in, and get around with real-time traffic information.

14.2.9 Google Photos

Google Photos is the home for all your photos and videos that help you find, relive and share your

memories. Automatically organized and searchable by the people, places, and things in them, your photos and memories are always easy to find and share.

14.2.10 Google Play

Whether you are into photography, picking stocks or just keeping up with your friends, there is an app for you. Choose from over a million apps on Google Play.

14.2.11 YouTube

See what the world is watching in music, gaming, entertainment, news and more. Subscribe to channels, share videos with friends, edit and upload videos, and watch on any device.

14.2.12 YT Music

The music streaming app. Made by YouTube.

Discover all the music on YouTube that you cannot find anywhere else, organized in one app and web player.

14.2.13 Google Calendar

Quickly switch between month, week, and day view. Flight, hotel, concert, restaurant reservations, and more are added to your calendar automatically. Create, manage, and view your tasks alongside your events in Calendar.

14.2.14 Keep Notes

Save your thoughts, wherever you are, with Keep Notes. Capture what is on your mind with ease by adding notes, lists, photos, and audio. Access these thoughts wherever you go, and even collaborate on your Keep Notes with family and friends in real time. And with location and time-based reminders, Keep Notes makes sure you never miss a thing.

14.2.15 Google TV

Make it easy to find and enjoy the entertainment you love in one place. With Google TV, you will be able to find what to watch next, see the latest releases, and use your device as your remote. One list for all your discoveries.


14.2.16 Safety

Help you prepare and react in an emergency by quickly connecting you with help and information you

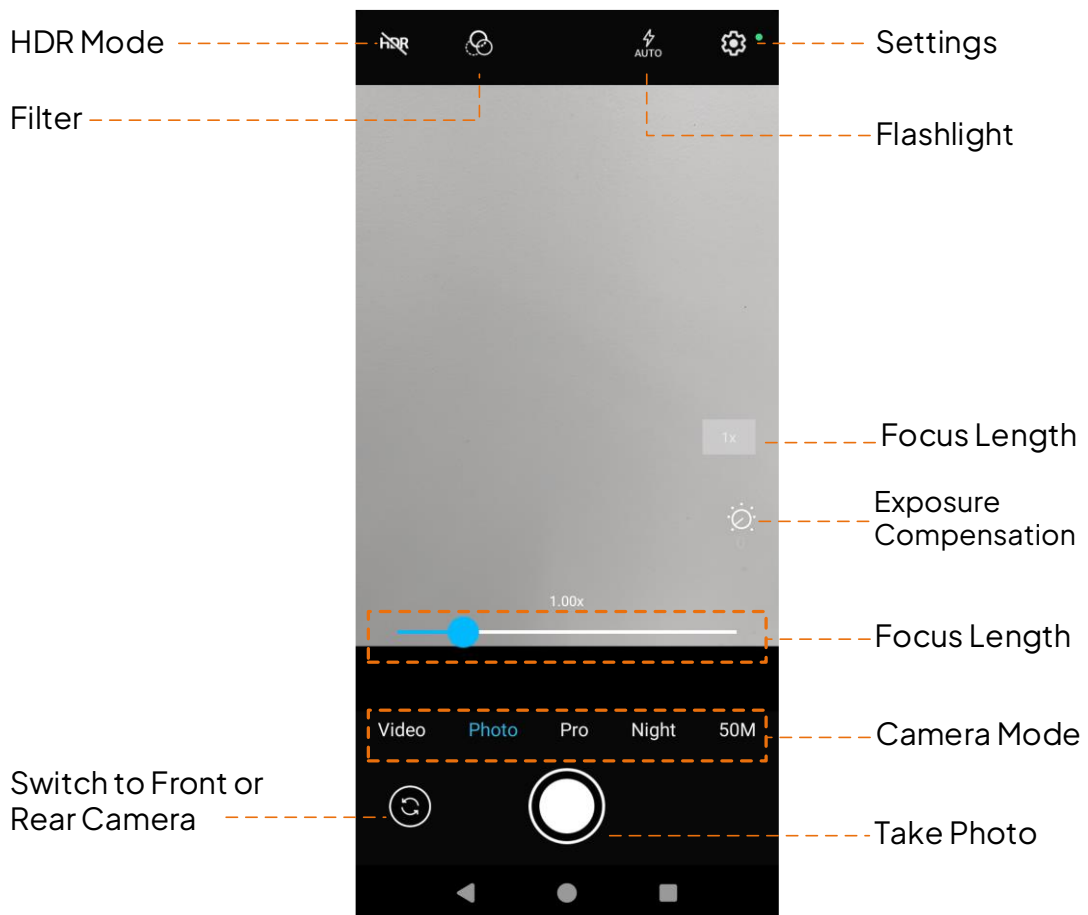
need. You can access the Safety Check, Emergency sharing, Emergency SOS, Crisis alerts, and more features.



14.3 Use the Multimedia App






14.3.1 Camera

The Camera app  allows you to take a photo or record a video.

14.3.1.1 Take a Photo




1. On the home screen, tap .
2. Tap **Photo**.
3. (Optional) To switch between the front and rear cameras, tap .
4. Point the camera to the object you want to shoot.
5. (Optional) Set the camera.


| If You Want to... | Then... |
|--------------------------------------|--|
| Focus the camera to a specific point | Tap the point on the screen. |
| Adjust the focal length | <ul style="list-style-type: none"> ● Spread apart your two fingers to zoom in and pinch your two fingers to zoom out. ● Drag the focal length slider. |
| Switch the camera to another mode | Tap Pro , Night , or 50M . |
| Set the flashlight |  : The flashlight is off.  : The flashlight automatically turns on when working in dim light.  : The flashlight is on. |
| Use HDR mode | <ol style="list-style-type: none"> 1. In the upper left corner, tap  to turn on HDR. 2. Select a HDR mode |
| Use a filter | <ol style="list-style-type: none"> 1. Tap . 2. Select a filter. |





6. Tap .

14.3.1.2 Use the Pro mode

In Pro mode, you can adjust the exposure compensation and light sensitivity.

