PTC760 Multi-mode Advanced Radio

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:

PTC760 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 cematériel aux conformité 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 auxCNR 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
	Denotes menus, tabs, parameter names,	To save the configuration, click Apply.
Boldface	window names, dialogue names, and hardware buttons.	The Log Level Settings dialogue appears.
		Press the PTT key.
		The screen displays "Invalid Battery!"
	Denotes messages, directories, file	Open "PDT_PSS.exe".
" " names, folder names, and parameter values.	Go to "D:/opt/local".	
		In the Port text box, enter "22".
>	Directs you to access a multi-level menu.	Go to File > New.
Italic	Denotes document titles.	For details about using the DWS, refer to Dispatch Workstation User Guide.
Courier New	Denotes commands and their execution results.	To set the IP address, run the following command: vos-cmd - m name IP

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	Illustratio n	Description	Example
Тар		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 ountil 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	1/11/1	Move two fingers together on the screen.	Pinch a photo to zoom out.
Spread	130	Move two fingers apart on the screen.	Spread a photo to zoom in.

1. Before Use

1.1 Packing List

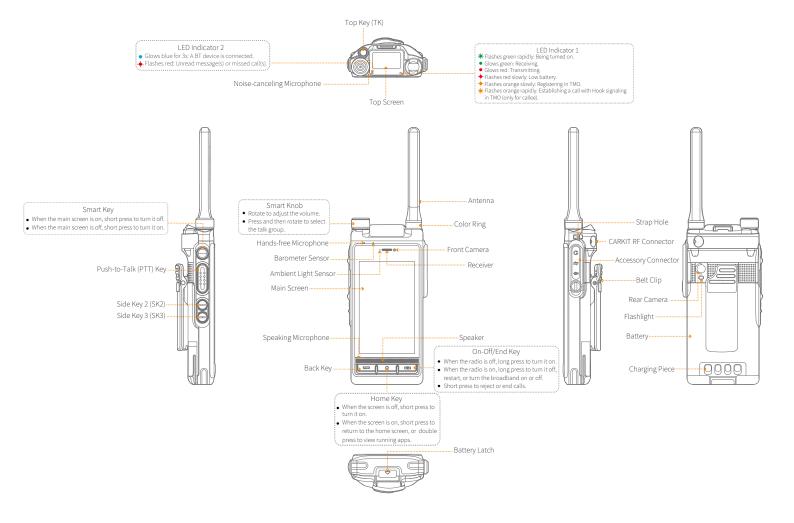
Please unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

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

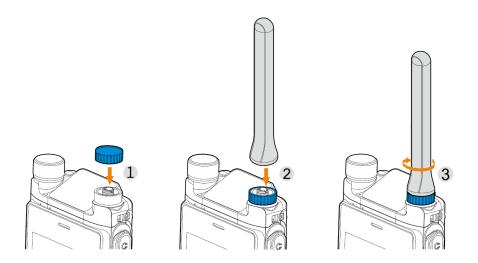


1.3 Attaching the Antenna

△ Caution

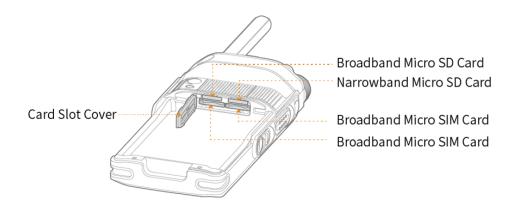
Do not hold the radio by the antenna and swing it. This may affect the antenna performance and shorten the life span of the antenna.

- 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.



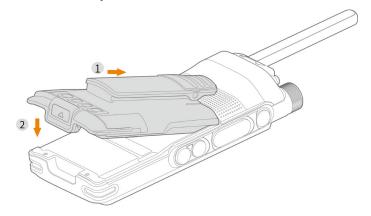
Note

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.

