

PDC760 Multi-mode Advanced Radio

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:

PDC760 Multi-mode Advanced Radio

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FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Verification of harmful interference by this equipment to radio or television reception can be determined by turning it off and then on. The user is encouraged to try to correct the interference by one or more of the following measures:

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

Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Note: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Compliance with RF Exposure Standards

Hytera's radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR § 1.1307, 1.1310 and 2.1093
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95.1:2005; Canada RSS102 Issue 5 March 2015
- Institute of Electrical and Electronic Engineers (IEEE) C95.1:2005 Edition

RF Exposure Compliance and Control Guidelines and Operating Instructions

To control your exposure and ensure compliance with the occupational/controlled environmental exposure limits, always adhere to the following procedures.

Guidelines:

- Do not remove the RF Exposure Label from the device.
- User awareness instructions should accompany device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions:

- Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) key. To receive calls, release the PTT key. Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy only when transmitting (in terms of measuring for standards compliance).
- Keep the radio unit at least 2.5 cm away from the face. Keeping the radio at the proper distance is important as RF exposure decreases with distance from the antenna. The antenna should be kept away from the face and eyes.
- When worn on the body, always place the radio in a Hytera-approved holder, holster, case, or body harness or by use of the correct clip for this product. Use of non-approved accessories may result in exposure levels which exceed the FCC's occupational/controlled environmental RF exposure limits.
- Use of non-approved antennas, batteries, and accessories causes the radio to exceed the FCC RF exposure guidelines.
- Contact your local dealer for the optional accessories of the product.

IC Statement

The device has been tested and complies with SAR limits; users can obtain Canadian information on RF exposure and compliance.

Après examen de ce matériel aux conformités aux limites DAS et/ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité and compliance d'acquérir les informations correspondantes.

This device complies with Innovation, Science and Economic Development Canada Compliance license-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

EU Regulatory Conformance

As certified by the qualified laboratory, the product is in compliance with the essential requirements and other relevant provisions of 2014/53/EU.

Please note that the above information is applicable to EU countries only.

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Documentation Information

Icon Conventions

Icon	Description
 Note	Indicates references that can further describe the related topics.
 Caution	Indicates situations that could cause data loss or equipment damage.

Notation Conventions

Item	Description	Example
Boldface	Denotes menus, tabs, parameter names, window names, dialogue names, and hardware buttons.	To save the configuration, click Apply.
		The Log Level Settings dialogue appears.
		Press the PTT key.
" "	Denotes messages, directories, file names, folder names, and parameter values.	The screen displays "Invalid Battery!"
		Open "PDT_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 DWS, refer to <i>Dispatch Workstation User Guide</i> .
Courier New	Denotes commands and their execution results.	To set the IP address, run the following command: <code>vos-cmd - m name IP</code>

Key Operations

Operation	Description
Press	Press and release quickly.

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

Main 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.
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.

1. Before Use

1.1 Packing List

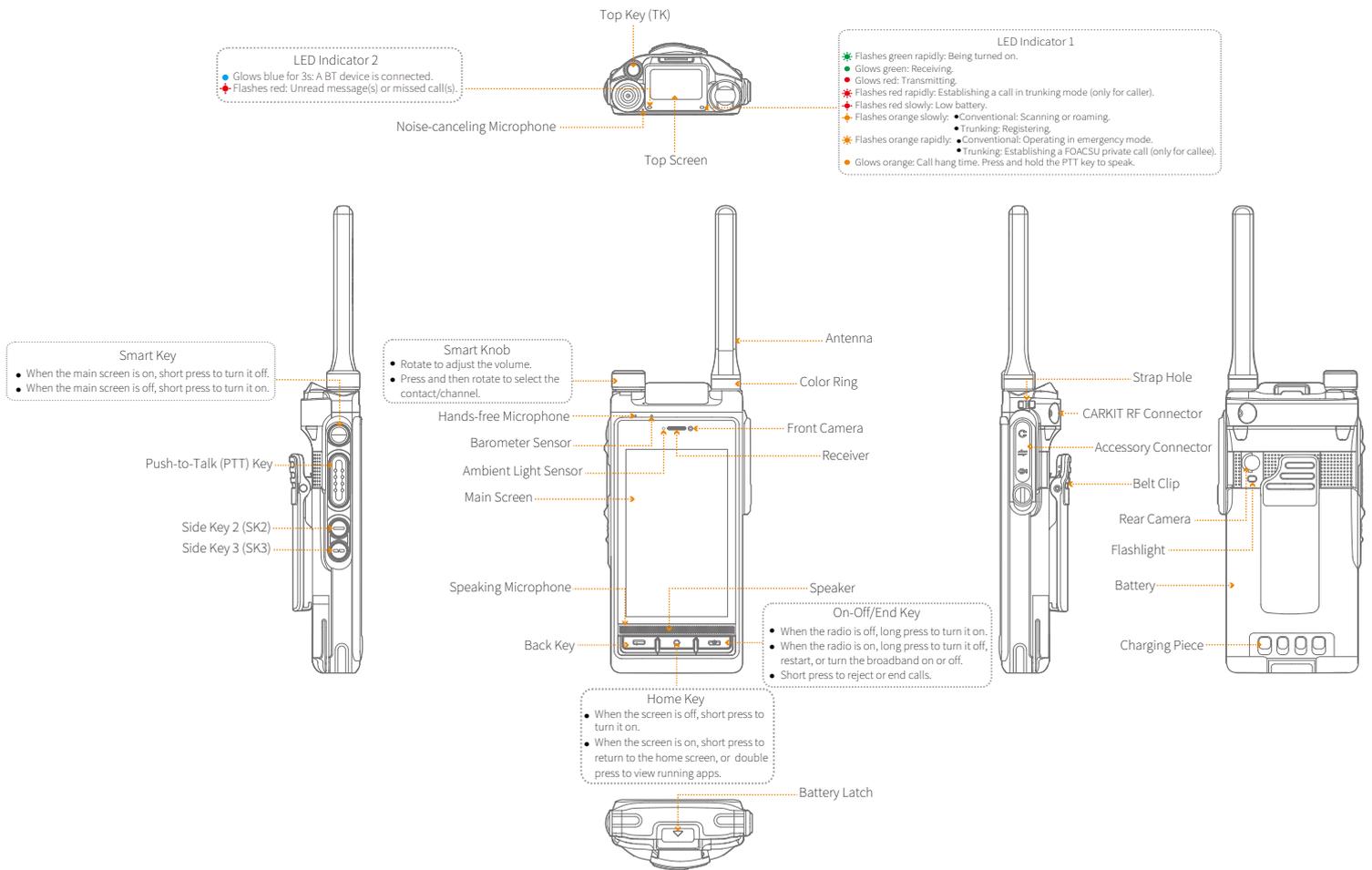
Please unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

Item	Quantity (PCS)	Item	Quantity (PCS)
Radio	1	Strap	1
Battery	1	Belt Clip	1
Antenna	1	Color Ring	3
Charger	1	Documentation Kit	1
Power Adapter	1	/	/

Note

- Figures in this manual are for reference only.
 - Check whether the frequency band marked on the antenna label matches that on the radio label. If not, contact your dealer.
-

1.2 Product Layout

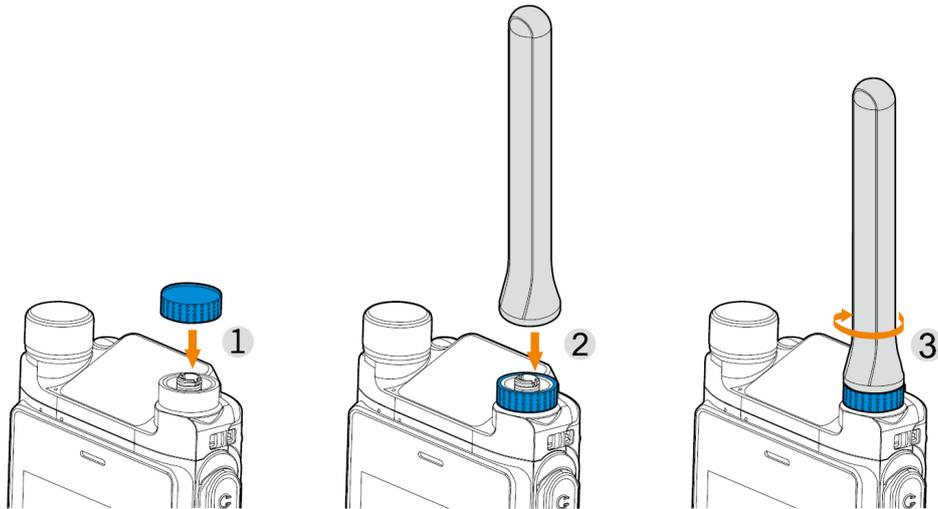


1.3 Attaching the Antenna

⚠ Caution

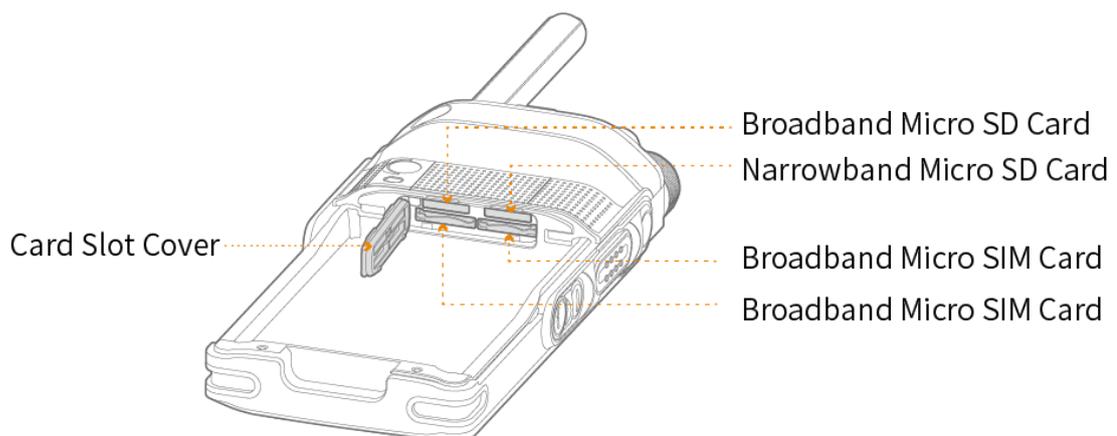
Do not hold the radio by the antenna and swing it. This may affect the antenna performance and shorten the life span of the antenna.

1. (Optional) Put the color ring (for identification) on the antenna connector.
2. Put the antenna on the antenna connector.
3. Rotate the antenna clockwise till hand tight.



1.4 Installing the Micro SIM Card and Micro SD Card

1. Pull the two protrusions on the top of the card slot cover and pull out the cover.
2. Install the Micro SIM card.
 - a. Pull out the Micro SIM card tray, and then put the Micro SIM card on the tray.
 - b. Insert the card tray with the Micro SIM card back into the slot.
3. Insert the Micro SD card into the corresponding slot.
4. Align the upper end of the card slot cover with the card slot, and then push it inward.
5. Press the lower end of the card slot cover to put it back in place.

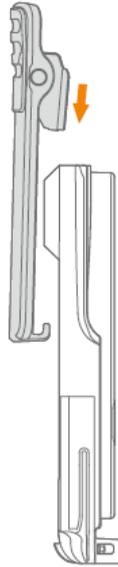


Note

You must completely take out the Micro SD card before re-installing it.

1.5 Attaching the Belt Clip

1. Align the holder on the belt clip with the grooves on the battery.
2. Press the belt clip downwards into place.



Note

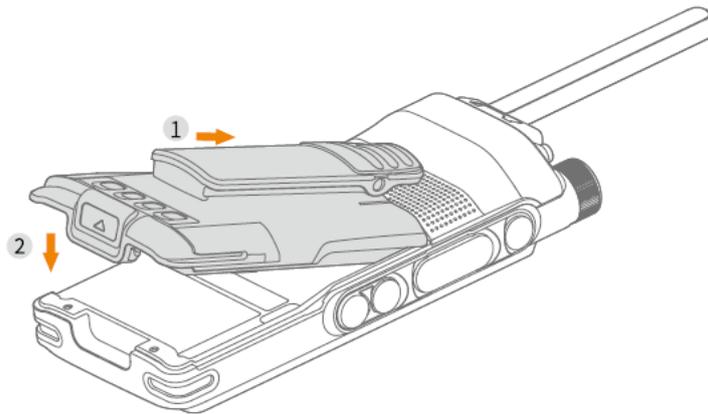
You can press and hold the belt clip spring plate and push the belt clip upwards to remove it.