1. On the home screen, tap .
2. Tap **Pro**.
3. Point the camera to the object you want to shot.
4. (Optional) Set the camera.

| If You Want to... | Then... |
|----------------------------------|--|
| Adjust the exposure compensation | Tap  . Higher exposure compensation value indicates brighter photos. |






| If You Want to... | Then... |
|-----------------------------|--|
| Adjust focal distance | <ol style="list-style-type: none"> 1. Tap . 2. Drag the slider toward Infinity or Macro to adjust the clarity of images. |
| Adjust the shutter speed | <ol style="list-style-type: none"> 1. Tap . 2. Drag the slider to select the shutter speed. Slower shutter speed (1/4) indicates brighter photo and may cause motion blur, while faster shutter speed (1/125) indicates darker photo and can be used to capture fast-moving objects. |
| Select a white balance mode | <ol style="list-style-type: none"> 1. Tap . 2. Select a mode according to the light conditions. |
| Adjust the ISO sensitivity | <ol style="list-style-type: none"> 1. Tap . 2. Adjust the value to low when shooting a still object or in dim condition, or to high when shooting a moving object or in bright condition. High ISO sensitivity indicates more image noise. |






5. Tap .

6. (Optional) To view the photo, tap the circle in the lower left corner.

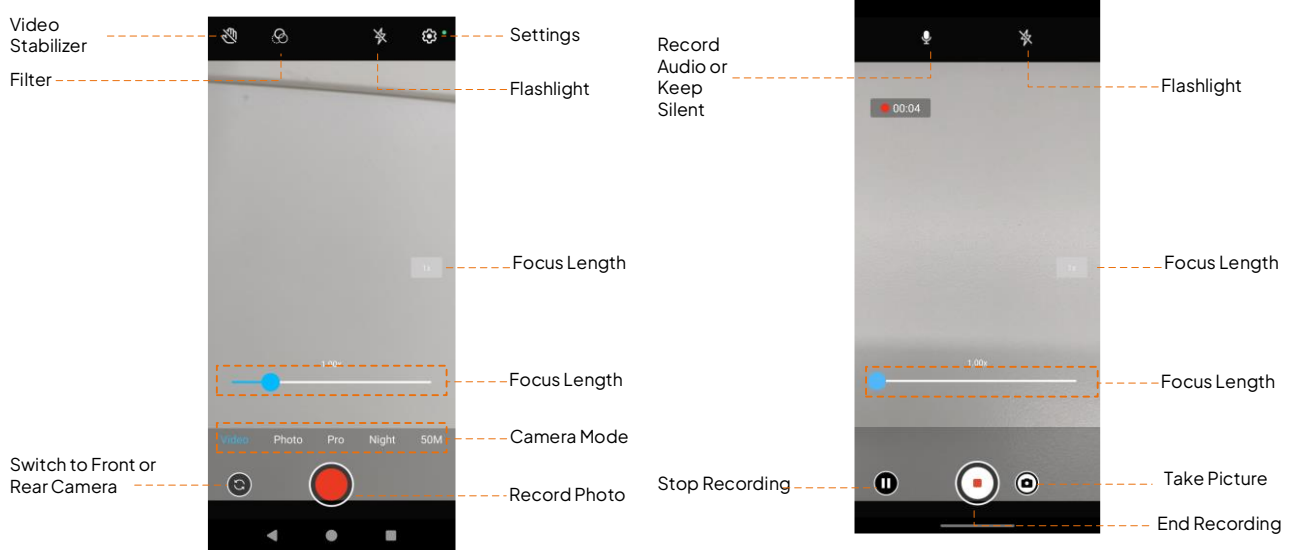
14.3.1.3 Set the Photo Parameters















On the **Camera** interface, tap , and then do any of the following:

- General Parameters
 - To use location services during photo taking, tap  following **GPS location**.
 - To use face detection during photo taking, tap  following **Face detection**.
 - To set the storage directory, tap  following **Storage location**.
 - To add watermarks to the photo, tap  following **Watermark**.
 - To set the functions of the **Volume Up** and **Volume Down** keys during photo taking, tap **Press volume keys to**.
 - To take a photo with your fingerprint, tap  following **Use fingerprint to take photo**.
 - To set the anti-flicker value, tap **Anti banding**, and then select a value.



- To turn on the shutter sound that you can hear during photo taking, tap  following **Shutter sound**.
- To encrypt photos, tap  following **Auto-encryption**.
- To encrypt photos after a preset time, turn on **Auto-encryption**, tap **Encryption delay**, and then set a value.
- Still Camera Parameters
 - To use the countdown timer after tapping the photo-taking button, tap **Countdown timer**, and then select a value.
 - To take multiple photos a time, tap  following **Burst mode**.
 - To display grid lines on the screen during photo taking, tap  following **Grid line**.
 - To set the photo size, tap **Picture size**, and then select a picture size.
 - To set the photo quality, tap **Image quality**, and then set the quality to **Low**, **Standard**, or **High**.
 - To set the exposure value, tap **Exposure**, and then select a value.
 - To set the exposure metering mode, tap **Exposure metering**, and then select a mode.
 - To set the white balance mode, tap **White balance**, and then select a mode.
 - To track and focus on a subject on the screen by touching it, tap  following **Touch tracking**.
- System Parameters
 - To reset camera settings, tap **Reset settings**.
 - To view the version information, tap **Version**.







14.3.1.4 Record a Video




1. On the home screen, tap .
2. Tap **Video**.
3. (Optional) To switch between the front and rear cameras, tap .
4. (Optional) Before recording, do any of the following.
 - To turn on the video stabilizer, tap , and tap  to turn it off.
 - To turn on the flashlight, tap , and tap  to turn it off.
 - To use a filter, tap , and then select a filter.
5. Point the camera to the object you want to shot.
6. Tap .
7. (Optional) During recording, do any of the following:
 - To make the recorded video audible or silent, tap  or .
 - To stop recording or continue to record, tap  or .
 - To capture a picture during recording, tap .
8. To end recording, tap .

14.3.1.5 Set the Video Parameters


- General Parameters
 - To use location services during photo taking, tap  following **GPS location**.
 - To use face detection during photo taking, tap  following **Face detection**.