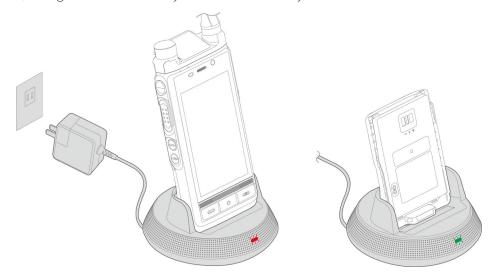


1.7 Charging the Battery

⚠ 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.	
Glows red	The battery is being charged.	
Clows groop	The battery attached to the radio is charged to 90% or above.	
Glows green	• The battery removed from the radio 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 Talk Group

To select the talk group, press the Smart Knob, and then rotate the knob within 5s.

Note

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 LCD Icons

Туре	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.	
	/	E/G/3G/4G	The EDGE/2G/3G/4G cellular network is enabled.	
		(î-	The radio is connected to the WLAN network.	
Network and signal		atl	The number of bars indicates the signal strength of the broadband network.	
		Δ	The radio has not registered with the broadband network.	
		(_	The radio has registered with the RoIP network.	
		<u>(=</u>)	The radio has registered with the narrowband network.	
		*	The radio operates in Airplane mode.	
		@	The WLAN hotspot is enabled.	
	Î		The RoIP network is enabled.	
	T o		The narrowband network is disabled.	
	Ψ×		In TMO, the radio detects no signal.In DMO, the radio is standby.	
	Tul		The number of bars indicates the signal strength of the narrowband network.	
	% 11		In TMO Fallback mode, the number of bars indicates the signal strength of the narrowband network.	
	©		An accessory is connected.	
Accessory	В		The BT feature is enabled.	
	·B·		A BT device is connected.	

Туре	Top Screen	Main Screen	Radio Status
	4		The GPS feature is enabled, and valid positioning data has been received.
	4	•	The GPS feature is enabled, but no valid positioning data has been received.
	3		In DMO, a gateway is available and connected.
	മ		In DMO, a gateway is available but unconnected.
			In DMO, a repeater is available and connected.
			In DMO, a repeater is available but unconnected.
	©		The radio is prohibited from transmitting.
	c _a		The End-to-End Encryption (E2EE) feature is enabled.
	∠á		The Over the Air Encrypt feature is enabled.
	6		All encryption features are enabled.
Others	8		The Voice Operated Transmit (VOX) feature is enabled.
	©		The radio operates in Covert mode.
	a		The hardware encryption card is abnormal.
	ъ.	×	The radio operates in Silent mode.
	/	?	The Micro SD card is abnormal.
		*	The Micro SD card is encrypted.
		Œ	No Micro SIM card is detected.
		?	The Micro SIM card is abnormal.
		Z	The NFC feature is enabled.
		•	The Background Video feature is enabled.
		•	The Background Recording feature is enabled.
		Ó	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. You can do any of the following:

- 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 any of the following:
 - > To sort the order of widgets, touch and drag the widgets.
 - > To add or delete widgets, tap the enable/disable toggle.
- To search for widgets, tap the Search field, and then enter the keywords.
- To manage the Shortcuts widget, do any of the following:
 - > To quickly access features, tap the feature icons.
 - > To add or delete displayed features, tap Edit.

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 any of the following:

- To quickly access Settings, tap .
- To enable or disable features, tap the feature icons.
- To add or remove displayed features, tap 🕰, and then touch and drag the feature icons.
- To adjust the main screen brightness, drag the brightness slider. For more options, tap 🗸.
- To manage notifications, do any of the following:
 - > To view details of a notification, tap the notification.
 - > To view earlier notifications, swipe upwards.
 - \triangleright To block a notification, swipe left, and then tap \bigcirc .
 - > To clear a notification, swipe right, and then tap Clear.
 - ➤ To clear all notifications, Tap ⑧ at the bottom.

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 any 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.

- Locking the screen
 - > Press the Smart Key.
 - > 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.

2.4.5.2 Setting the Screen Lock Type

- 1. Tap **①**.
- 2. Under the Personal pane, tap Security.
- 3. Tap Screen lock.
- 4. Tap Swipe, Pattern, or Password.

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

2.4.5.3 Setting the Screen Lock Range

- 1. Tap .
- 2. Under the Personal pane, tap Security.
- 3. Tap Lock screen.
- 4. Do any 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 with or without ambient sounds.

Enabling or disabling the microphone

During recording, the microphone is disabled by default.