1.6 Attaching 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*.
-

1. Slide the battery into the slot.
2. Press the battery latch until it is fully fitted into the radio.

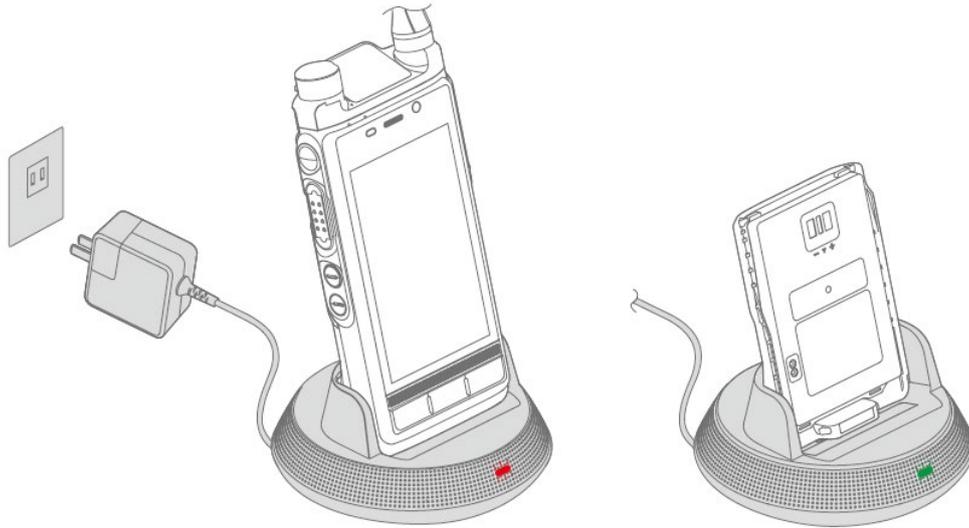


1.7 Charging the Battery

Caution

- Use the approved charger 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).
-

Before initial use, charge either the battery alone or the battery that is attached to the radio.



The LED indicator on the charger shows the charging status, as described in the following table.

LED Indicator	Charging Status
Flashes red slowly	No battery is placed on the charger.
Flashes orange slowly	The battery is being activated.
Glow red	The battery is being charged.
Glow green	<ul style="list-style-type: none"> ● The radio with battery attached is charged to 90% or above. ● The standalone battery is charged to 95% or above.
Flashes red rapidly	The battery fails to be charged.

2. Basic Operations

2.1 Turning On or Off the Radio

2.1.1 Turning On the Radio

Long press the On-Off/End key until the startup screen appears.

2.1.2 Turning Off the Radio

1. Long press the On-Off/End key until the power-off selection screen appears.
2. Tap Power off, and then tap OK.

2.1.3 Restarting the Radio

1. Long press the On-Off/End key until the restart selection screen appears.
2. Tap Restart, and then tap OK.

2.2 Adjusting the Volume

To increase or decrease the volume, rotate the Smart Knob clockwise or counter-clockwise.

2.3 Selecting the Contact or Channel

To select the contact or channel, press the Smart Knob, and then rotate the knob within 5s. If you do not rotate the Smart Knob within 5s, or if you press it again within 5s, you can rotate it to adjust the volume.

2.4 Understanding the Screens

⚠ Caution

- Do not hit or scrape the screen with hard or sharp objects. Otherwise, the screen may be damaged.
- Do not drop the radio. Otherwise, the screen may be cracked.



2.4.1 Status Indications

2.4.1.1 LCD Icons

Type	Top Screen	Main Screen	Radio Status
Battery power			The fuller the battery bar is, the stronger the battery power remains.
			The battery power is low.
Network and signal	/	E/G/3G/4G	The E/2G/3G/4G cellular network is enabled.
			The radio is connected to the WLAN network.
			The number of bars indicates the signal strength of the broadband network.
			The radio has not registered with the broadband network.
			The radio operates in Airplane mode.
			The WLAN hotspot is enabled.
			The RoIP network is enabled, and the radio has registered voice service in the broadband network.
			The RoIP network is enabled, and the radio has registered video service in the broadband network.
			The RoIP network is enabled, and the radio has registered video and voice services in the broadband network.
			The RoIP network is enabled, and the radio has registered in the broadband network.
			The narrowband network is disabled.
	<ul style="list-style-type: none"> The radio detects no signal in trunking mode. The radio is standby in conventional mode. 		

Type	Top Screen	Main Screen	Radio Status
			The number of bars indicates the signal strength of the narrowband network.
			In trunking single base station (BS) mode, the number of bars indicates the signal strength of the narrowband network.
Accessory			An accessory is connected.
			The BT feature is enabled.
			A BT device is connected.
			The GPS feature is enabled, and valid positioning data is received.
			The GPS feature is enabled, but no valid positioning data is received.
Others			The radio operates in low or high power mode.
			The radio is roaming.
			The radio is scanning.
			The radio stays on an active channel.
			The radio stays on Priority Channel 1.
			The radio stays on Priority Channel 2.
			The End-to-End Encryption (E2EE) feature is enabled.
			The Over the Air Encrypt feature is enabled.
			The Scrambler feature is enabled.
			The Monitor feature is enabled.
			The Voice Operated Transmit (VOX) feature is enabled.
			The radio operates in Covert mode.
			The hardware encryption card is abnormal.

Type	Top Screen	Main Screen	Radio Status
			The radio operates in Silent mode.
	/		The Micro SD card is abnormal.
			The Micro SD card is encrypted.
			No Micro SIM card is detected.
			The Micro SIM card is abnormal.
			The NFC feature is enabled.
			The Background Video feature is enabled.
			The Background Recording feature is enabled.
			The Alarm feature is enabled.

2.4.2 Widgets

The widgets allow you to view the PMR information and favorite contacts, and quickly access apps such as Agenda, Recorder, and Notes.

- To access widgets, swipe right on the home screen.
- To fold or unfold widgets, tap Fold or Unfold.
- To manage widgets, swipe to the bottom of the widgets interface, and then tap Edit. Then do the following:
 - To sort the order of widgets, press and drag the widgets.
 - To add or delete widgets, tap the enable/disable toggle.
- To search, tap the Search field, and then enter the contents you want to access.
- To manage the Shortcuts widget, do the following:
 - Tap shortcuts, such as Photo, Alarm, Calculator, and Lock screen, to quickly access the features.
 - Tap Edit to add or delete shortcuts displayed in the Shortcuts widget.

2.4.3 Control and Notification Center

The control and notification center allows you to access system functions and view notifications.

To access the control and notification center, swipe down from the top edge of the main screen. You can do one of the following:

- To quickly access Settings, tap .
- To enable or disable features, tap the widgets.
- To add or remove widgets displayed in the control center, tap , and then drag the widgets.
- To adjust the main screen brightness, drag the brightness slider. For more options, tap .
- To manage notifications, do one of the following:
 - To view details of a notification, tap the notification.
 - To view earlier notifications, swipe upwards.
 - To block a notification, swipe left, and then tap .
 - To clear a notification, swipe right, and then tap Clear.
 - To clear all notifications, tap .

2.4.4 App Center

The app center allows you to visit and manage apps.

To access the app center, swipe left on the home screen. You can do one of the following:

- To open an app, tap the app.
- To reposition an app, touch and hold the app icon, and then drag it to a new location.
- To uninstall a non-system app, touch and hold the app icon, and then drag it to the Uninstall field.
- To create an app folder, touch and hold the app icon, and then drag it to another app.
- To rename an app folder, open the folder, tap the folder name, and then edit the name.

2.4.5 Screen Management

2.4.5.1 Locking or Unlocking the Screen

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

To lock or unlock the screen, do either of the following:

- Locking the screen
 - Press the Smart Key to turn the screen off.

- If the radio's standby time reaches the lock screen time, the screen will be turned off automatically. To set the lock screen time, tap , tap Display under the Device pane, and then go to Brightness level > Time.

- Unlocking the screen

Press the Smart Key or the Home key to turn the screen on.

2.4.5.2 Setting the Lock Pattern

1. Tap .
2. Under the Personal pane, go to Security > Screen lock.
3. Tap Swipe, Pattern, or Password.

With the lock pattern enabled, swipe up, draw the pattern, or enter the password to unlock the screen.

2.4.5.3 Setting the Lock Screen Range

1. Tap .
2. Under the Personal pane, go to Security > Lock screen.
3. Do one of the following:

- Enable Sync lock Control Center.

The radio locks the control and notification center when the screen is locked.

- Enable the knobs, PTT key, or programmable keys.

These knobs or keys are locked when the screen is locked.

- Enable Keys work when broadband off.

You can use the Smart Knob, PTT key, SK2, SK3, and TK when the screen is locked with the broadband off.

2.4.5.4 Capturing or Recording the Screen

Capturing the Screen

You can capture a screenshot to save contents on the screen. Do either of the following:

- Press SK2 and SK3 simultaneously.
- Press the preprogrammed Screenshot key.

Recording the Screen

You can record screen operations and ambient sounds.

- Recording screen operations
 - In the control and notification center, tap Screen Recorder.
 - Press the preprogrammed Screen recording key.
- Recording ambient sounds

During screen operation recording, the microphone is disabled by default.

To record ambient sounds, tap , go to Assistance > Screen recording > Audio source, and then tap Microphone.

2.4.5.5 Inverting the Top Screen

You can change the orientation of the top screen for clear and fast access to the information. Do either of the following:

- Press the preprogrammed Invert top screen key.
- In the control and notification center, tap Invert top screen.

2.4.5.6 Ending Recently Used Apps

You can end the recently used apps to release the storage space.

Double press the Home key to enter the recently used apps interface. Do either of the following:

- To end a running app, tap , swipe left, or swipe right.
- To end all running apps, tap .

2.5 Switching the Communication Mode

Upon power-on, the radio automatically enters broadband & narrowband mode.

To switch to narrowband mode, long press the On-Off/End key, and then tap Broadband off.

To switch back to broadband & narrowband mode, long press the On-Off/End key, and then tap Broadband on.

2.6 Switching the Work Mode

1. Tap .
2. Under the Basic settings pane, tap Work mode.
3. Tap Conventional, DMR trunking, or MPT trunking.

2.7 Using the SIM Cards

The radio supports the Dual SIM Dual Standby feature, but cannot access voice services and data services simultaneously.

2.7.1 Enabling or Disabling the SIM Cards

1. Tap .
2. Under the Wireless & networks pane, tap SIM cards.
3. Enable SIM 1 or SIM 2.

2.7.2 Setting the Default SIM Card

You can set a SIM card as the default card for the Internet, calls, and messages.

1. Tap .
2. Under the Wireless & networks pane, tap SIM cards.
3. Tap Cellular data, Calls, and SMS messages, and then select the default card for each service.

Note

- The Dual SIM Dual Standby feature is only applicable to radios with dual SIM card slots.
 - When two telecom cards are used simultaneously, if you set card 1 as the default card, card 2 cannot register the network; if you set card 2 as the default card, both cards can register the network.
-

2.8 Checking the Device Info

Tap , and then tap Device info under the System pane. You can do one of the following:

- Check the device information including Model name, Serial number, Software version, and Capacity.
- Tap Status to check the battery, SIM cards, PMR network, and other info.
- Tap Legal information to check software license and privacy policy of the Company.

2.9 Viewing the Broadband Network Info

1. Tap , and then tap .
2. Enter "***#0328#***".

2.10 Viewing Helpful Tips

The tips allow you to know about radio features and operations in the form of words, pictures, or animations.

To view helpful tips, tap , and then tap New features, To know your radio, Pick-out, or FAQ.

3. Communication Services

3.1 Calls over PMR Network

When you are speaking during a call, keep the microphone about 2.5 to 5 cm away from your mouth. This ensures optimal voice quality on the receiving radio.

Note

- In trunking mode, if the radio is not registered or attached, you cannot initiate a call.
 - In trunking mode, you can initiate a call by entering an ID complying with the dialing rules. For details, consult your dealer.
 - The All Call feature, Broadcast Call feature, and Include Call feature are enabled by your dealer.
-

3.1.1 Group Call

A group call is a call from an individual user in a group to all the other members in the group.

3.1.1.1 Initiating a Group Call

Through Preset Contact

1. Press and then rotate the Smart Knob to select the channel or group contact.
2. Press and hold the PTT key.

Through Manual Dialing

1. Tap .
2. In the Dialer interface, enter the group ID complying with the dialing rules.
3. Do either of the following:
 - In trunking mode, tap .
 - In conventional mode, tap , and then tap Group in the Choose Call Way dialog box.
4. Press the PTT key.

Through Contact List

1. Tap  or .
2. Go to Contacts > Favorites/Group, and then tap the group contact.

3. Press and hold the PTT key or tap .

Through One Touch Call

With the One Touch Call feature enabled, do either of the following:

- In trunking mode, press the preprogrammed One touch call/msg key.
- In conventional mode, press the preprogrammed One touch call/msg key, and then press the PTT key.

3.1.1.2 Receiving a Group Call

You can answer a group call without any operation.

3.1.1.3 Managing a Group Call

During a group call, the calling party can perform the following operations:

- To record the call, tap .
- To switch to the conversation interface, tap .
- To obtain or send location information, tap  to access the positioning interface.

3.1.1.4 Ending a Group Call

Conventional Mode

A group call automatically ends when the call hang time expires.

Trunking Mode

A group call ends in one of the following cases:

- The calling party taps  or presses the On-Off/End key.
If the called party presses the On-Off/End key, the called party exits the call, and can rejoin the call later.
- The call hang time expires.
- The call duration exceeds the preset time.
- The base station (BS) signal is lost.
- A pre-emptive call or an emergency call occupies the channel.
- The calling party changes the contact with the Clear Down feature enabled.