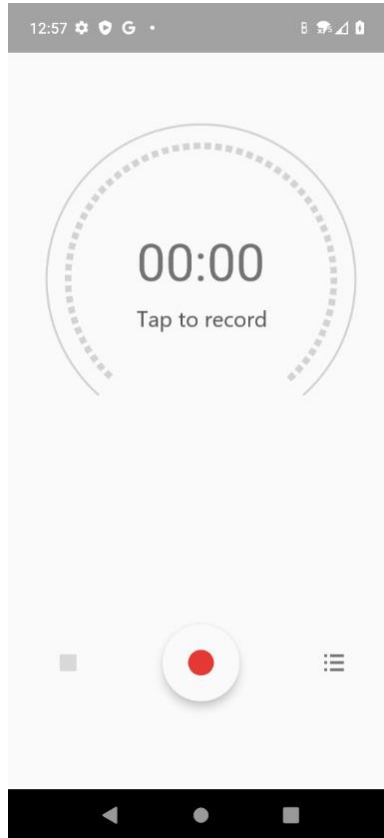
- To set the storage directory, tap  following **Storage location**.
- To set the functions of the **Volume Up** and **Volume Down** keys during photo taking, tap **Press volume keys to**.
- To take a photo with your fingerprint, tap  following **Use fingerprint to take photo**.
- To set the anti-flicker value, tap **Anti banding**, and then select a value.
- To turn on the shutter sound that you can hear during photo taking, tap  following **Shutter sound**.
- To encrypt photos, tap  following **Auto-encryption**.
- To encrypt photos after a preset time, turn on **Auto-encryption**, tap **Encryption delay**, and then set a value.
- Video Camera Parameters
 - To display grid lines on the screen during photo taking, tap  following **Grid line**.
 - To set the video quality, tap **Video quality**, and then select a value.
 - To set the maximum video duration, tap **Video duration**, and then select a value.
 - To track and focus on a subject on the screen by touching it, tap  following **Touch tracking**.
 - To set the noise reduction mode, tap **Noise reduction**, and then select a mode.
 - To set the video encoding method, tap **Video encoder**, and then select a method.
 - To set the audio encoding method, tap **Audio encoder**, and then select a method.
 - To set the rotation angle of videos, tap **Video rotation**, and then select an angle.
 - To set the camera's shutter speed, tap **Time lapse**, and then select a value.
 - To set the video high frame rate, tap **Video HFR**, and then select a value.
- System Parameters
 - To reset camera settings, tap **Reset settings**.
 - To view the version information, tap **Version**.





14.3.2 Sound Recorder

The Sound Recorder app  allows you to record voice at any time in your daily life and work. You can also press the programmable key to quickly start or stop audio recording.



14.3.2.1 Record Audio

1. On the home screen, tap .




2. Tap  to start recording.
During recording, you can tap  to pause or tap  again to continue recording.
3. Tap  to stop recording.
The **Save recording?** dialog appears.
4. Enter the file name, and then tap **Save**.

14.3.2.2 View and Play Audio Files




1. On the home screen, tap .
2. In the lower-right corner, tap .
- The **Recording list** interface appears.
3. Tap the recording file to replay it.

14.3.2.3 Rename, Share, or Delete Audio Files


1. On the home screen, tap .

2. Tap .









The **Recording list** interface appears.

3. Touch and hold a recording file, or select more recordings.
4. Do any of the following:
 - To rename the file(s), tap  to enter the name, and then tap **Save**.
 - To share the file(s), tap , and then select a share method.
 - To delete the file(s), tap , and then tap **Delete**.


14.3.3 Music

The Music app  allows you to play music stored in the device or the SD card.

14.3.3.1 Play the Music


1. On the home screen, tap .
2. Tap  to select **Artists**, **Albums**, **Songs**, or **Playlists**, and then select the music you want to play.
3. (Optional) Do any of the following:
 - To stop playing, tap .
 - To play the music, tap .
 - To play the music on a loop, tap .
 - To turn on shuffle play, tap .
 - To play the previous song, tap  or .

14.3.3.2 Set the Music


On the music playing interface, tap  to set the music as ringtone, share or delete the music.

14.4 Use the Utility App

14.4.1 Scanner

The Scanner app  is used to scan and identify the information of a QR code or a bar code, such as websites, texts, and more.


14.4.1.1 Scan a Code

1. On the home screen, tap .



2. Point the camera to the code you want to scan.

Make sure that the code is within the frame.


14.4.1.2 Set the Scanner

1. On the home screen, tap .


2. In the lower right corner, tap , and then do any of the following.


- To turn on the flashlight during scanning, tap  following **Flash**.
- To turn on the sound that you can hear after scanning, tap  following **Scan sound**.
- To set the scanning timeout, tap **Scan timeout**, and then select a duration.

After turning on the Scanner app, if the scanner does not scan a code within the preset duration, the app will stop scanning.



- To set the data output mode, tap **Data output mode**, and then select a mode.
- **Simulate keystroke:** After scanning, the scanned data will be entered into the current input field.
- **Broadcast output:** After scanning, the scanned data will be sent to other apps through the broadcast system.
- To set that the scanned URL is automatically opened in Google Chrome, tap  following **Auto open URL**.

14.4.2 Files

The Files app  is used to store and manage all files of the device, including images, videos, audios, and downloaded apps.




1. On the home screen, tap .

2. View the files.


- Tap  to search for files.
- In the upper left corner, tap , and then view files by type.

3. Touch and hold the file until it is selected, or tap to select more files.

4. Do any of the following:

- To share the file, tap .
- To delete the file, tap .
- To copy, move, or rename the file, tap .

14.4.3 Documents


The Documents app  allows you to view, download, and manage notifications and files pushed from the Smart Mobile Device Management (MDM) server.

The main interface of the app is divided into the following tabs:

- **Messages:** displays notifications from the MDM server.
- **Files:** allows you to categorize and search the files from the MDM server.
- **Download:** allows you to manage files which are being downloaded or have been downloaded.



The device automatically stops or resumes downloading depending on the battery power and network connection.

14.4.3.1 View a Notification

1. On the home screen or the Quick Access screen, tap .
2. Tap **Messages**.
3. Tap the unread or read notification to view details.

When the device receives a notification, you can directly tap the notification to view details.

14.4.3.2 Browse or Download a File


1. On the home screen or the Quick Access screen, tap .
2. Tap **Files**, and then browse files in either of the following ways:
 - Tap **CAT** to browse the files by category.
 - Tap , and then enter the keywords to search for a file.

The device displays the search results below the search box.

3. Tap the file to be downloaded.
4. Tap **Download all**.

After viewing a file, you can also download the file directly from the file details interface.