To record ambient sounds, tap (), tap Assistance under the Device pane, go to Screen recording > Audio source, and then tap Microphone.

- Recording screen operations
 - > In the control and notification center, tap the control widget of Screen Recorder.
 - Press the preprogrammed Screen recording key.

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 the control widget of Invert top screen.

2.4.5.6 Closing Running Apps

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

Double press the Home key, and then do either of the following:

- To close a running app, tap X, swipe left, or swipe right.
- To close all running apps, tap $\overline{\mathbf{m}}$.

2.5 Switching the Communication Mode

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

To disable broadband 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 Narrowband Work Mode

- 1. Tap 💽
- 2. Under the Basic settings pane, tap Work mode.
- 3. Tap DMO or TMO.

2.7 Using the SIM Cards

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

☑ Note

The Dual SIM Dual Standby feature is only applicable to radios with dual SIM card slots.

2.7.1 Enabling or Disabling the SIM Cards

- 1. Tap ().
- 2. Under the Wireless & networks pane, tap SIM cards.

Fnable 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.



When two telecom cards are used simultaneously, if you set card 1 as the default card, card 2 cannot register with the network; if you set card 2 as the default card, both cards can register with the network.

2.8 Checking the Device Info

Tap (, tap Device info under the System pane. You can do any 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 information.
- Tap Legal information to check software license and privacy policy of the Company.

2.9 Checking the Broadband Network Info

Tap Tap , and then enter "*#*#0328#*#*".

2.10 Viewing Helpful Tips

The Tips app introduces radio features and operations in 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 PMR Calls

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

✓ Note

- In TMO, if the radio is not registered or attached, you cannot initiate a call.
- In TMO, you can initiate a call by entering an ID that complies with the dialing rules. Consult your dealer for details.

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 talk group.
- 2. Press and hold the PTT key.

Through Contact List

- 1. Tap or •
- 2. Tap Folder, and then select the folder.
- 3. Tap \bigcirc to switch the default group.
- 4. Press and hold the PTT key or tap \bigcirc in the contact details interface.

Through One Touch Call

With the One Touch Call feature enabled, press the preprogrammed One touch call/msg 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 obtain the location information of the radio or the speaking party, or send location information, tap
 .

3.1.1.4 Ending a Group Call

DMO

A group call ends when the calling party taps or presses the On-Off/End key.

TMO

- With the permission of the trunking system, the calling party can tap or press the On-Off/End key to end the group call. The called party can do so to exit the group call.
- Without the permission of the trunking system, the calling party can tap or press the On-Off/End key to exit the group call, and the called party enters the channel reservation state.



In TMO, with the Virtual Channel Reservation feature enabled, you can press the **PTT** key to call back within the preset time after the other party hangs up.

3.1.2 Private Call

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

In DMO, a private call is a half-duplex call. In TMO, a private call can be a half-duplex or full-duplex call.

- Half-duplex private call: The calling party and the called party cannot speak simultaneously.
- Full-duplex private call: The calling party and the called party can speak simultaneously.

To switch the call type, do as follows:

- 1. Tap 💽.
- 2. Under the Call Settings pane, tap Default call setup.
- 3. Tap Half-duplex or Full-duplex.

3.1.2.1 Initiating a Private Call

Through Manual Dialing

- 1. Tap
- 2. On the dialpad, enter the private ID.
- 3. Tap .
- 4. Press and hold the PTT key.

Through Contact List

- 1. Tap or •
- 2. Go to Contacts > Favorites/Private.
- 3. Do either of the following:
 - > Tap the private contact, and then press and hold the PTT key.
 - > In the contact details interface, tap .

Through One Touch Call

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

3.1.2.2 Receiving a Private Call

DMO

You can answer a private call without any operation.

TMO

You can answer a private call according to its signaling, which is configured by your dealer.

- When receiving a private call with Hook signaling, the radio rings and vibrates. You can press the PTT key to answer the call.
- When receiving a private call with Direct signaling, you can answer it without any operation.

3.1.2.3 Managing a Private Call

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

- To turn on the speaker during a full-duplex call, tap 🕩.
- To record the call, tap

- To obtain the location information of the radio or the speaking party, or send location information, tap
 .