3.1.2 Private Call

A private call is a call from an individual user to another individual user.

3.1.2.1 Initiating a Private Call

Through Preset Contact

1. Press and then rotate the Smart Knob to select the channel or private contact.
2. Press and hold the PTT key.

Through Manual Dialing

1. Tap .
2. In the Dialer interface, enter the private ID complying with the dialing rules.
3. Do either of the following:
 - In trunking mode, tap .
 - In conventional mode, tap , and then tap Private in the Choose Call Way dialog box.
4. Press the PTT key.

Through Contact List

1. Tap  or .
2. Go to Contacts > Favorites/Private, and then tap the private contact.
3. Press and hold the PTT key or tap .

Through One Touch Call

With the One Touch Call feature enabled, do either of the following:

- In trunking mode, press the preprogrammed One touch call/msg key.
- In conventional mode, press the preprogrammed One touch call/msg key, and then press the PTT key.

3.1.2.2 Receiving a Private Call

Conventional Mode

You can answer a private call without any operation.

Trunking Mode

You can answer a private call according to the setup mode as follows:

- FOACSU
When receiving a FOACSU private call, the radio rings and vibrates. To answer the call, press the PTT key within the preset time.

- Off Air Call Set-Up (OACSU)

When receiving an OACSU private call, you can answer the call without any operation.

3.1.2.3 Managing a Private Call

During a private call, the calling party can perform the following operations:

- To record the call, tap .
- To dial again, tap  to open the Dialer.
- To switch to the conversation interface, tap .
- To obtain or send location information, tap  to access the positioning interface.

3.1.2.4 Ending a Private Call

Conventional Mode

A private call automatically ends when the call hang time expires.

Trunking Mode

A private call ends in one of the following cases:

- The calling or called party taps  or presses the On-Off/End key.
- The call hang time expires.
- The call duration exceeds the preset time.
- The BS signal is lost.
- A pre-emptive call or an emergency call occupies the channel.
- The calling party changes the contact with the Clear Down feature enabled.

3.1.3 All Call

- Conventional mode

An all call is a call from an individual user to all the other users on the current digital channel.

- Trunking mode

An all call is a call from an individual user to all the other users in a specific base station, area, or system.

The all call can be either of the following types:

- Broadcast All Call: Only the calling party can transmit voice.
- General All Call: Both the calling party and the called party can transmit voice.

3.1.3.1 Initiating an All Call

Through Preset Contact

1. Press and then rotate the Smart Knob to select the channel or all call contact.
2. Press and hold the PTT key.

Through Manual Dialing

1. Tap .
2. In the Dialer interface, enter the all call ID complying with the dialing rules.
3. Tap  or press the PTT key.

Through Contact List

1. Tap  or .
2. Go to Contacts > Group, and then tap the all call contact.
3. Press and hold the PTT key or tap .

Through One Touch Call

With the One Touch Call feature enabled, do either of the following:

- In trunking mode, press the preprogrammed One touch call/msg key.
- In conventional mode, press the preprogrammed One touch call/msg key, and then press the PTT key.

3.1.3.2 Receiving an All Call

You can answer an all call without any operation.

3.1.3.3 Ending an All Call

Conventional Mode

An all call ends when the calling party releases the PTT key.

Trunking Mode

An all call ends in one of the following cases:

- The calling party taps  or presses the On-Off/End key.
If the called party presses the On-Off/End key, the called party exits the call, and can rejoin the call later.
- The preset transmission time of the calling party expires.

- The call duration exceeds the preset time.
- The BS signal is lost.
- The calling party changes the contact with the Clear Down feature enabled.

3.1.4 Broadcast Call (Trunking Only)

A broadcast call is a special group call.

In a broadcast call, only the calling party can speak.

3.1.4.1 Initiating a Broadcast Call

Through Contact List

1. Tap  or , and then tap Contacts.
2. Tap Group, and then tap the group contact to access the contact details interface.
3. Tap .

Through One Touch Call

With the One Touch Call feature enabled, press the preprogrammed One touch call/msg key.

3.1.4.2 Receiving a Broadcast Call

You can answer a broadcast call without any operation.

3.1.4.3 Ending a Broadcast Call

A broadcast call ends in one of the following cases:

- The calling party taps  or presses the On-Off/End key.
If the called party presses the On-Off/End key, the called party exits the call, and can rejoin the call later.
- The call duration exceeds the preset time.
- The BS signal is lost.
- A pre-emptive call or an emergency call occupies the channel.
- The calling party changes the contact with the Clear Down feature enabled.

3.1.5 PSTN/PABX Call (Trunking Only)

A PSTN/PABX call is a call to a PSTN/PABX user over the wired telephone network.

- PSTN: Public Switched Telephone Network
- PABX: Private Automatic Branch Exchange

3.1.5.1 Initiating a PSTN/PABX Call

Through Contact List

1. Tap  or , and then tap Contacts.
2. Tap Favorites/Private, and then tap the PSTN/PABX contact
3. Press the PTT key.

Through Manual Dialing

1. Tap .
2. In the Dialer interface, enter the PSTN/PABX ID complying with the dialing rules.
3. Tap , and then tap PSTN or PABX in the Choose Call Way dialog box.
4. Press the PTT key.

Through One Touch Call

With the One Touch Call feature enabled, press the preprogrammed One touch call/msg key.

3.1.5.2 Receiving a PSTN/PABX Call

You can answer a PSTN/PABX call without any operation.

3.1.5.3 Ending a PSTN/PABX Call

A PSTN/PABX call ends in one of the following cases:

- The calling or called party taps  or presses the On-Off/End key.
- The call duration exceeds the preset time.
- The BS signal is lost.
- A pre-emptive call or an emergency call occupies the channel.
- The calling party changes the contact with the Clear Down feature enabled.

3.1.6 Include Call (Trunking Only)

An include call is a special group call during which another group is invited within the call hang time. An include call has the same Talk Priority and Clear Down feature as a group call.

To initiate an include call, do as follows:

1. Initiate a group call. For details, see [3.1.1.1 Initiating a Group Call](#).

2. Tap  or , enter the detail interface of the group call contact, tap .

For operations of receiving or ending an include call, see [3.1.1.2 Receiving a Group Call](#) or [3.1.1.4 Ending a Group Call](#).

3.1.7 DGNA (Trunking Only)

The Dynamic Group Number Assignment (DGNA) feature allows you to initiate a call to or receive a call from a dynamic group temporarily created by a dispatcher. The created dynamic group is saved in a dynamic subgroup list on the radio. As the response group, you can receive a call from the dynamic group no matter which group contact the Smart Knob is turned to. If the dynamic group is deleted by the dispatcher, you cannot use it.

For operations of initiating, receiving, or ending a DGNA call, see [3.1.1 Group Call](#).

3.1.8 Affiliation Group Call (Trunking Only)

The master group is the most important group, and the affiliated group is the secondary group. With the Affiliation Group feature enabled, when the master group establishes a call, the system will force all the master group members in an ongoing call (except for those in an emergency call) to join the master group call.

When the radio is forced to switch to the master group call, set the master group as the current contact, response group or background group.

3.1.9 Group Combine (Trunking Only)

The Group Combine feature allows the dispatcher to patch some groups to form a temporary group for special communication purpose. If the radio user initiates a call to a member of the temporary group, the rest of the members can also receive the call. If the radio user is in these temporary group, the radio can receive the calls made to any group member. If the temporary group is deleted by the dispatcher, you cannot use it.

3.1.10 Priority Group (Trunking Only)

With the Priority Group feature enabled by your dealer, you can set the priority level of groups. When receiving a group service request in a voice call, the radio preferentially participates in the service of the group with a

higher priority.

To set the priority level of the group, do either of the following:

- Tap , tap Priority groups under the Contacts settings pane, and then set the group contacts to priority level 1, 2, or 3.

A larger number represents a higher priority.

- Tap  or , tap Contacts, and then tap the group contact to access the contact details interface.

3.1.11 Call Forwarding (Trunking Only)

The Call Forwarding feature allows you to forward calls to another radio when your radio malfunctions, powers off, or cannot answer calls. This ensures smooth communications.

With the Call Forwarding feature enabled by your dealer, tap , go to Call forwarding, enable Voice forwarding, and then set the private ID or PSTN/PABX number to receive the calls.

3.1.12 Call Queuing

When all channels of the trunking system are busy, the call initiated by the radio will be placed in a queue. After a channel becomes idle and the trunking system allocates the channel to the call, the call can be established. During queuing, both the top screen and the main screen displays "Call queued". With the Clear Down feature enabled by your dealer, you can hang up to cancel queuing and end the call. This feature is enabled by default.

3.1.13 Call on Analog Channel

You can initiate a call to all the other users on an analog channel.

To initiate such a call, press and then rotate the Smart Knob to select the channel, and then press and hold the PTT key. You can answer a call on an analog channel without any operation.

3.1.14 TOT

The Time-out Timer (TOT) feature allows the radio to automatically stop transmission and keep beeping when the preset transmission period (60s by default) in a group or private call expires. To stop beeping, release the PTT key. To initiate a group or private call again, press and hold the PTT key after the preset time. This feature is enabled by default to prevent the calling or the called party from occupying the channel for a long time.

3.2 Phone Call

3.2.1 Initiating a Phone Call

Through Contact List

1. Tap .
2. Go to FAVORITES or ALL, and then tap the phone contact.
3. In the contact details interface, tap .

Through Manual Dialing

1. Tap .
2. Tap , and then enter the phone number.
3. Tap .

Through Call Logs

1. Tap .
2. Tap .
3. Tap the phone contact or number.
4. Tap .

3.2.2 Receiving a Phone Call

To answer a phone call, tap .

3.2.3 Managing a Phone Call

During a phone call, the calling party can perform the following operations:

- To record the call, tap .
- To enable or disable the speaker, tap .
- To switch to the video call, tap .

3.2.4 Ending a Phone Call

To end a phone call, tap  or press the On-Off/End key.

3.2.5 Initiating an Emergency Call

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

To initiate an emergency call, do either of the following:

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

3.3 Message Services

3.3.1 Message Services in the PMR Network

You can send text messages or status messages. The status message is a predefined code that transfers the message content.

3.3.1.1 Sending a Message

Through Conversation

1. Tap  or , and then tap Conversation.
2. Tap , and then tap New Conversation.
3. In the message interface, do either of the following:
 - Tap the To field to enter the contact ID.
 - Tap  to select the contact from the contact list.
4. Tap the Type message field to enter the content.
5. (Optional) Tap  to send location information and add quick reply texts, status messages, and contact information.
6. Tap .

Through Contact List

1. Tap  or , and then tap Contacts.
2. Tap Favorites, Private, or Group to select the contact.
3. In the contact details interface, tap .
4. Edit and send the message.

For detailed operation, see steps 4–6 in [Through Conversation](#).

3.3.1.2 Viewing a Message

1. Tap  or , and then tap Conversation.
2. Tap the contact in the conversation list to view all messages with the contact.
3. In the message details interface, tap  to do one of the following:
 - To search for history messages, tap find chat content, tap the search field, and then enter the content.
 - To search for history attachments, tap find chat content, and then tap image and video or file.
 - To search for history messages by dates, tap find chat content, and then tap date.
 - To pin a conversation to the top, tap top chat.
 - To clear all history messages with the contact, tap clear all chat. The cleared messages cannot be recovered.

3.3.1.3 Replying to a Message

1. Tap  or , and then tap Conversation.
2. In the message details interface, tap the Type message field to enter the content, and then send the message.

3.3.1.4 Managing a Message

1. Tap  or , and then tap Conversation.
2. In the message details interface, touch and hold the message text, and then you can do one of the following:
 - To check multiple messages, tap Multi check.
 - To copy and paste the text message, tap Copy, touch and hold the Type message field, and then tap PASTE.
 - To forward the text or location message, tap Forward.
 - To delete messages, tap Delete. The deleted messages cannot be recovered.
 - To collect messages to the radio, tap Favorite.
 - To view collected messages, go back to the Conversation tab, tap , and then tap My favorites.

3.3.2 Message Services in the Public Network

You can send text messages or multimedia messages. The multimedia message is a message that contains

photos, voices, videos, or other multimedia content.

3.3.2.1 Sending a Message

Through Messaging App

1. Tap .
2. Tap  to access the new message interface.
3. Do either of the following:
 - Tap the To field to enter the phone number.
 - Tap  to select the contact from the contact list.
4. Tap the Send message field to enter the content.
5. (Optional) Tap  to add attachments, such as pictures, videos, and audio files.
6. Tap .

Through Contacts App

1. Tap .
2. Go to FAVORITES or ALL, and then tap the phone contact.
3. In the contact details interface, tap .
4. Edit and send the message. For detailed operations, see steps 4 to 6 in [Through Messaging App](#).

Through Phone App

1. Tap .
2. Tap , and then enter the phone number.
3. Tap Send SMS.
4. Edit and send the message. For detailed operations, see steps 4 to 6 in [Through Messaging App](#).