14.4.3.3 Manage the File




1. On the home screen or the Quick Access screen, tap .
2. Tap **Download**, and then do the following:
 - To manage a downloading file, tap **Downloading**, and then tap the file to pause downloading, continue downloading, re-download, or delete the file.

- To manage a downloaded file, tap **Downloaded**, and then tap the file to view or delete it.




14.4.4 Clock

The Clock app  allows you to set the alarm, view the world clock, and use the timer or stopwatch.









Alarm


1. On the home screen, tap .
2. Tap .
3. Tap .
4. Set the time.
5. Tap **OK**.
6. (Optional) Set the repeat days, ringtone, label, and so on.

Clock







1. On the home screen, tap .
2. Tap .
3. Tap .
4. In the search box, enter the city name.
5. Tap the city to add it.

Timer

1. On the home screen, tap .
2. Tap .
3. Set the time.
4. Do any of the following:
 - Tap  to start the countdown.
 - Tap  to temporarily stop the countdown, and then tap  to start the countdown again.
 - Tap  to restart the countdown from the beginning.
 - Tap  to add one more minute to the countdown.
 - Tap  to delete the current countdown.



- Tap  to add a new timer.

Stopwatch



1. On the home screen, tap .
2. Tap .
3. Do any of the following:
 - Tap  to begin timing.
 - Tap  to pause timing.
 - Tap  to reset the stopwatch to zero.
 - Tap  to keep track of lap times.


Bedtime


The Bedtime feature allows you to set a bedtime for you to disconnect from the device.


1. On the home screen, tap .
2. Tap .
3. Tap Get started.
4. Set a regular wake-up time, select the alarm mode and alarm sound, and then tap **Next**.
5. Set a bedtime, set the bedtime mode, and then tap **Done**.

Other Settings


1. On the home screen, tap .
2. Tap .
3. Tap **Settings**.
4. Do one of the following.


| If You Want to... | | Then... |
|-------------------|---|--|
| Clock | Switch between analog and digital clock displayed on the main interface | <ol style="list-style-type: none"> 1. Tap Style. 2. Select Digital or Analog. |
| | Show or hide seconds | Tap  following Display time with seconds . |

| If You Want to... | | Then... |
|-------------------|--|---|
| | Add a clock form home while in another time zone | Tap  following Automatic home clock . |
| | Pick your home time zone | <ol style="list-style-type: none"> 1. Tap Home time zone. 2. Select your home time zone. |
| | Set data and time manually | <ol style="list-style-type: none"> 1. Tap Change date & time. 2. Set the date, time, time zone, and time format. |
| Alarms | Choose how long your alarm rings | <ol style="list-style-type: none"> 1. Tap Silence after. 2. Select the duration. |
| | Choose how long "snoozing" delays an alarm | <ol style="list-style-type: none"> 1. Tap Snooze length 2. Select the duration. |
| | Change your alarm's volume | Drag the slider to adjust the volume. |
| | Make the alarm become louder over time | <ol style="list-style-type: none"> 1. Tap Gradually increase volume. 2. Select the duration. |
| | Choose what the volume keys do | <ol style="list-style-type: none"> 1. Tap Volume buttons. 2. Select Snooze or Dismiss. <p>The volume keys can be used to snooze or dismiss an alarm.</p> |
| | Pick what day your week starts on | <ol style="list-style-type: none"> 1. Tap Start week on. 2. Select Saturday, Sunday, or Monday. |
| Timers | Pick the ringtone that plays when the timer ends | <ol style="list-style-type: none"> 1. Tap Timer sound. 2. Under Your sounds, tap Add new to add your own sound, or select the existing sound under Device sounds. |
| | Make the timer sound become louder over time | <ol style="list-style-type: none"> 1. Tap Gradually increase volume. 2. Select the duration. |

| If You Want to... | | Then... |
|-------------------|------------------------|--|
| | Have the timer vibrate | Tap  following Timer vibrate . |


14.4.5 Calculator



The Calculator app  facilitates basic and advanced arithmetic calculations.

To open the calculator, on the home screen, tap .




14.4.6 SuperNote

The SuperNote app  allows you to record and store text, picture, audio, and more, or set the reminder time.






1. On the home screen, tap .
2. Tap  to create a new note.
3. Enter the note title and content.
4. Tap **Submit**.

14.4.7 File Vault

The File Vault app  allows you to encrypt files (such as photos, videos, or documents), manage encrypted files, and decrypt files.

Encrypt the Files





You can use the File Vault app to encrypt the files for security.

1. On the home screen or the Quick Access screen, tap  or  to access login interface.
2. For initial use, set a password, and then tap .
3. (Optional) To change the password, on the login interface, tap **Change Password**.
4. Tap .
5. In the upper left corner, tap  to select the category.
6. Tap the file you want to encrypt.

The file is encrypted.


7. (Optional) To view the encrypted file, on the **File Vault** interface, tap **Images and videos**, **Audio**, **Documents**, or **Others**.

Decrypt the Files

1. On the home screen, tap  to enter the login interface.
2. For initial use, enter the password, and then tap .
3. Tap the **Images and videos**, **Audio**, **Documents**, or **Others**.
4. In the upper-right corner, tap .
5. Tap **Decrypt path** to select the path where the decrypted file will be stored.
6. In the upper right corner, tap .
7. Tap **Edit**, and then select the file to be decrypted.
8. Tap **Remove**.

The file disappears in the File Vault.

14.4.8 Compass

1. On the home screen or the Quick Access screen, tap .
2. View the altitude, longitude, direction, and more.

 **NOTE**


- For initial use, follow the on-screen instructions to calibrate the compass.
 - Make sure that the Compass app is allowed to access your location.
-

14.4.9 Flashlight

To turn on or off the flashlight, do one of the following:


- Swipe down from the status bar, and then tap **Flashlight**.
- Press the programmable **Flashlight** key.

14.4.10 Apps

The Apps  app allows you to view, download, and manage apps from the Smart MDM server.



- **Notifications:** displays notifications.
- **Apps:** classifies all apps for you to view or search for.
- **Downloads:** allows you to manage the apps installed or being downloaded. The device automatically stops or resumes downloading according to the battery power and network connection.

14.4.10.1 View the App Notification

1. On the home screen or the Quick Access screen, tap .
2. Tap **Notifications**.
3. Tap the unread or read notification to view details.

When receiving a notification, you can directly tap the notification to view details.