3.1.2.4 Ending a Private Call

A private call ends when the calling or called party taps or presses the On-Off/End key.



In a half-duplex call in TMO, with the Virtual Channel Reservation feature enabled, you can press the PTT key to call back within the preset time after the other party hangs up.

3.1.3 All Call

- In DMO, you can initiate an intra-network or inter-network all call.
 - > Intra-network all call: a call from an individual user to all other users on the same frequency in the same network.
 - > Inter-network all call: a call from an individual user to all other users on the same frequency in different networks.
- In TMO, you can initiate an all call to all other radios registered with the trunking system.

3.1.3.1 Initiating an All Call

Through Preset Contact

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

Through Manual Dialing

- 1. Tap
- 2. On the dialpad, enter the all call ID.
- 3. Tap or press and hold the PTT key.

Through Contact List

- 1. Tap **Q** or
- 2. Tap Folder, and then select the folder.

- 3. Tap to set the all call contact as the default group.
- 4. Press and hold the PTT key or tap 📞 in the contact details interface.

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

An all call is a special group call and can be ended in the same way as the group call.

For operations of ending the all call, see 3.1.1.4 Ending a Group Call.

3.1.4 Broadcast Call (TMO 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

- 1. Tap 💽
- 2. Under the Call settings pane, tap Broadcast call.
- 3. Tap or press the PTT 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

- With the permission of the trunking system, the calling party can tap or press the On-Off/End key to end the broadcast call. The called party can do so to exit the broadcast call.
- Without the permission of the trunking system, the calling party can tap or press the On-Off/End key to exit the broadcast call, and the called party enters the channel reservation state.

3.1.5 PSTN/PABX Call (TMO Only)

A PSTN/PABX call is a call initiated through 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 **Q** or
- 2. Go to Contacts > Favorites/Private.
- 3. Tap the PSTN/PABX contact in the contact list.
- 4. Press the PTT key.

Through Manual Dialing

- 1. Tap
- 2. On the dialpad, enter the PSTN/PABX ID.
- 3. Tap ().
- 4. In the Choose Call Way dialog box, tap PSTN or PABX.
- 5. 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

To answer a PSTN/PABX call, press the Back/Answer or PTT key.

3.1.5.3 Ending a PSTN/PABX Call

A PSTN/PABX call ends when the calling or called party taps or presses the On-Off/End key.

3.1.6 DGNA (TMO 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 dispatch station. After accepting the dynamic group participation request, you can view the group on the radio. After the dynamic group is dismissed, you cannot view the group on the radio.

For operations of initiating, receiving, or ending a DGNA call, see 3.1.1 Group Call.

3.2 Phone Call

3.2.1 Initiating a Phone Call

Through Contact List

- 1. Tap 1
- 2. Tap the phone contact in the contact list.
- 3. Tap 📞

Through Manual Dialing

- 1. Tap 📞
- 3. On the dialpad, enter the phone number.
- 4. Tap (C).

Through Call Logs

- 1. Tap 📞
- 2. Tap 🔇.
- 3. Select 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 Phone Call

If the radio is within the network coverage of the carrier, you can initiate an emergency phone call even without the SIM card installed. Do either of the following:

- On the unlocked main screen, tap 📞 > 🏢 , 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 PMR Network

You can send text messages or status messages.

A status message is a predefined code that transfers the message content.

3.3.1.1 Sending a Message

Through Conversation

- 1. Tap 🕠 or ြ
- 2. Tap Conversation.
- 3. Tap +, and then tap New Conversation.
- 4. 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.
- 5. Tap the Type message field to enter the content.
- 6. (Optional) Tap (+) to send location information and add quick reply texts, status messages, and contact information.
- 7. Tap 🕢.

Through Contact List

1. Tap **Q** or

- 2. Tap Contacts.
- 3. Tap Favorites, Private, or Group.
- 4. Tap the contact, and then tap
- 5. Edit and send the message.

For detailed operation, see steps 5–7 in Through Conversation.