3.4 Contacts

Contacts include PMR contacts and phone contacts. You can view and manage contacts.

 Note

Only phone contacts and PMR private/PSTN/PABX contacts can be added, edited, or deleted.

3.4.1 PMR Contacts

3.4.1.1 Searching for a Contact

1. Tap  or , and then tap Contacts.
2. Tap , and then enter the contact name, its initial, or radio ID in the search box.

The radio displays the search results below the search box.

3.4.1.2 Sharing a Contact

1. Tap  or , and then tap Contacts.
2. Tap the contact as the recipient, and then tap Message.
3. In the message interface, tap , and then tap Contact.
4. In the Choose contact interface, select the contacts who you want to share their information.

3.4.1.3 Editing a Contacts

1. Tap  or , and then tap Contacts.
2. In the contact details interface, tap .
3. Edit the contact information including avatar, name, radio ID, and phone number, and then tap .

 Note

You can delete the contact by tapping **Delete contact**.

3.4.1.4 Adding a Favorite Contact

1. Tap  or , and then tap Contacts.
2. In the contact details interface, enable Set as star contact.

3.4.1.5 Creating a Contact

1. Tap  or , and then tap Contacts.
2. Tap , and then tap Add Contacts.
3. Enter the contact information including avatar, name, radio ID, and phone number, and then tap .

 Note

- You can also save the IDs or numbers from the call logs or messages to the contact list.
-

-
- If the calling party and the called party enable **Auto-add contacts** and **Send talker alias**, the called party automatically adds the calling party to the contact list when receiving the call.
-

3.4.1.6 Managing the Zones/Subgroups

Zone

In conventional mode, a zone is a group of channels within the same operational area.

Tap  or , and then tap Zone. You can do either of the following:

- Switching the channel
 - a. Select the zone folder.
 - b. Tap  to set the channel as the current channel.
- Editing the channel
 - a. Tap the channel, and then tap  to do either of the following:
 - For the digital channel, edit Roam list, Scan list, Contact, RX group list, and TX power.
 - For the analog channel, edit Scan list, TX power, and Squelch level.
 - b. Tap .

Subgroup

In trunking mode, a subgroup consists of multiple groups or private contacts.

To switch the current contact, do as follows:

1. Tap  or , and then tap Subgroup.
2. Tap the subgroup.
3. Tap  to set the contact as the current contact.

3.4.2 Phone Contacts

3.4.2.1 Searching for a Contact

Tap , and then tap  to enter the contact name or its initial in the search box.

The radio displays the search results below the search box.

3.4.2.2 Sharing a Contact

- Through Messaging app

- a. Tap .
 - b. Tap .
 - c. Tap , and then tap Insert contact information.
 - d. Select the contact, and then send its information to other contacts.
- Through Contacts app
 - a. Tap , and then tap the contact.
 - b. In the contact details interface, tap , and then tap Share.
 - c. In the Share contact via dialog box, select a sharing method.

3.4.2.3 Editing a Contact

1. Tap , and then tap the contact.
2. In the contact details interface, tap .
3. In the Edit contact interface, edit the contact information including avatar, name, phone number, and email, and then tap .

Note

In the **Edit contact** interface, you can tap  to delete the contact, link or unlink the contact with other contacts, set the ringtone, and set all calls of the contacts to voice mail.

3.4.2.4 Adding a Favorite Contact

1. Tap , and then tap the contact.
2. In the contact details interface, tap .

3.4.2.5 Creating a Contact

1. Tap .
2. Tap .
3. In the Add new contact interface, set the contact information including avatar, name, phone number, and email, and then tap .

Note

- You can also save the IDs or numbers from the call logs or messages to the contact lists.
 - If the calling party and the called party enable **Auto-add contacts** and **Send talker alias**, the called party automatically adds the calling party to the contact list when receiving the call.
-

3.4.2.6 Managing a Group

The contacts can be grouped by various types, allowing you to send a message or mail to a group of contacts. The groups are coworkers, family, and friends by default. If you want to create a group, you must create an account.

To manage a group, tap the group, tap , and then do either of the following:

- To add contacts to the group, tap Edit.
- To move contacts from the group, tap Move group members.

4. Network and Data Sharing

4.1 PMR Network

After the radio is connected to the PMR network, you can access PMR services.

To enable the PMR network, do either of the following:

- Tap , and then enable Narrowband.
- In the control and notification center, tap the control widget of Narrowband.

4.2 RoIP Network

In trunking mode, after enabling and registering the Radio over IP (RoIP) network, the radio automatically switches between the broadband and narrowband networks according to the network signal. Supporting the broadband and narrowband networks realizes voice, data, video and multi-media information services. The radio uses the same number to register in different networks, which guarantees mission-critical voice all the time.

The RoIP feature must be used in combination with the PTT over Cellular (PoC) system and trunking system. After connecting the radio to a WLAN or LTE network, tap , and then enable RoIP settings.

The status icon in the status bar of the home screen is shown as one of the following:

-  : indicates that and the radio has registered RoIP video and voice services in the broadband network.
-  : indicates that the radio has registered RoIP voice services in the broadband network.
-  : indicates that the radio has registered RoIP video services in the broadband network.

4.2.1 Group or Private Voice Call

For detailed operations, see [3.1.1 Group Call](#) and [3.1.2 Private Call](#).

4.2.2 Group or Private Video Call

4.2.2.1 Initiating a Video Call

Through Contact List

1. Tap  or .
2. Tap Contacts, and then tap the contact to access the details interface.

3. Tap .

Through Manual Dialing

1. Tap .

2. Enter the contact ID complying with the dialing rules.

3. Tap .

Through Conversation

1. Tap  or , and then tap Conversation.

2. Tap , and then tap New Conversation.

3. In the message interface, do either of the following:

- Tap the To field to enter the contact ID.
- Tap  to select the contact from the contact list.

4. Tap , and then tap Video Call.

4.2.2.2 Managing a Video Call

During a video call, the calling party can perform the following operations:

- To switch to speaker, tap .
- To switch between the front and rear cameras, tap .
- To switch to the voice call, tap .
- To switch to the conversation interface, tap .
- To obtain or send location information, tap  to access the call positioning interface.

4.2.2.3 Ending a Video Call

Tap  or press the On-Off/End key.

4.3 Cellular Network

Before accessing the public network services, ensure that you have installed the SIM card properly. If the public network services are not in use, tap to turn it off to decrease data usage and increase battery life.

To enable or disable the cellular network, do either of the following:

- Tap , and then go to Data usage > Cellular data.
- In the control and notification center, tap the control widget of Data.

4.3.1 Setting the Network

1. Tap .
2. Under the Wireless & networks pane, go to More > Cellular networks.
3. Do one of the following:
 - Tap Data roaming to enable this feature. You can access data services when you are outside the service area of your network provider.
 - Tap Preferred network type to select 2G, 3G, or 4G network. Before accessing the 4G network services, ensure that you have installed the SIM card with 4G services enabled.
 - Tap Enhanced 4G LTE Mode to enable the Voice over LTE (VoLTE) feature. This feature allows the radio to use LTE services to improve voice communications.

4.3.2 Monitoring Data Usage

1. Tap .
2. Under the Wireless & networks pane, tap Data usage.
3. Do either of the following:
 - To check data usage, tap Cellular data usage.
 - To avoid excessive data usage, tap Billing cycle, and then set Billing cycle, Set data warning and Set data limit.

4.4 WLAN

After successful WLAN connection, you can visit the Internet or shared media from other devices in the network.

To enable or disable the WLAN, tap , tap WLAN under the Wireless & networks pane, and then tap Off or On.

If you select an open network, the radio automatically connects to it. If you select a secure network, you need to enter a password before connection.

4.4.1 Adding a WLAN Network

To add a WLAN network not displayed on the available network list, swipe to the bottom of the list, tap Add network, and then enter the network name.

For more network security protection, you can set security to access the network through different protocols. You can connect to the network through the proxy server. Tap Advanced options, and then set Proxy and IP settings.

4.4.2 Advanced WLAN Settings

In the WLAN interface, tap , and then do one of the following:

- View the MAC address and IP address of the radio.
- To check or delete saved networks, tap Saved networks.
- To receive a notification when a WLAN is available, enable Network notification.
- To keep the WLAN enabled when the radio screen is sleeping, do one of the following:
 - Tap Always.
The radio is always connected to the WLAN when the screen sleeps.
 - Tap Only when plugged in.
If the screen sleeps, the radio is connected to the WLAN only when being charged.
 - Tap Never.
The radio is not connected to the WLAN when the screen sleeps.

4.5 Tethering and Portable Hotspot

The Tethering & Portable Hotspot feature allows you to share the radio's data connection with nearby devices.

To set up WLAN hotspot, do as follows:

1. Tap .
2. Under the Wireless & networks pane, go to More > Tethering & portable hotspot.
3. Enable Portable WLAN hotspot.
4. Tap Set up WLAN hotspot, and then set Network name, Security, and Password.
5. Tap Save.

4.6 BT

The BT feature allows the radio to exchange data with another BT-enabled device over short distances.

4.6.1 Pairing a BT Device

1. Enable the BT feature by doing either of the following:

- Tap , and then tap BT under the Wireless & networks pane.
- In the control and notification center, tap the control widget of BT.

The radio automatically detects available BT devices, and other BT devices can also detect the radio.

2. Tap the name of the BT device.

3. Wait for the BT device to respond to the BT pairing request.

After the BT device accepts the BT pairing request, the radio can exchange information (e.g., files, photos, and videos) with the BT device.

Note

You can tap  following the device, and then tap **Forget** to forget the paired device.

4.6.2 Sending and Receiving Files

Many apps support data transfer through the BT. Take Gallery as an example.

To send photos or videos through the BT, do as follows:

1. Tap .
2. Touch and hold the picture or video, tap Share, and then tap BT.
3. Tap the BT device from the available BT device list.
4. (Optional) To check the sending process, in the control and notification center, tap BT Share.

When other devices request for sending files, you must accept the request before receiving the files.

4.6.3 BT Location

The BT Location feature is an indoor positioning technology based on BT 4.0. After detecting the beacon information broadcast by the BT beacon, the radio sends the location information to the BT location data center through the public network.

With the BT enabled, tap , go to BT location > Broadband BT location, and then you can do one of the following:

- To refresh the beacon information every five seconds or stop refreshing, tap Refresh or Stop.
- To report the location, tap Location report.

- To get the MAC address of the radio, tap QR code.

4.6.4 Advanced BT Settings

After the BT feature is enabled, you can tap  to do the following:

- To detect BT devices again, tap Refresh.
- To stop detecting, tap Stop.
- To rename the radio, tap Rename.
- To view received files, tap Show received files to access the BT received file list.

4.7 Airplane Mode

When you are in an airplane or in an area with radio restrictions, you may be required to make the radio enter the airplane mode. In airplane mode, the radio cannot use voice or data services. However, you can turn on WLAN network or BT, initiate NB services, or use apps that require no cellular data connection.

To enable or disable the airplane mode, do either of the following:

- Tap , and then go to More > Airplane mode.
- In the control and notification center, tap the control widget of Airplane mode.

4.8 NFC

The Near Field Communication (NFC) feature allows the radio to recognize nearby NFC-capable devices.

Tap , go to More > NFC, and then enable NFC.

4.9 VPN

A virtual private network (VPN) extends a private network across a public network. Applications 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).

To set up a VPN, do as follows:

1. Tap .
2. Under the Wireless & network pane, go to More > VPN.
3. Enable VPN.

4. Tap VPN settings.
5. Tap **+**.
6. Edit and save the VPN profile.
7. Tap the configured VPN, and then enter the username and password.
8. Tap Connect.

 Note

Consult your dealer for detailed configurations.

4.10 USB

You can use a USB cable to connect the radio and computer for data transferring.

In the control and notification center, tap USB Connect this device, and then tap the way to use USB.

- To only connect the radio, tap Connect this device.
The computer cannot read the radio's data, but can read and write the radio.
- To transfer files between the radio and computer, tap Transfer files.
- To transfer photos between the radio and computer, tap Transfer photos (PTP).
- To use the radio as Musical Instrument Digital Interface (MIDI) to play music, tap Use device as MIDI.

5. Radio Features and Operations

5.1 Power Level

You can set the TX power level to high or low. High power enables communication with radios far away from you but consumes more battery power. Low power enables communication with radios close to you and saves battery power.

You can set the power level in one of the following ways:

- In the control and notification center, tap the control widget of Power.
- Press the preprogrammed Adjust power level key.
- In trunking mode, tap , tap Power level on the Basic settings pane, and then tap Low or High.
- In conventional mode, do as follows:
 - a. Tap  or , and then tap Zone.
 - b. Select a digital or an analog channel, and then tap .
 - c. Tap TX power, and then tap High or Low.

5.2 Scan

5.2.1 Conventional Mode

The Scan feature allows you to listen to activities on other channels, keeping track of your team members.

- Enabling the scan feature
 - In the control and notification center, tap the control widget of Scan.
 - Press the preprogrammed Scan key.
 - Tap , and then enable Scan.
 - Switch to the channel configured with the Auto Scan feature.