14.4.10.2 View and Download the App


1. On the home screen or the Quick Access screen, tap .
2. Tap **Apps**, and then view apps in either of the following ways:
 - Tap **Category** to view the apps by category.
 - Tap , and then enter the keywords of the app.

The device displays the results below the search box.
3. Select and download the app.

After receiving and viewing a notification, you can download the app directly from the notification details interface.





14.4.10.3 Manage the App Download

Downloading

1. On the home screen or the Quick Access screen, tap .
2. Tap **Downloads**.
3. Tap **Downloading**.


You can see the downloading app, stop downloading, continue to download, re-download, and delete the downloading.

Installed



1. On the home screen or the Quick Access screen, tap .
2. Tap **Downloads**.
3. Tap **Installed**.
4. Do either of the following:
 - To uninstall the app, tap .
 - To update the app, tap . After update, you can tap  to open the app.

15. System


15.1 Set the Language



1. On the home screen, tap .
2. Go to **System > Languages**.
3. Do any of the following:
 - To select the system language, tap **System Languages**, add or select a language, and then touch and drag the language to the top of the language order.
 - To set the language for each app, tap **App languages**, and then select a language.
 - To set regional preferences, such as temperature, tap **Regional preferences**.
If an app does not support regional preferences, the app will use its default locale settings.

15.2 Set the Text-to-Speech Engine

1. On the home screen, tap .
2. Go to **System > Languages**.
3. Tap **Text-to-speech output**.
4. Do any of the following:
 - To set the preferred text-to-speech (TTS) output engine, tap **Preferred engine**.
The device comes with Google TTS engine.
 - To set the TTS engine, tap .
 - To set the speech rate of the TTS output, drag the slider below **Speech rate**.
 - To set the pitch of the TTS output, drag the slider below **Pitch**.
 - To listen to the example output of the TTS engine, tap **Play**.
 - To reset the TTS settings, tap **Reset**.






15.3 Set the Keyboard

1. On the home screen, tap .
2. Go to **System > Keyboard**.
3. Do any of the following:
 - To select the keyboard and input method, tap **On-screen keyboard**.




- To enable spell checker, tap **Spell checker**, and then tap  following **Use spell checker**.
- To start a personal dictionary, go to **Personal dictionary** > **For all languages** > , and then enter a word to the dictionary.
- To adjust pointer speed, tap **Pointer speed**, and then drag the slider left or right.

15.4 Set the Navigation Mode

The Navigation Mode allows you to set how you can switch apps, go back to the last interface, or go to the home screen.

1. On the home screen, tap .
2. Go to **System** > **Gestures** > **Navigation mode**.
3. Select a navigation mode.
 - **Gesture navigation**: Use the drag and swipe gesture to return to the home screen, switch apps, and perform other operations.
 - **3-button navigation**: Use the ,  and  buttons at the bottom of the screen to return to the home screen, switch apps, and perform other operations.
4. (Optional) For more settings, tap .




15.5 Set the Shortcut to Open Camera

1. On the home screen, tap .
2. Go to **System** > **Gestures** > **Quickly open camera**.
3. Do the following:
 - To set that you can quickly open the camera from any screen by pressing the **On-Off** key twice, tap  following **From any screen**.
 - To set that you can quickly open the camera by double pressing the **Volume Down** key when the screen is locked, tap  following **From lock screen**.

15.6 Set the One-handed Mode



The One-handed Mode allows you to pull down the top half of the screen, making it easier to reach with your thumb.

1. On the home screen, tap .
2. Go to **System** > **Gestures** > **Navigation mode**, and then tap **Gesture navigation**.

3. Tap  to go back to the **Gestures** interface, and then tap **One-handed mode**.
4. Tap  following **Use one-handed mode**.
5. (Optional) Do any of the following.
 - To set the action triggered by a downward swipe on the screen, select **Pull screen into reach** or **Show notifications**.
 - To turn on the one-handed mode shortcut, tap  following **One-handed mode shortcut**, and then tap **One-handed mode shortcut** to set how you can use the shortcut.



15.7 Set the Gesture to Prevent Ringing

You can set calls and notifications to vibrate or mute after pressing the **On-Off** key and **Volume Up** key combination.

1. On the home screen, tap .
2. Go to **System > Gestures > Prevent ringing**.
3. Tap  following **Use prevent ringing**.
4. Select **Vibrate** or **Mute**.


15.8 Set the Three-finger Screenshot





With the Three-finger Screenshot feature, you can take a screenshot by swiping downward on the screen with three fingers.

1. On the home screen, tap .
2. Go to **System > Gestures**.
3. Tap  following **Three-finger screenshot**.

15.9 Set the Date and Time

The device can automatically synchronize with the local date, time, and time zone over mobile network. You can also manually set them.

1. On the home screen, tap .
2. Go to **System > Date & time**.


| If You Want to... | | Then... |
|-------------------|--|---|
| Automatically | Set time to synchronize with the network | Tap  following Set time automatically . |
| | Set time zone to synchronize with the network | Below Time zone , tap  following Set automatically . |
| Manually | Set date | <ol style="list-style-type: none"> 1. Tap Date. 2. Select a date. 3. Tap OK. |
| | Set time | <ol style="list-style-type: none"> 1. Tap Time. 2. Select a time. 3. Tap OK. |
| | Set time zone | <ol style="list-style-type: none"> 1. Tap Time zone. 2. Select a time zone, and then tap OK. |
| | Use the time format of the region of the system language | Tap  following Use locale default . |
| | Set time format | Tap  following Use 24-hour format . |

15.10 Reset the Device

CAUTION

Before resetting the device, back up the data in advance to avoid data loss.


When the device runs slowly or the apps quit unexpectedly, you can reset the network, apps, or system to fix the problem.

1. On the home screen, tap .
2. Go to **System > Reset options**.
3. Do any of the following:
 - To reset mobile network settings, tap **Reset Mobile Network Settings > Reset settings**, and then tap **Reset settings**.
 - To reset BT and WLAN settings, tap **Reset BT & WLAN**, and then tap **Reset**.

- To reset all app data, tap **Reset app preferences**, and then tap **Reset apps**.
- To clear the downloaded eSIM cards, tap **Erase eSIMs**, and then tap **Erase**.
- To erase all data in the non-protected partition in the internal storage, tap **Erase all data (factory reset)** > **Erase all data**.