3.3.1.2 Viewing Messages

- 1. Tap or and then tap Conversation.
- 2. In the conversation list, tap the contact.
- 3. In the message details interface, tap ≡, and then do any of the following:
 - > To search for history messages, tap find chat content, and then enter the keywords in the search field.
 - > To search for history messages by date, tap find chat content, and then tap date.
 - > To pin the 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 conversation list, tap the contact.
- 3. In the message details interface, tap the Type message field.
- 4. Enter the content and send the message.

3.3.1.4 Managing Messages

- 1. Tap or [], and then tap Conversation.
- 2. In the conversation list, tap the contact.
- 3. In the message details interface, touch and hold the message text, and then do any of the following:
 - > To select multiple messages, tap Multi check.
 - > To copy and paste the text message, tap Copy.
 - > To paste the copied content, touch and hold the Type message field, and then tap PASTE.

- > To forward the text or location message, tap Forward.
- > To delete the message, tap Delete. The deleted messages cannot be recovered.
- > To add messages to the favorite list, tap Favorite.
- \succ To view messages in the favorite list, in the Conversation interface, tap +, and then tap My favorites.

3.3.2 Public Network

You can send text messages or multimedia messages.

A multimedia message is a message that contains pictures, audio files, videos, or other multimedia content.

3.3.2.1 Sending a Message

Through Messaging App

- 1. Tap
- 2. Tap 🕕
- 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, and then enter the content.
- 5. (Optional) Tap **@**, and then add attachments including pictures, videos, and audio files.
- 6. Tap **3**.

Through Contacts App

- 1. Tap
- 2. Tap the phone contact in the contact list.
- 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.



You can add, edit, and delete phone contacts and PMR private/PSTN/PABX contacts.

3.4.1 PMR Contacts

3.4.1.1 Searching for a Contact

- 1. Tap **Q** or
- 2. Tap Contacts.
- 3. Tap \mathbb{Q} , and then enter the name, initials, and radio ID of the contact.

The radio displays the search results below the search box.

3.4.1.2 Sharing a Contact

- 1. Tap **Q** or
- 2. Tap Contacts.
- 3. Tap a contact as the recipient, and then tap Message.
- 4. Tap (+), and then tap Contact.
- 5. Select the contact(s) to be shared with the recipient.

3.4.1.3 Editing or Deleting a Contact

- 1. Tap 00 or 5.
- 2. Tap Contacts.
- 3. Tap the contact, and then tap 🔼 .
- 4. Do either of the following:

- > Edit the contact information including avatar, name, radio ID, and phone number, and then tap
- > Tap Delete contact to delete the contact, and then tap OK to confirm.

3.4.1.4 Adding a Favorite Contact

- 1. Tap 🕠 or ြ
- 2. Tap Contacts.
- 3. Tap the contact, and then enable Set as star contact.

3.4.1.5 Creating a Contact

- 1. Tap 🕡 or 🔚.
- 2. Tap Contacts.
- 3. Tap +, and then tap Add Contacts.
- 4. Enter the contact information including avatar, name, radio ID, and phone number.
- 5. Tap **✓**.

Note

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

3.4.1.6 Managing a Folder

A folder contains multiple talk groups.

Tap or lap Folder, and then do any of the following:

- To create a new folder, tap +, and then tap New static folder.
- To delete a folder, touch and hold the folder, and then tap Delete.
- To rename a folder, touch and hold the folder, and then tap Rename.
- To create a shortcut of the folder in the app center, touch and hold the folder, and then tap Create home screen shortcuts.
- ullet To add a talk group to a folder, tap the folder, tap ullet, and then tap Add group.
- To delete a talk group from a folder, tap the folder, touch and hold the talk group, and then tap Delete.

3.4.1.7 Managing a Favorite Folder

A favorite folder is a special folder that allows you to switch the talk group across work modes.

Tap or [], tap Folder, and then do any of the following:

- To create a new favorite folder, tap +, and then tap New favorite.
- To delete a favorite folder, touch and hold the folder, and then tap Delete.
- To rename a favorite folder, touch and hold the folder, and then tap Rename.
- To create a shortcut of the favorite folder in the app center, touch and hold the folder, and then tap Create home screen shortcuts.
- To add a talk group to a favorite folder, tap the folder, tap +, and then tap Add group.
- To delete a talk group from a favorite folder, tap the folder, touch and hold the talk group, and then tap Delete.