With this feature enabled, the radio searches the scan list preset for the current channel and stays on the active channel.

Note

If you do not want to monitor activities on a channel, press the preprogrammed **Nuisance delete** key to temporarily remove the channel from the scan list.

- Setting the scan list

The scan list is a list of analog and digital channels that the radio scans.

To set the scan list, do as follows:

- Tap  or , and then tap Contact.
- Tap Zone, and then tap the channel.
- Tap  to edit the scan list.

5.2.2 Trunking Mode

5.2.2.1 Pre-registration Hunt

Before registering, the radio hunts through the control channels for available BSs. The hunting plans include Fixed Trunking Station Control Channel (Fixed TSCC) and Flexible Trunking Station Control Channel (Flexible TSCC). If the radio has unified frequency plans, it uses the Fixed TSCC; otherwise, it uses the Flexible TSCC. With the Fixed TSCC preset, you can select one of the following hunt modes.

Hunt Mode	Description	Operation
Short Hunt	This feature allows the radio to hunt the fixed TSCC in the defined hunt list.	Tap  , and then go to Scan > Scan mode, and then tap Short hunt, Comprehensive hunt, or Team hunt.
Comprehensive Hunt	This feature allows the radio to hunt all the channels within the preset frequency range.	
Team Hunt	This feature allows the radio to hunt the fixed TSCC in the defined team hunt list.	

5.2.2.2 Post-registration Hunt

After successful registration, you can hunt again by pressing the preprogrammed Manual Current Hunt key. To ensure seamless communications, you can adopt one of the following hunt modes.

Hunt Mode	Description	Operation
Background Hunt	This feature allows an idle radio to keep detecting the signal strength of the BS with which it registers. If the signal strength goes below the threshold level preset by the dealer, the radio will automatically hunt for an adjacent BS with stronger signal strength and register with it.	<ul style="list-style-type: none"> ● Tap , and then tap Scan to enable Background hunt, Home station hunt, or Handover.

Hunt Mode	Description	Operation
Home Station Hunt	In a BS overlapping area, this feature allows the radio to switch back to the home station channel when its signal strength reaches the preset threshold. It is recommended that you set your frequently used channel as the home station channel.	<ul style="list-style-type: none"> ● Press the preprogrammed Background hunt, Home station hunt, or Handover key.
Multi-site Handover	The signal strength received from a BS may fluctuate due to position change, affecting the communication quality of the radio. On such occasions, this feature allows the radio to automatically register with the BS with stronger signal.	

5.3 Roam

5.3.1 Conventional Mode

The Roam feature allows the radio to automatically select base stations with strong signal. This ensures seamless communication across sites or networks. With the Roam feature enabled by your dealer, you can do either of the following:

- Enabling the Roam Feature
 - In the control and notification center, tap the control widget of Roaming.
 - Press the preprogrammed Narrowband roaming key.
 - Tap , and then tap Roaming.
 - Switch to the channel configured with the Auto Roam feature.

With the Roam feature enabled, the radio roams according to the roam list.

- Setting the Roam List

The roam list is a list of digital channels where the radio roams. To set the roam list, do as follows:

- Tap  or , and then tap Contact.
- Tap Zone, and then tap the channel.
- Tap  to edit the roam list.

 Note

The Scan and Roam features cannot be enabled for the same digital channel simultaneously.

5.3.2 Trunking Mode

The Roam feature allows the radio to register with a non-home BS or network when it is on the move. When the radio detects signal, it initiates the registration.

This feature needs to be enabled by your dealer.

5.4 E2EE

With the End-to-End Encryption (E2EE) feature enabled, voice and data are protected against eavesdropping, so as to ensure communication privacy.

If this feature is configured by your dealer, you can enable this feature in one of the following ways:

- In the control and notification center, tap the control widget of E2EE.
- Press the preprogrammed E2EE key.
- Tap , and then tap E2EE.
- Switch to the channel configured with the E2EE feature.

Note

In conventional mode, enabling the E2EE feature is to enable encryption for the current channel. When switching to the channel, the radio automatically enables encryption.

5.5 Call Settings

Call Settings allows you to configure the features about call services.

5.5.1 Soft PTT Key

With the Soft PTT Key feature enabled, the call interface displays the virtual PTT button.

To enable or disable this feature, tap , and then tap Soft PTT Key under the Call settings pane.

5.5.2 Call Recording

The Call Recording feature allows you to record all calls. The recordings are automatically saved in the Recorder.

- To record one PMR call, tap  in the call interface.
- To record all PMR calls, tap , and then tap Call Recording under the Call settings pane to enable the feature.

5.5.3 Voice w/Location

The Voice w/Location feature allows the radio to report its location to the dispatch station or trunking system when the radio user initiates a private call, a group call, or an emergency call.

To enable or disable this feature, tap , and then tap Voice with location under the Call settings pane.

5.5.4 Call Location

During a call, if the transmitting radio is enabled with the Voice w/Location and Call Location features, the receiving radio can display the location of the transmitting radio when its user taps . The radio can obtain or send location in the call location interface.

To enable or disable this feature, tap , and then tap Call Location under the Call settings pane.

5.5.5 Talker Alias

With the Talker Alias feature enabled by your dealer, the radio sends the alias to the called party when the radio user initiates a call. Therefore, the called party can identify your identity or add you as a contact.

1. Tap .
2. Under the Call settings pane, tap Talker alias.
3. Do either of the following:
 - To enable or disable the feature, tap Send talker alias.
 - To automatically add the talker alias to the contact list, enable Auto-add contacts.

5.5.6 Speed Dial

1. Tap .
2. Under the Call settings pane, tap Speed Dial.
3. Link the numbers (1–9) with contacts.
4. Tap .
5. Open the Dialer, and then touch and hold a number in the dialer to initiate a call to linked contact.

Note

When the numeric buttons is not related with contacts, you can touch and hold the numeric buttons to link a contact with it.

5.6 One Touch Call/ Message

The One Touch Call/Message feature allows you to quickly initiate a preset service.

The following table shows the services that can be implemented by this feature and the corresponding operations.

Mode	Description	Operation
Conventional Mode	<p>On a digital channel, you can do any of the following:</p> <ul style="list-style-type: none"> ● Initiate a group, private, or all call. ● Send a text message or location information to a private or group contact. ● Initiate an alert call, radio check, remote monitor, radio enable, or radio disable service. 	<ul style="list-style-type: none"> ● For call services on a digital channel, press the One Touch Call/msg key, and then press and hold the PTT key. ● For other services, press the preprogrammed One touch call/msg key.
Trunking Mode	<ul style="list-style-type: none"> ● Initiate a group, private, broadcast, or PSTN/PABX call. ● Send a text, status, or user-defined message to a private or group contact. 	

5.7 Emergency

The Emergency feature allows you to seek help from your companion or the control center in case of emergency. With the highest priority, you can initiate an emergency service even when your radio is transmitting or receiving.

In emergency mode, the radio transmits at high power level by default. The following table describes different types of emergency services that you can use.

Emergency Type	Description
Siren Only	The radio emits a siren, but does not transmit any emergency signal to the control center.
Regular	The radio gives visible and audible indications.
Silent	The radio gives no visible or audible indication.

Emergency Type	Description
Silent w/Voice	The radio gives audible indications only upon receiving a call. Otherwise, the radio gives no audible or visible indication.
Alarm w/Siren	The radio transmits the emergency signal to the control center, and then emits a siren.

In addition, if the emergency type is Regular, Silent, or Silent w/Voice, you can request your dealer to set one of the following emergency modes:

Emergency Mode	Description
Call Only	You can only initiate an emergency call.
Alarm w/Call	You can only send an emergency code and initiate an emergency call.
Alarm	You can only send an emergency code.

5.7.1 Initiating an Emergency Service

With the Emergency feature enabled by your dealer, you can press the preprogrammed Emergency on key (short press TK by default) to initiate an emergency service.

If the Alarm w/Call To Follow feature is enabled by your dealer, you can speak into the microphone without pressing and holding the PTT key. If the preset voice cycles expire, you can press and hold the PTT key to initiate the emergency call again.

5.7.2 Receiving an Emergency Call

You can answer an emergency call without any operation.

5.7.3 Ending an Emergency Service

5.7.3.1 Conventional Mode

An emergency service ends when the service initiator presses the preprogrammed Emergency off key (long press TK by default).

5.7.3.2 Trunking Mode

An emergency service ends in any of the following cases:

- The service initiator presses the preprogrammed Emergency off key (long press TK by default).
- The call duration exceeds the preset time.
- The BS signal is lost.
- With the Clear Down feature enabled, the calling party changes the contact.

 Note

In the case of an emergency group or all call, the called party can only exit the call, and can rejoin the call later.

5.8 Location Report

The Location Report feature allows the radio to report its location information to the dispatch station or trunking system.

To report the location information, do either of the following:

- Press the preprogrammed Location report key.
- Request your dealer to configure the Location Report trigger as power-on/off, preset time, or distance interval.

The radio automatically reports the location information according to the trigger.

5.9 Stun, Revive, and Kill (Trunking Only)

When the radio is stunned by the dispatch station or trunking system, both the top and main screens display the icon . In this case, the radio cannot initiate or receive any network service (including calls and short messages), but retains features such as registration, revive, authentication, power-on/off, and lock screen. To restore normal use, request the dispatch station or trunking system to send a revive command.

When the radio is killed by the dispatch station or trunking system, both the top and main screens display the icon . In this case, the radio is incapable of any function except power-on/off. To restore normal use, send the radio back to the Company.

The Stun, Revive, and Kill features are enabled by your dealer by default.

5.10 Other Services

Conventional Mode	Feature	Description	Operation
Digital Channel	Alert Call	This feature allows you to send a call alert to a private contact. After seeing the alert, the contact can call you back. This feature is enabled by default.	<p>To initiate a service, do either of the following:</p> <ul style="list-style-type: none"> ● Tap  or , tap the contact from the Favorites or Private contact list, and then tap the service. ● Press the preprogrammed One touch call/msg key.
	Radio Check	This feature allows you to check whether a private contact's radio is powered on or operating on a channel without disturbing the contact. This feature is enabled by default.	
	Remote Monitor	This feature allows you to remotely activate the microphone of a private contact's radio to monitor its activities. This feature is enabled by your dealer.	
	Radio Disable/Enable	The Radio Disable feature allows you to send a command to disable the radio of a private contact. The disabled radio can be monitored remotely, but cannot use other features. To restore the disabled radio to normal use, send a Radio Enable command. These two features are enabled by your dealer.	
	Priority Interrupt	This feature allows you to interrupt the ongoing call on the current channel to release it. Then you can initiate a new call or a new data service on that channel. This feature is enabled by your dealer.	

Conventional Mode	Feature	Description	Operation
Analog Channel	Scrambler	This feature allows the radio to invert the frequency spectrum of transmitted audio signals. Only the receiving radio with the same Scrambler settings can restore the audio signals. This prevents eavesdropping and ensures communication privacy. This feature is configured by your dealer.	<p>To enable or disable this feature, do one of the following:</p> <ul style="list-style-type: none"> ● Tap , and then tap Scrambler. ● Tap the control widget Scrambler. ● Press the preprogrammed Scrambler key.
	Monitor	This feature allows the radio to receive more signals including weak signals. It helps you to recognize weak voices from the speaker.	To enable or disable this feature, press the preprogrammed Monitor key.
	Adjust Squelch Level	This feature allows you to adjust the squelch threshold required for the radio's speaker to be turned on. Higher squelch level requires stronger signals.	<p>To adjust the squelch level, do either of the following:</p> <ul style="list-style-type: none"> ● Tap , and tap Squelch level. ● Press the preprogrammed Adjust squelch level key.

Conventional Mode	Feature	Description	Operation
Digital/Analog Channel	Talk Around	<p>The Talk Around feature allows you to continue communication in direct mode when the repeater malfunctions or the radio is out of the repeater's coverage. This feature is configured by your dealer.</p>	<p>To enable or disable this feature, do either of the following:</p> <ul style="list-style-type: none"> ● Tap the control widget Talkaround. ● Press the preprogrammed Talkaround key.

6. Security

6.1 Location

The location service allows the radio to determine its location information with WLAN, cellular network, BT, or GPS.

1. Tap .
2. Under the Personal pane, tap Location.
3. Enable Location service.
4. Set the mode to High accuracy or Device only.

The radio allows apps with permission to access the location information.

1. Tap .
2. Under the Device pane, tap Apps.
3. Tap the gear icon on the upper right corner.
4. Go to App permissions > Location.
5. Tap the app to enable or disable the access permission.

6.2 Man Down

The Man Down feature allows the radio to automatically enter the emergency mode in either of the following scenarios:

- The radio is inclined by an angle greater than the preset angle.
- The radio keeps motionless (including moving at a constant speed) longer than the preset time.

You can place the radio upright or move it to exit the emergency mode.

To enable this feature, do either of the following:

- Tap , tap Security under the Personal pane, and then tap Man down.
- Press the preprogrammed Man down key.