15.11 Connect to the MDM

After the device is registered with the MDM server, you can connect the device to the server through network. This allows you to manage accesses, send app notifications, and upgrade the system through the MDM.

1. On the home screen, tap .
2. Tap **MDM**.
3. Connect to the MDM server.
 - Tap **Active server address** or **Standby server address**, enter the address of the MDM server, and then tap **Save**.
 - Tap  to scan the QR code of the MDM server.

15.12 Upgrade the System

CAUTION


- Use the official software only to upgrade the system, to prevent equipment failure, data loss, or damage to the system security.
- Back up your data before upgrade.
- Ensure that the battery power is more than 30% before upgrading.

Prerequisites

You have connected the device to the MDM according to [15.11 Connect to the MDM](#).

Procedure

When an upgrade package is available, upgrade the system.

- Manual upgrade
 - On the home screen, go to  > **System** > **System update**, and then follow the on-screen instructions to upgrade the device.

- When the **System update** dialog appears on the screen, tap **OK** to download the upgrade package.

After the download is completed, the device starts to upgrade.

- Automatic upgrade

- The device automatically downloads the upgrade package, and then starts to upgrade.
- After you receive a system upgrade notification, the device automatically downloads the upgrade package, and then starts to upgrade.

16. Troubleshooting

| Phenomena | Analysis | Solution |
|---|---|---|
| The device cannot be turned on. | The battery may be installed improperly. | Remove and reattach the battery. |
| | The battery power may run out. | Recharge or replace the battery. |
| | The battery may suffer from poor contact caused by dirtied or damaged battery contacts. | Clean the battery contacts. |
| The touchscreen fails to respond to any taps. | Too many apps are running. | Forcibly stop some apps or restart the device. |
| The keys, screen, or LED indicators do not work normally. | The keys, screens, or LED indicators may fail to function temporarily. | Restart the device. |
| | The keys, screen, or LED indicators may be damaged. | Contact your dealer or technicians of the Company for maintenance. |
| The touchscreen fails to be unlocked. | The unlock pattern or password may be incorrect. | Contact your dealer or technicians of the Company for maintenance. |
| The device cannot access the mobile network. | The SIM card is abnormal or out of service because of unpaid charges. | <ul style="list-style-type: none"> ● Make sure SIM card functions properly. ● Pay the charges, and then restart the device. |
| | The mobile data feature is not enabled for the SIM card. | Contact the carrier to enable the data connection feature. |
| | The signal may be weak. | Make sure the device is within the network coverage. |

| Phenomena | Analysis | Solution |
|---|--|---|
| | Both the mobile and WLAN network are turned on, but the WLAN connection is unstable. | Turn the WLAN off. |
| The sound is too low, unstable, or muted. | The signal may be weak. | Make sure call participants are within the communication range. |
| | The volume may be too low. | Increase the volume. |
| | The speaker may be blocked or damaged. | Clean or replace the speaker. |
| The camera does not work. | The device may not detect the front or rear camera. | Restart the device. |
| | The storage space may be insufficient. | Free up the storage space. |
| The device fails to detect the SIM card or SD card. | The SIM card or SD card may be installed improperly. | Remove and reattach the SIM card or SD card. |
| | The SIM card or SD card may suffer from poor contact caused by dirtied or damaged metal contacts. | Clean the metal contacts of the SIM card or SD card. |
| The GPS cannot locate your position. | The device may be at an unfavorable position. For example, the signal may be blocked by tall buildings or frustrated in the underground areas. | Move to an open and flat area, and try again. |
| The battery fails to be charged. | The data cable may be connected improperly. | Remove and reinsert the data cable. |

| Phenomena | Analysis | Solution |
|-----------|--|-------------------------------|
| | The power adapter plug may be inserted into the socket improperly. | Remove and reinsert the plug. |

If the above solutions cannot fix your problems, or you may have some other queries, please contact your local dealer for more technical support.

17. Care and Cleaning

To guarantee optimal performance as well as a long service life of the device, follow the tips below.

17.1 Product Care

- Only trained personnel can disassemble the device.
- Do not throw, smash, or hit the device forcefully.
- Do not use sharp or hard objects, such as needles or screwdrivers, to scrape or poke the device's ports.
- Do not expose the device to extreme temperatures for a long term.
- Do not expose the device to corrosive environments, such as saltwater, seawater, or corrosive gases.
- If no accessory is connected to the USB port on the side of the device, close the cover of the port.
- Do not connect incompatible devices to the device.
- Do not move the device by carrying the antenna.

To prevent liquid from entering the device and causing damage, follow the tips below.

- Do not expose the device to high-temperature and high-humidity environments, such as saunas, bathhouses, and more.
- Do not expose the device to non-purified water, such as saltwater, seawater, ionized water, alcoholic beverages, cosmetics, and more.
- Do not connect accessories or chargers when the device has been exposed to liquid or when the port is not dry.

If liquid has entered the device, follow the tips below.

NOTE

If liquid has entered the internal of the device, DO NOT turn on the device, and contact your dealer or repair technicians as soon as possible.

-
- Do not turn on the device, connect accessories to the device, or charge the device.
 - Do not use external heat sources, such as microwave ovens or hairdryers, to dry the device.
 - Do not insert cotton swabs or tissues into the ports.
 - Use a clean, soft cloth to thoroughly dry the device's ports and all water-affected areas, and then place the device in a well-ventilated and dry area.

17.2 Battery Care

To ensure that the battery performs normally and to extend the battery's lifespan, follow the tips below.

- Use the original charger to charge the battery.
- Before charging, turn off the device.
- Do not use the device while it is charging.
- Charge and use the battery at 0°C to 40°C. Extremely high or low temperatures will affect the battery's lifespan and charging efficiency.
- To avoid over-discharging, replace the battery and charge it promptly when the battery level is low and the low battery alert appears.
- To avoid over-charging, disconnect the device from the charger promptly once charging is complete.
- Handle the battery with care to prevent it from falling or getting exposed to liquid.
- To prevent short circuits, avoid using thin metal wires or other objects to contact the poles of the charging and discharging ports.

17.3 Product Cleaning

CAUTION

Before cleaning, turn off the device and remove the battery.

- Clean up the dust and fine particles on the device surface and charging piece with a clean and dry lint-free cloth or a brush regularly.
- Use neutral cleanser and a non-woven fabric to clean the screen, keys, and front case after long-time use. Do not use chemical preparations such as stain removers, sprays or oil preparations, so as to avoid surface case damage.
- Make sure the device is completely dry before use.

17.4 Product Storage

If the device will not be used for a long term, store the device following the tips below.

NOTE

- Before storage, turn off the device, remove the battery and then store it separately from the

device.

- Make sure all external connections to the device are disconnected or turned off.
 - If the battery remains unused for a long term, its capacity and performance may reduce.
-
- Store the device in a clean, dry, and well-ventilated indoor environment with an environment temperature of -5°C to $+25^{\circ}\text{C}$ and relative humidity between 45% and 75%.
 - Avoid exposing the device to acidic or corrosive substances.
 - Do not store the device near fire sources or heat sources.
 - Do not store the device in direct sunlight.
 - Recharge the battery every three months and perform maintenance every six months.

18. Optional Accessories

CAUTION

Use the accessories specified by the Company only. Otherwise, we will not be liable for any loss or damage arising out of use of unauthorized accessories.

Contact your local dealer for the optional accessories used with the device.

19. Statements

19.1 Copyright Information

Hytera is the trademark or registered trademark of Hytera Communications Corporation Limited (the Company) in the People's Republic of China (PRC) and/or other countries or areas. The Company retains the ownership of its trademarks and product names. All other trademarks and/or product names that may be used in this manual are properties of their respective owners.

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19.2 Disclaimer

The Company endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and designs are subject to change without notice due to continuous technological development. No part of this manual may be copied, modified, translated, or distributed in any manner without the prior written consent of the Company.

We do not guarantee, for any particular purpose, the accuracy, validity, timeliness, legitimacy or completeness of the third-party products and contents involved in this manual.

If you have any suggestions or would like to receive more information, please visit our website at: <https://www.hytera.com>.

19.3 CE SAR Statement

This equipment complies with Directive 2014/53/EU radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by European Union market (France). These requirements set a SAR limit of 2W/kg averaged over one

gram of tissue. The highest SAR value reported under this standard during product certification for use at the head is 1.31 W/kg and body is 1.17 W/kg. The SAR limit is 4.0 W/kg with Limbs, the highest SAR value reported under this standard during product certification for use at the limbs is 2.49 W/kg.

19.4 5G and 6G Frequency Range Restriction

The functions of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) within the bands 5150–5350 MHz and 5945–6425 MHz for this device are restricted to indoor use only within all European Union countries(AT/BE/BG/CZ/DK/DE/EE/IE/EL/ES/FR/HR/IT/CY/LV/LT/LU/HU/MT/NL/PL/PT/RO/SI/SK/FI/SE/TR/NO/CH/IS/LI/UK(NI)).

| | | | | |
|---|----|----|----|--------|
|  | | | | |
| AT | EE | IE | NO | SE |
| BE | FI | IT | PL | CH |
| BG | FR | LV | PT | NL |
| HR | DE | LI | RO | UK(NI) |
| CY | EL | LT | SK | |
| CZ | HU | LU | SI | |
| DK | IS | MT | ES | |

19.5 Manufacturer Information

- Manufacturer Name
Hytera Communications Corporation Limited
- Manufacturer Address
Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, P.R.C., P 518057

20. Specifications

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|--------------------------------------|--|---------------------------------------|---|
| BT Classic | GFSK $\pi/4$ DQPSK 8DPSK | 2402–2480 MHz | 1 MHz | 10.61dBm |
| BT LE | GFSK | 2402–2480 MHz | 1 MHz 2 MHz | 9.15dBm |
| 2.4G WLAN | DSSS OFDM | 2412–2472 MHz | 20 MHz 40 MHz | 18.98dBm |
| 5G WLAN | OFDM | 5180–5825 MHz | 20 MHz 40 MHz 80 MHz 160 MHz | 19.64dBm |
| 6G WLAN | OFDMA | 5955–7115 MHz | 20 MHz 40 MHz 80 MHz 160 MHz | 18.21dBm |
| GPS (RX) | N/A | L1: 1575.42 MHz L5: 1176.45 MHz | N/A | N/A |
| NFC | ASK | 13.56 MHz | N/A | -26.99dBuA/m @10m |
| GSM | GMSK (GPRS/EGPRS) 8PSK (EGPRS) | GSM850 TX: 824–849 MHz RX: 869–894 MHz GSM900 TX: 890–915 MHz RX: 925–960 MHz | 200 kHz | GSM850: 33 dBm GSM900: 33 dBm DCS1800: 30 dBm |

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|------------------------|--|--|--|
| | | DCS1800 TX: 1710–1785 MHz RX: 1805–1880 MHz PCS1900 TX: 1850–1910 MHz RX: 1930–1990 MHz | | PCS1900: 30 dBm |
| WCDMA | BPSK QPSK | B1 TX: 1920–1980 MHz RX: 2110–2170 MHz B2 TX: 1850–1910 MHz RX: 1930–1990 MHz B4 TX: 1710–1755 MHz RX: 2110–2155 MHz B5 TX: 824–849 MHz RX: 869–894 MHz B8 TX: 880–915 MHz RX: 925–960 MHz | 5 MHz | B1: 24 dBm B2: 24 dBm B4: 24 dBm B5: 24 dBm B8: 24 dBm |
| LTE | QPSK 16QAM 64QAM | B1 TX: 1920–1980 MHz RX: 2110–2170 MHz B2 TX: 1850–1910 MHz RX: 1930–1990 MHz | B1: 5/10/15/20 MHz B2: 1.4/3/5/10/15/20 MHz | B1: 24 dBm B2: 24 dBm B3: 24 dBm B4: 24 dBm B5: 24 dBm B7: 24.5 dBm |