Note

- This feature is applicable only to radios that support the Emergency feature.
 - This feature is configured by your dealer.
-

6.3 Lone Worker

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

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

You can press the keys, rotate the knob, or transmit voice to exit the emergency mode.

To enable this feature, do either of the following:

- Tap , tap Security under the Personal pane, and then tap Lone worker.
- Press the preprogrammed Lone worker key.

Note

- This feature is applicable only to radios that support the Emergency feature.
 - This feature is configured by your dealer.
-

6.4 SIM Card Lock

The SIM card lock allows you to lock the SIM card with the PIN number. If you restart, install or uninstall the SIM card, or replace the radio, you must enter the PIN number to unlock the SIM card.

1. Tap , tap Security under the Personal pane, and then tap Set up SIM card lock.
2. In the SIM card lock settings interface, tap Lock SIM card, and then enter the PIN number.

If needed, tap Change SIM PIN to change the PIN number.

Note

- Contact the carrier for the PIN number and PUK number of the SIM card.
 - If you enter an incorrect PIN number more than the maximum times, you need to enter the PUK number to unlock. If you enter an incorrect PUK number more than the maximum times, the SIM card becomes invalid.
-

6.5 App Lock

The app lock service allows you to set a password to lock apps, therefore preventing unauthorized access.

1. Tap .
2. Under the Personal pane, tap Application lock.
3. Set the app lock password and select the apps that need to be locked.

7. Device

7.1 Display

Tap , tap Display under the Device pane, and then do any of the following:

- To adjust the screen brightness, tap Brightness level, and then drag the brightness sliders for the main screen and top screen.
- To allow the radio to automatically adjust the main screen brightness, tap Brightness level, and then enable Adaptive brightness.
- To set the duration after which the main screen and top screen will be turned off automatically, tap Brightness level, and then tap Time.
- To disallow incoming calls on the PMR network or app notifications to wake the screen when it is off, enable Manually light up main screen.
- To set the wallpaper of the main screen, tap Wallpaper.
- To set the text size displayed on the main screen, tap Font size.

7.2 Sounds

7.2.1 Audio Profile

Tap , and then tap Sounds under the Device pane. You can set the audio profile of the radio, adjust the volume, and set the alert tone.

Option	Audio Profile	
	Standard Mode	Covert Mode
Standard mode	The radio can switch between Ring or Silent mode.	/
Vibrate on ring	In Ring mode, the radio rings and vibrates when receiving calls, messages, or notifications.	/
Vibrate on silent	In Silent mode, the radio mutes and vibrates when receiving calls,	/

	messages, or notifications.	
Volume	You can drag the volume sliders to adjust the volume of ring, media, alarm, and call.	
Ringtone	<ol style="list-style-type: none"> 1. With Ringtone enabled, the radio emits an alert tone when receiving, queuing in, or ending a call. 2. You can set the tone for call services. Options include Broadband, Narrowband, and Vibrations. 	
Message tone	<ol style="list-style-type: none"> 1. With Message tone enabled, the radio emits an alert tone when receiving a message or failing to send the message. 2. You can set the tone for message services. Options include Broadband, Narrowband, and Vibrations. 	
Notification tone	The radio emits an alert tone when receiving a notification. Options include Broadband and Vibrations.	
Mobile service tone	<ol style="list-style-type: none"> 1. With Mobile service tone enabled, the radio emits an alert tone when registering. 2. You can set the alert tone type. 	

7.2.2 VOX Mode

The Voice Operated Transmit (VOX) feature allows you to speak without pressing and holding the PTT key. The radio automatically transmits voice when the volume reaches the preset level.

To enable or disable this feature, do either of the following:

- Tap , tap Sounds under the Device pane, and then tap VOX mode.
- Press the preprogrammed VOX key.

Note

This feature is configured by your dealer.

7.2.3 Three-band Equalizer

The Three-band Equalizer feature allows the radio to balance frequency components of the audio signal upon receiving voice. This optimizes the quality of the received voice to meet user demands in different

scenarios. You can select different three-band equalization modes when the radio outputs audio through a speaker or an audio accessory.

Tap , tap Sounds under the Device pane, and then tap Three-band equalizer. You can select the equalization mode. The parameters of each mode are described in the following table. If Custom is selected, you need to manually set the listed parameters.

Audio Path	Equalization Mode	Low Frequency Gain (dB)	Mid Frequency Gain (dB)	High Frequency Gain (dB)
External	Treble Boost	0	0	8
	Square	0	3	3
	Downtown	1	3.5	7
	Indoor	3.5	1.5	-1.5
	Custom	-10 to 10	-10 to 10	-10 to 10
Earphone	Treble Boost	-2	0	8
	Square	-1.5	4	4
	Downtown	-2.5	2	8
	Indoor	1.5	3	-2.5
	Custom	-10 to 10	-10 to 10	-10 to 10

7.2.4 Vocoder

If the radio supports both AMBE and NVOC vocoders, you can switch the vocoder.

1. Tap .
2. Under the Device pane, tap Sounds.
3. Tap Vocoder.
4. Select the vocoder type.

The radio automatically restarts to make the settings take effect.

7.2.5 Audio Mode

The radio selects different audio mode depending on the audio accessory.

7.2.5.1 Ring Tone and Media

Wireless Audio Accessory	Wired Audio Accessory	Audio Mode
×	×	Speaker
√	×	Wireless audio accessory
×	√	Wired audio accessory

7.2.5.2 Call

You can press the preprogrammed Switch audio path key or tap the on-screen icons to set the audio mode during a call.

Wireless Audio Accessory	Wired Audio Accessory	Audio Mode	
		Full-duplex Call	Half-duplex Call
×	×	Receiver or speaker	Speaker
√	×	Cycle of speaker, receiver, or wireless audio accessory in sequence	Speaker or wireless audio accessory
×	√	Cycle of speaker, receiver, or wired audio accessory in sequence	Speaker or wired audio accessory

7.3 Programmable Keys

The radio supports programmable keys including TK, SK2, and SK3. When you assign a feature to a key, you can short press, long press or double press this key to quickly activate the feature.

1. Tap .
2. Under the Device pane, tap Programmable keys.
3. Set the programmable key.

7.4 Assistance Features

7.4.1 Glove Mode

The Glove Mode feature allows you to use the radio when wearing gloves with enhanced touch screen sensitivity.

1. Tap .
2. Under the Device pane, tap Assistance.
3. Enable Glove mode.

7.4.2 Voice Broadcast

If your dealer pre-imports voice files and configures the Voice Broadcast feature, the radio can broadcast contents as follows.

- When receiving a new message, the radio automatically broadcasts the new message alert, and then the message content, if configured by your dealer.
- When receiving a call that needs to be answered manually, the radio automatically broadcasts the new call alert.
- When the channel is switched by the Smart Knob, the radio automatically broadcasts the switched channel alias.

To enable or disable this feature, do either of the following:

- Tap , tap Assistance under the Device pane, and then tap Voice broadcast.
- Press the preprogrammed Voice broadcast key.

7.5 Storage

You can check the internal storage space of the radio and the storage space of the installed Micro SD card.

Tap , and then tap Storage under the Device pane.

You can clear all app cache to release the storage space.

1. Tap .
2. Under the Device pane, tap Storage.
3. Tap Cached data.
4. Tap OK.

You can also clear the data or cache for a specific app.

1. Tap .
2. Under the Device pane, tap Apps.
3. Tap the app, and then tap Storage.
4. Clear the data or cache.
 - To clear the configuration information and restore the initialized status, tap Clear data.
 - To clear data such as pictures, text, or records temporarily stored, tap Clear cache.

7.6 Battery

7.6.1 Checking Battery Information

1. Tap .
2. Under the Device pane, tap Battery.
3. Tap Battery status or State.

7.6.2 Displaying Battery Power

To show the remaining battery power on the main screen, do as follows:

1. Tap .
2. Under the Device pane, tap Battery.
3. Enable Battery percentage.

7.6.3 Enabling Battery Saver

The battery saver allows the radio to reduce power consumption by lowering the screen brightness, adjusting the sleep time, and so on.

To manually enable the battery saver, do either of the following:

- In the control and notification center, tap Battery Saver.
- Tap , tap Battery under the Device pane, and then tap Battery saver.

To allow the radio to enable the battery saver automatically, do as follows:

1. Tap .
2. Under the Device pane, tap Battery.

3. Tap Battery saver.
4. Tap Turn on automatically.
5. Select Never, at 5% battery, or at 15% battery.

7.6.4 Changing Battery Work Type

The battery work types include standard, phone, and radio.

- Standard: The radio enables both the narrowband and broadband networks.
- Phone: The radio enables only the broadband network.
- Radio: The radio enables only the narrowband network.

To change the battery work type, tap , tap Battery under the Device pane, and then tap Work type.

8. System

8.1 Languages and Input

Tap , and then tap Languages & input under the Personal pane. You can set the display language, keyboard and input method.

- To select the language, tap Languages.
- To select the keyboard and input method, tap Virtual Keyboard.

8.2 Date and Time

8.2.1 Selecting Reference Clock

The radio updates the display time according to the reference clock. The broadband and narrowband systems adopt a unified reference clock. The reference clock includes the following types:

- Local timing: Upon power-on, the radio acquires time data from the clock chip and updates the display time.

 Note

When the reference clock adopts the local time, you can manually set the date and time.

- Broadband timing: After successfully registering with the broadband system and obtaining the broadcast time of the system, the radio updates the display time.
- Satellite timing: Upon power-on, the radio acquires satellite time through the positioning system and updates the display time.

To select the reference clock, tap , tap Date & time under the System pane, and then tap Reference clock.

8.2.2 Setting Time Format

1. Tap .
2. Under the System pane, tap Date & time.
3. Enable or disable Use 24-hour format.

8.2.3 Selecting Time Zone

Tap , tap Data & time under the System pane, and then do either of the following:

- To manually select the time zone, tap Select time zone.
- To allow the radio to use the time zone provided by the network, enable Automatic time zone.

8.3 Factory Reset

Caution

- **Before restoring the factory settings, back up your data to avoid loss of important data.**
 - **When the battery level is below 20%, the factory settings cannot be restored.**
-

The Factory Reset feature allows you to restore the radio to factory settings through the Mobile Device Management (MDM) system. During the process, the radio displays "Factory reset", and all data, including the system and SD card data, or encryption key is deleted.

If a lock screen password is required, you need to enter the password before restoring the factory settings. After the factory reset is complete, the radio will restart automatically.

8.4 System Upgrade

Caution

- **Do not upgrade the radio system with unauthorized software to avoid radio failure, loss of data, or potential security problems.**
 - **When the battery level is below 30% or the storage space is insufficient, the radio system cannot be upgraded.**
-

When a new software version is available, you can upgrade the system. Before upgrading, make sure that the radio is connected to a WLAN or mobile network. To save data usage, it is recommended to use WLAN to download the upgrade package. During the upgrade process, the radio terminates the ongoing services. The upgrade method is configured through the MDM.

- After the MDM server sends an upgrade notification to the radio, you can manually upgrade the system. If you delay upgrading, the notification will appear periodically.
- The MDM server automatically upgrades the radio system.
- Tap , tap System upgrade under the System pane, and then tap Upgrade.

After the upgrade is complete, the radio will automatically restart and prompt a notification indicating the successful upgrade.

9. Apps and Notifications

9.1 Installing an App

1. Tap , and then tap APP.
2. Select the app from the app list.
3. Tap Install.

9.2 Uninstalling an App

It is recommended to uninstall unwanted apps to release the storage space and improve the system running speed. Do one of the following:

- Open the app center, touch and hold the app icon until it jiggles, and then drag it to the Uninstall field.
- Tap  > Management, select the app, and then tap Uninstall.
- Tap , tap Apps under the Device pane, tap the app, and then tap Uninstall.

9.3 Managing App Permission

When opening an app, the app may request access to a specific function or information. You can tap Allow to accept the request, or tap Deny to deny the request.

To view or change the permission settings, do as follows:

1. Tap .
2. Under the Device pane, tap Apps.
3. Tap the app.
4. Tap Permissions, and then manage the permission.

9.4 Managing App Notifications

App notifications can be displayed on the lock screen or in the control and notification center.

1. Tap .
2. Under the Device pane, tap Notifications or Apps.
3. Tap the app, and then modify its notification settings.

10. Camera

The Camera app allows you to take photos and record videos.

To open the camera, tap . To switch between photo taking and video recording, tap  or .

10.1 Taking Photos

To take a photo, tap .

You can also do any of the following:

- Tap  to select the shooting mode as follows:
 - Automatic: The camera automatically selects the shooting mode according to different scenarios.
 - HDR (High-Dynamic Range): The camera compensates the ambient light to take high-quality photos with rich colors.
 - Portrait, Sports, Backlight, Night: You can select different modes as required.
- Tap  to set the flashlight as follows:
 - Select On to turn on the flashlight during shooting.
 - Select Off to turn off the flashlight during shooting.
 - Select Auto to allow the camera to automatically turn on the flashlight depending on the ambient light.

Note

- **The flashlight is available only for the rear camera.**
- **The flashlight and HDR mode cannot be turned on simultaneously.**

-
- Tap  to switch between the front and rear camera.