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|------------|--|--|---|
| | | B3 TX: 1710–1785 MHz RX: 1805–1880 MHz | B3: 1.4/3/5/10/15 /20 MHz | B8: 24 dBm B12: 24 dBm B13: 24 dBm |
| | | B4 TX: 1710–1755 MHz RX: 2110–2155 MHz | B4: 1.4/3/5/10/15 /20 MHz | B17: 24 dBm B18: 24 dBm B19: 24 dBm |
| | | B5 TX: 824–849 MHz RX: 869–894 MHz | B5: 1.4/3/5/10 MHz | B20: 24 dBm B26: 24 dBm |
| | | B7 TX: 2500–2570 MHz RX: 2620–2690 MHz | B7: 5/10/15/20 MHz B8: 1.4/3/5/10 MHz B12: 1.4/3/5/10 MHz | B28: 24 dBm B66: 24 dBm B68: 24 dBm B71: 24 dBm B34: 24 dBm |
| | | B8 TX: 880–915 MHz RX: 925–960 MHz | B13: 5/10 MHz B17: 5/10 MHz B18: 5/10/15 MHz B19: 5/10/15 MHz | B38: 24.5 dBm B39: 24 dBm B40: 24.5 dBm B41: 26 dBm |
| | | B12 TX: 699–716 MHz RX: 729–746 MHz | B20: 5/10/15/20 MHz B26: 1.4/3/5/10/15 MHz | B42: 26 dBm B43: 24 dBm B48: 24 dBm |
| | | B13 TX: 777–787 MHz RX: 746–756 MHz | B28: 3/5/10/15/20 MHz | |
| | | B17 TX: 704–716 MHz RX: 734–746 MHz | B66: 1.4/3/5/10/15 /20 MHz B68: 5/10/15 MHz | |
| | | B18 TX: 815–830 MHz | B71: 5/10/15/20 MHz | |

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|------------|---|----------------------|--------------------|
| | | RX: 860–875 MHz | B34: 5/10/15 MHz | |
| | | B19 | B38: 5/10/15/20 MHz | |
| | | TX: 830–845 MHz | | |
| | | RX: 875–890 MHz | B39: 5/10/15/20 MHz | |
| | | B20 | | |
| | | TX: 832–862 MHz | B40: 5/10/15/20 MHz | |
| | | RX: 791–821 MHz | B41: 5/10/15/20 MHz | |
| | | B26 | | |
| | | TX: 814–849 MHz | B42: 5/10/15/20 MHz | |
| | | RX: 859–894 MHz | B43: 5/10/15/20 MHz | |
| | | B28 | | |
| | | TX: 703–748 MHz | B48: 5/10/15/20 MHz | |
| | | RX: 758–803 MHz | | |
| | | B66 | | |
| | | TX: 1710–1780 MHz | | |
| | | RX: 2110–2200 MHz | | |
| | | B68 | | |
| | | TX: 698–728 MHz | | |
| | | RX: 753–783 MHz | | |
| | | B71 | | |
| | | TX: 663–698 MHz | | |
| | | RX: 617–652 MHz | | |
| | | B34 | | |
| | | TX/RX: 2010–2025 MHz | | |
| | | B38 | | |
| | | TX/RX: 2570–2620 MHz | | |

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|--|---|---|--|
| | | B39 TX/RX: 1880–1920 MHz B40 TX/RX: 2300–2400 MHz B41 TX/RX: 2496–2690 MHz B42 TX/RX: 3400–3600 MHz B43 TX/RX: 3600–3800 MHz B48 TX/RX: 3550–37000 MHz | | |
| NR | DFT-s-OFDM: PI/2 BPSK QPSK 16QAM 64QAM 256QAM CP-OFDM: QPSK 16QAM 64QAM 256QAM | n1 TX: 1920–1980 MHz RX: 2110–2170 MHz n2 TX: 1850–1910 MHz RX: 1930–1990 MHz n3 TX: 1710–1785 MHz RX: 1805–1880 MHz n5 | n1: 5/10/15/20/2 5/30/40/45/ 50 MHz n2: 5/10/15/20 MHz n3: 5/10/15/20/2 5/30 MHz n5: 5/10/15/2 MHz | n1: 24 dBm n2: 24 dBm n3: 24 dBm n5: 24 dBm n7: 24.5 dBm n8: 24 dBm n12: 24 dBm n20: 24 dBm n28: 24 dBm n66: 24 dBm |

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|------------|--|---|---|
| | | TX: 824–849 MHz RX: 869–894 MHz n7 | n7: 5/10/15/20 MHz n8: 5/10/15/20 MHz | n71: 24 dBm n38: 25.5 dBm n40: 24.5 dBm |
| | | TX: 2500–2570 MHz RX: 2620–2690 MHz n8 | n12: 5/10/15 MHz n20: 5/10/15/20 MHz n28: 5/10/15/20/3 0 MHz | n41: 27 dBm n48: 24 dBm n77: 26 dBm n78: 26 dBm n79: 26 dBm |
| | | TX: 880–915 MHz RX: 925–960 MHz n12 | n66: 5/10/15/20/2 5/30/40 MHz | |
| | | TX: 699–716 MHz RX: 729–746 MHz n20 | n71: 5/10/15/20 MHz | |
| | | TX: 832–862 MHz RX: 791–821 MHz n28 | n38: 10/15/20 MHz n40: 10/15/20/25/ 30/40/50/60 /80 MHz | |
| | | TX: 703–748 MHz RX: 758–803 MHz n66 | n41: 10/15/20/30/ 40/50/60/80 /90/100 MHz | |
| | | TX: 1710–1780 MHz RX: 2110–2200 MHz n71 | n77: 10/15/20/40/ 50/60/70/80 /90/100 MHz | |
| | | TX: 663–698 MHz RX: 617–652 MHz n38 | | |
| | | TX/RX: 2570–2620 MHz | | |

| Technology | Modulation | Frequency Range (Transmitter/Receiver) | Channel Bandwidth | Conducted Power |
|------------|------------|---|--|--------------------|
| | | n40 TX/RX: 2300–2400 MHz | n78: 10/15/20/40/50/60/70/80/90/100 MHz | |
| | | n41 TX/RX: 2496–2690 MHz | n79: 40/50/60/80/100 MHz | |
| | | n48 TX/RX: 3550–3700 MHz | | |
| | | n77 TX/RX: 3300–4200 MHz | | |
| | | n78 TX/RX: 3300–3800 MHz | | |
| | | n79 TX/RX: 4400–5000 MHz | | |

21. Abbreviations

| Abbreviation | Full Name |
|--------------|-----------------------------|
| GPS | Global Positioning System |
| LCD | Liquid-Crystal Display |
| LED | Light-Emitting Diode |
| MDM | Mobile Device Management |
| PC | Personal Computer |
| PTT | Push-To-Talk |
| SIM | Subscriber Identity Module |
| USB | Universal Serial Bus |
| WLAN | Wireless Local Area Network |



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