10.2 Recording Videos

1. Tap  to start recording.
2. (Optional) Tap  to take a photo.
3. Tap  to finish recording.

10.3 Adjusting the Focus

When you open the camera to take a photo or record a video, the radio automatically adjusts the focus.

You can also pinch the screen to zoom out or spread the screen to zoom in.

10.4 Advanced Camera Settings

In the shooting interface, you can tap , and then access the following advanced settings:

- Location tag: It allows the camera to record the location information when shooting.
- Shutter sound: It allows you to turn on or off the shutter sound when shooting.
- White balance: It provides you with different modes to adjust the color balance of a photo or video. The default setting is Auto. You can also tap White balance to select Incandescent, Fluorescent, Daylight, or Cloudy.
- Watermark: It allows you to add a watermark to your photo or video to record the shooting time or add specific labels. Tap Watermark to enable it, and then select Time watermark or Image watermark.
- ISO: It represents the light sensitivity of the camera and helps you to adjust the exposure and image quality. The quality of a photo or video decreases when the ISO value increases, but a high ISO value can compensate for the light. The default setting is Auto. You can also tap ISO to select the value.
- Exposure: It adjusts the exposure to improve the photo quality. The default setting is 0. You can also tap Exposure to select the value. The higher the exposure, the brighter the photo.
- Face Detection: It automatically detects faces and focus.
- Redeye Reduction: It removes red eyes from the photo in dark environment when shooting.

11. Gallery

The Gallery app allows you to view, manage, and share photos and videos.

To open the gallery, tap .

11.1 Viewing Photos and Videos

1. Tap .
2. Do either of the following:
 - Tap Photos to view all files organized by date.
 - Tap Albums to view files organized by album.

11.2 Watching Videos

1. Tap .
2. Select the video, and then tap .
3. (Optional) Tap  to pause the video.

11.3 Managing Photos or Videos

1. Tap .
2. Do either of the following:
 - Tap and hold the file until  appears.
 - Tap  to select all files.
3. Do one of the following:
 - Tap Share to share the file via Radio, BT or Messaging.
 - Tap Delete to delete the file.
 - Tap More to move the file to a new album or existed folder.

11.4 Creating an Album

1. Tap .
2. Tap Albums.

3. Tap , and then enter the album name.
4. Tap Save.

11.5 Switching to Camera

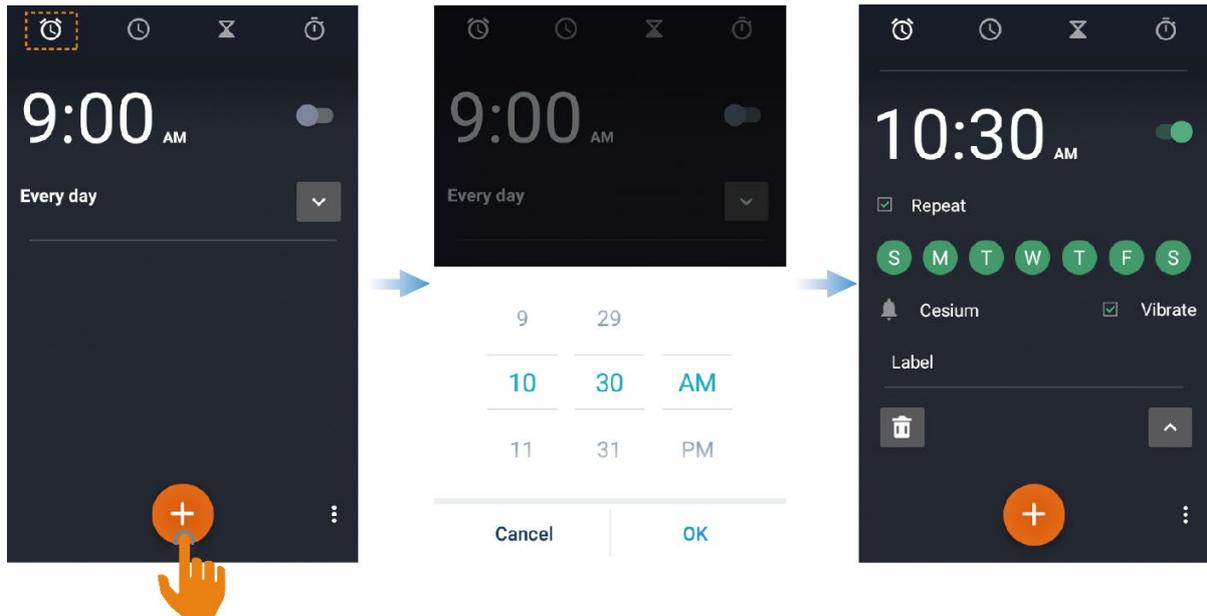
In the gallery interface, you can tap  in the upper right corner to open the camera.

12. Clock

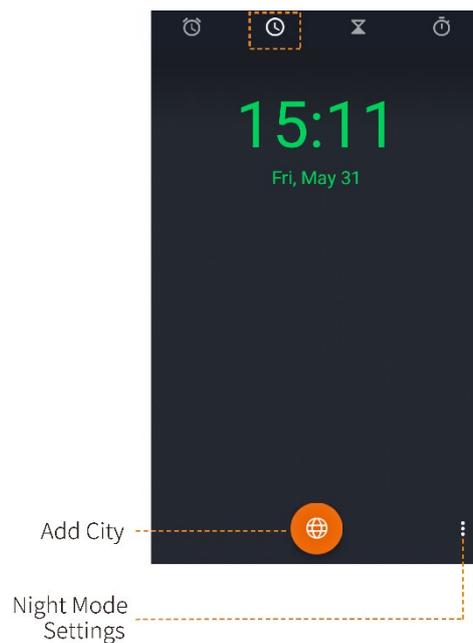
The Clock app allows you to use the alarm, view the world clock, set a stopwatch, or use a timer.

To open the clock, tap .

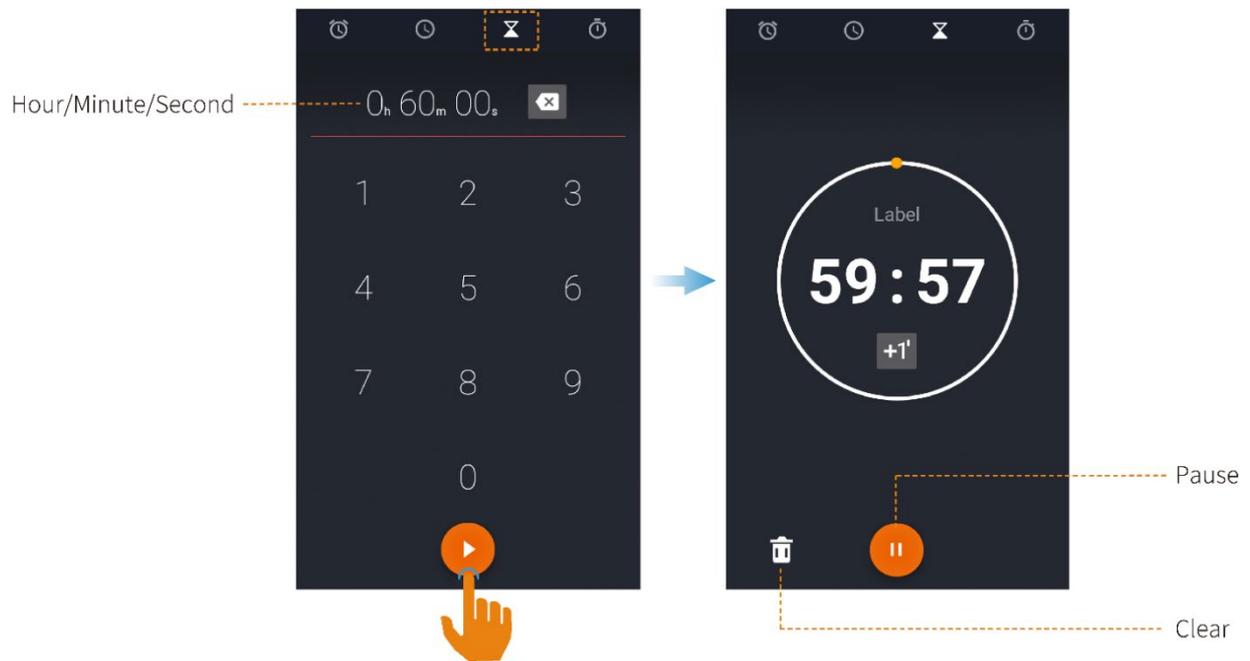
12.1 Alarm



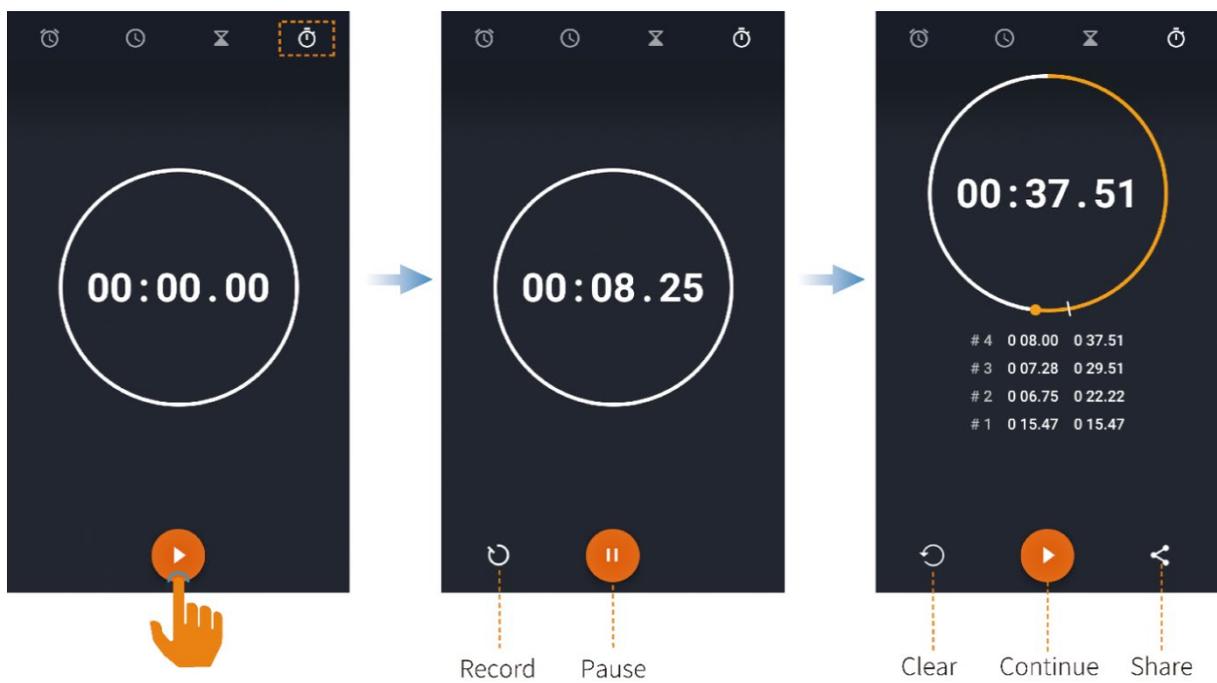
12.2 World Clock



12.3 Timer



12.4 Stopwatch



13. Calendar

The Calendar app allows you to arrange daily schedules, manage important events, and check holiday information.

13.1 Viewing the Calendar

1. Tap .
2. Swipe left or right to view the calendar or tap  to view a specific date.
3. Tap  to jump back to the current date.

13.2 Managing an Event

13.2.1 Creating an Event

1. Tap .
2. Tap the date.
3. Tap .
4. Enter the details including event name, reminder time, repetition cycle, and location.
5. Tap .

13.2.2 Searching an Event

1. Tap .
2. Tap .
3. Enter keywords in the Search field.
4. Tap Search.

13.2.3 Editing or Deleting an Event

1. Tap .
2. Tap the event.
3. Tap Edit or Delete.

13.3 Advanced Calendar Settings

You can tap  > Settings, and then do any of the following:

- Enable Show week number.
- Tap Week starts on to select Locale default, Saturday, Sunday, or Monday as the first day of the week.
- Tap Use home time zone to display calendar and event times in your home time zone during traveling.
- Tap Notifications to set Sound, Vibrate, Pop-up notification, and Default reminder time.

14. Navigator

 Note

- This feature is applicable only to radios with the GPS module.
 - Before using this feature, turn on the GPS and calibration compass.
-

The Navigator app tracks the position of the radio to show you the simple route and the shortest distance to the target address. It supports functions including narrowband navigation, map navigation, coordinate location input, historical records, location sending and offline maps. The narrowband navigation adopts the compass to display the coordinate, and straight-line distance. The map navigation works with a third-party map app to display the map, search for destination, and plan the route. The broadband navigation requires offline city maps downloaded through the public network.

With the Navigator feature enabled by your dealer, tap  to open the app.

14.1 Finding a Place

- Tap , and then enter the destination in the Search field or select the history record.
- Tap , tap , and then enter the latitude and longitude of the destination.

You can also find a place through  or .

1. Tap Conversation.
2. Tap the contact, and then tap its location information.
3. Tap Map.

14.2 Sending a Position Message

After the radio obtains the position, you can send a position message.

1. Tap .
2. Tap Send in the lower right corner.
3. Enter the contact number or select the contact from the contact list.

14.3 Downloading an Offline Map

You can download the offline map to view it when offline.

1. Tap .

2. Tap .
3. Select the city and download the map.

15. Tools

15.1 Files

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

1. Tap .
2. Tap , and then view files by type, or tap  to search for files.

You can touch and hold the file until it is selected, or tap to select more files, and then do any of the following:

- Tap  to share the file via BT or Messaging.
- Tap  to delete the file.
- Tap  to copy, move, or rename the file.

15.2 Documents

The Documents app allows you to view, download, and manage documents sent by the MDM server.

- The Messages interface displays notifications.
- The Files interface classifies all documents for you to view or search.
- The Download interface allows you to manage the documents downloaded or being downloaded. The radio automatically stops or resumes downloading according to the power supply and network connection.

15.2.1 Viewing a Notification

1. Tap .
2. Tap Messages.
3. Tap the unread or read notification to view details.

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

15.2.2 Viewing or Downloading a Document

1. Tap .
2. Tap Files, and then view documents in either of the following ways:

- Tap CAT to view the documents by category.
- Tap , and then enter the keywords of the document. The radio displays the search results below the search box.

3. Select and download the document.

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

15.2.3 Managing Downloads

15.2.3.1 Documents Being Downloaded

During the download process, you can tap Download > Downloading to select the document, and then pause or continue the process, or re-download or delete the document.

15.2.3.2 Downloaded Documents

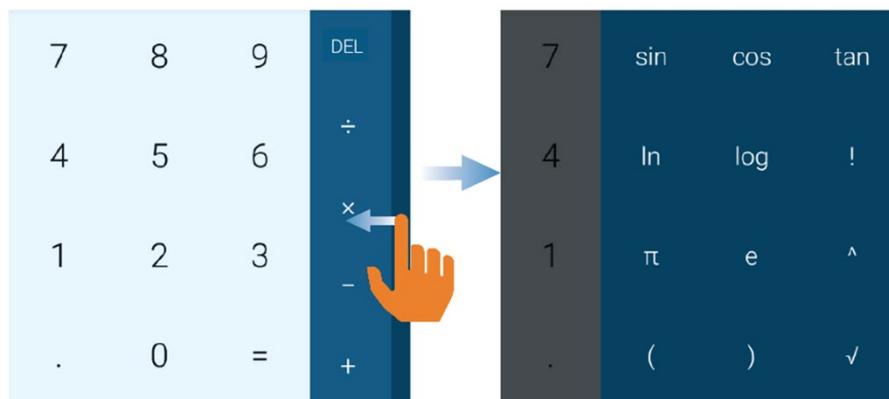
Once the download is complete, tap Download > Downloaded, and then do any of the following:

- Tap  to open the document.
- Tap  to delete the document.
- Tap Delete in the upper right corner, select the documents, and then tap  to delete in batches.

15.3 Calculator

The Calculator app facilitates basic and advanced arithmetic calculations.

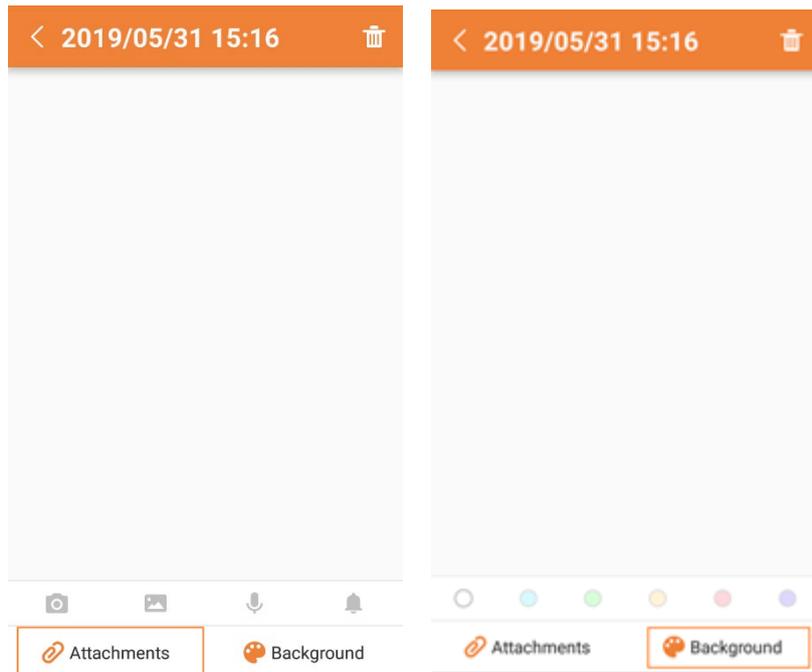
To open the calculator, tap .



15.4 Notes

The Notes app records and stores information including text, image, or audio.

1. Tap  to open the notepad.
2. Tap  to create a note.



- Tap Attachments to add an image, audio, or reminder.
 - Tap Background to change the background color of the content.
3. Tap  to save the edited content.

15.5 Recorder

The Recorder app allows you to record voice and manage the audio files. You can record a call or record locally.

To open the recorder, tap .



15.5.1 Recording an Audio File

1. Tap  to start recording.
2. (Optional) Tap  to pause, and then tap  to continue.
3. Tap  to stop recording.

15.5.2 Playing an Audio File

Tap , and then tap the file from the Local, Phone, or Radio list.

15.5.3 Managing Audio Files

In the Local, Phone, or Radio list, touch and hold the audio file until  appears, and then select the file or tap Select all to select all files.

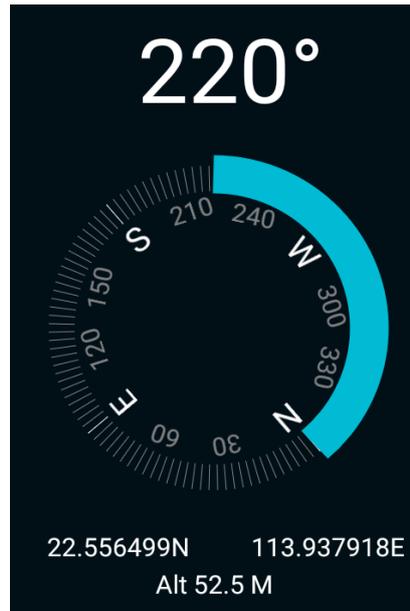
- Tap  to rename the file, and then tap OK to confirm.
- Tap  to share the file via BT or Messaging.
- Tap  to delete the file.

15.6 Compass

The Compass app shows you the direction, latitude, longitude, and altitude.

When using the compass for the first time, calibrate the compass according to the on-screen instructions and allow the compass to access your location information.

To open the compass, tap .



15.7 Browser

Caution

Do not browse untrusted websites to protect the radio from malwares and viruses.

After the radio is connected to the network, you can tap  to open the browser.

15.7.1 Accessing a Website

1. Tap the address bar.
2. Enter the web address.
3. Tap Go.

15.7.2 Managing Multiple Webpages

Tap , and then do any of the following:

- To open a new webpage, tap , and then enter the new website address.
- To switch the webpage, swipe up or down, and then tap the webpage.
- To close a webpage, swipe left or right from the webpage. You can also swipe up or down, and then tap  in the upper right corner to close multiple webpages.
- To view bookmarks or history, tap , and then tap Bookmarks or History.

15.7.3 Advanced Browser Settings

After opening a webpage, tap **⋮** on the right side of the address bar to make more settings for the current webpage, bookmark, or browser.

15.7.3.1 Current Webpage

- To refresh the current webpage, tap Refresh. To stop refreshing, tap Stop.
- To share the webpage via BT or other apps, tap Share page.
- To search for contents, tap Find on page, and then enter the keywords. The radio highlights the search results in yellow.
- To convert the current webpage into computer version, tap Request desktop site.

15.7.3.2 Bookmark

- To save the current webpage as a bookmark, tap Save to bookmarks, and then edit the information.
- To edit, share, or delete a bookmark, tap Bookmarks, and then touch and hold the bookmark.

15.7.3.3 Home Page

- To set a bookmark as the homepage, touch and hold the bookmark, and then tap Set as homepage.
- To set the homepage, go to Settings > General > Set homepage.

15.7.3.4 Others

- To set the text size displayed on the webpage, go to Settings > Accessibility, and then drag the sliders.
- To set whether the webpage displays images, go to Settings > Bandwidth management, and then enable or disable Load images.
- Go to Settings > Privacy & security, and then do any of the following:
 - Clear locally cached content and databases.
 - Set whether the browser displays website warnings.
 - Accept cookies or clear all cookie data.
 - Set whether the browser remembers form data or clear all saved form data.
 - Set whether to allow websites to access your location information.

16. Troubleshooting

Phenomena	Analysis	Solution
The radio 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 radio fails to respond to any operation.	There may be too many apps running.	Forcibly stop some apps or restart the radio.
The keys, screens, or LED indicators do not work normally.	The keys, screens, or LED indicators may fail to function temporarily.	Restart the radio.
	The keys, screens, or LED indicators may be damaged.	Contact your local dealer or Hytera technicians for maintenance.
The touch screen fails to be unlocked.	The unlock pattern or password is incorrect.	Contact your local dealer or Hytera technicians for maintenance.
The radio cannot register.	The radio cannot detect signals from the BS.	Make sure the radio is within the coverage of the BS.
	The radio may not be authorized.	Contact the BS manager to check if the radio is authorized in the network management system.
The radio registers repeatedly.	The signal may be intermittent.	Make sure the radio is within the coverage of the BS.
The radio cannot establish a call.	The signal may be weak.	Make sure the radio is within the coverage of the BS.
No voice is heard after a call is established.	The radio ID may be repeated.	Contact the BS manager to check whether the radio ID is repeated in the network management system.

Phenomena	Analysis	Solution
The called party disconnects repeatedly during communication.	The signal may be intermittent or weak.	Make sure the radio is within the coverage of the BS.
The voice is unclear.	The signal may be weak.	Make sure call participants are within the communication range.
During receiving, the voice is weak, discontinuous, or totally inactive.	The battery voltage may be low.	Recharge or replace the battery.
	The volume may be low.	Increase the volume or contact your local dealer to turn the Mic AGC feature off.
	The antenna may be loosened or installed improperly.	Turn the radio off, and then remove and reattach the antenna.
	The speaker may be blocked or damaged.	Clean the external surface of the speaker.
You cannot communicate with group members.	The frequency or signaling type may be inconsistent with that of other members.	Make sure your TX/RX frequency and signaling type are correct.
	The channel type (digital/analog) may be set inconsistently.	Make sure all members are on the same digital/analog channel.
	You may be too far away from the group members.	Move towards other members.
	The signal may be weak.	Make sure all members are within the communication range.
You hear unknown voices or sounds.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio may be set with no signaling.	Set signaling for all radios operating at the same frequency to avoid interference.

Phenomena	Analysis	Solution
You are unable to hear anyone because of too much noise and hiss.	The signal may be weak.	Make sure call participants are within the communication range.
	The radio 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 radio may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
The GPS cannot locate your position.	The radio 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 camera does not work.	The radio does not detect the front or rear camera.	Restart the radio.
	The storage space is insufficient.	Clear up the storage space.
The radio 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.
You cannot use the data connection.	The SIM card fails to function properly or is out of service because of unpaid charges.	Make sure the SIM card functions properly or pay the charges.

Phenomena	Analysis	Solution
	The data connection feature is disabled for the SIM card.	Contact the carrier to enable the data connection feature.
	The signal may be weak.	Make sure the radio is within the network coverage.
	Both Data and WLAN are turned on, but the WLAN connection is unstable.	Turn off WLAN.
The battery fails to be charged.	The battery may be placed into the charger improperly.	Remove and reinsert the battery.
	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 optimum performance as well as a long service life of the product, please follow the tips below.

17.1 Product Care

- Do not pierce or scrape the product.
- Keep the product away from substances that can corrode the circuitry.
- Do not hold the product by its antenna or earpiece cable.
- Close the accessory connector cover when no accessory is in use.

17.2 Product Cleaning

Caution

Turn off the product and remove the battery before cleaning.

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

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 product.

19. Abbreviations

Abbreviation	Full Name
E2EE	End-to-End Encryption
FOACSU	Full Off Air Call Set-Up
GPS	Global Positioning System
HDR	High-Dynamic Range
ISO	International Standardization Organization
LED	Light-Emitting Diode
MDM	Mobile Device Management
MIDI	Musical Instrument Digital Interface
NFC	Near Field Communication
OACSU	Off Air Call Set-Up
PoC	Push-to-Talk over Cellular
PTT	Push-to-Talk
VoLTE	Voice over LTE
VOX	Voice Operated Transmit
VPN	Virtual Private Network
WLAN	Wireless Local Area Networks



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Address: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, People's Republic of China

Postcode: 518057

[http:// www.hytera.com](http://www.hytera.com)