3.4.1.8 Managing a Scan List

You can use a scan list to manage talk groups that can receive calls in TMO.

Tap or [], go to Folder > Scan list, and then do any of the following:

- Create, delete, or rename a scan list, or add or delete a talk group in the scan list.
 - \rightarrow To create a new scan list, tap +, tap New scan list, and then enter the list name.
 - > To delete a scan list, touch and hold the list, tap Delete, and then tap OK.
 - > To rename a scan list, touch and hold the list, tap Rename, and then enter the new list name.
 - > To create a shortcut of the scan list in the app center, touch and hold the list, and then tap Create home screen shortcuts.
 - > To add a talk group to a scan list, tap the scan list, tap +, tap Add group, and then select the talk group.
 - > To delete a talk group from a scan list, tap the scan list, touch and hold the talk group, and then tap Delete.
- Tap Scan to enable the Scan feature. The radio automatically attaches to the talk groups in the scan list after registration.
- Tap 🕢 on the right side of the scan list to set it as the default scan list.

3.4.1.9 Switching the Default Group

The radio can initiate and receive voice calls to or from the default group, and can send and receive messages to or from this group.

To switch the default group, do either of the following:

Through the knob

Rotate the Smart Knob to select a talk group. The selected talk group is set as the default group.

Through the menu



- b. Tap Folder.
- c. Tap the folder, and then tap 🗸 on the right side of the talk group.

3.4.1.10 Switching the Selected Folder

The selected folder contains the default group. Only one selected folder is allowed. You can add groups to which you will initiate calls or send messages to the folder.

To switch the selected folder, do either of the following:

- Press the preprogrammed Folder up or Folder down key.
- Switch the default group. The folder containing the default group will be set as the selected folder automatically.

3.4.1.11 Switching the Home Group

If the radio often switches between talk groups, you can set the most frequently used group as the home group. Then, you can quickly switch to the home group by pressing the corresponding preprogrammed key.

- 1. Tap **Q** or
- 2. Tap Folder, and then tap the folder and talk group.
- 3. In the talk group details interface, tap Set Home Group.
- 4. Press the preprogrammed Switch to home group key.

If the home group is configured as the startup group, the radio operates under the home group upon power-on.

3.4.1.12 NTG (TMO Only)

A notice talk group (NTG) is a special talk group with high priority by default. A NTG can be associated with multiple groups. When initiating a NTG call, you can talk with all the talk groups associated with the NTG. When the default group is a NTG group, the radio monitors the talk groups associated with the NTG. When the default group is a talk group associated with a NTG, the radio monitors only the NTG.

After a NTG is configured, it is displayed as "N:" in the Contacts menu. You can access the contact details interface to view the list of associated groups.

3.4.2 Phone Contacts

3.4.2.1 Searching for a Contact

- 1. Tap 🔼
- 2. Tap **Q**.
- 3. In the search box, enter the contact name or initials.

The radio displays the search results below the search box.

3.4.2.2 Sharing a Contact

- Through Messaging app
 - а. Тар 💬

 - c. Tap **@**, and then tap Insert contact information.
 - d. Select the contact, and then send the contact information to other contacts.
- Through Contacts app
 - a. Tap 1, and then tap the contact.
 - b. Tap , and then tap Share.
 - c. Select a sharing method.

3.4.2.3 Editing a Contact

- 1. Tap 🚺
- 2. Tap the contact.
- 3. Tap 🧪.
- 4. Edit the contact information including avatar, name, phone number, and email address.
- 5. Tap **✓**.
 - ☑ Note

You can tap **to** delete the contact, link or unlink the contact with other contacts, and set the ringtone.

3.4.2.4 Adding a Favorite Contact

- 1. Tap 🔼
- 2. Tap the contact.
- 3. In the contact details interface, tap $\frac{1}{2}$.

3.4.2.5 Creating a Contact

- 1. Tap 🔼
- 2. Tap 🔼
- 3. Set the contact information including avatar, name, phone number, and email address.
- 4. Tap **✓**.
- ☑ Note

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

3.4.2.6 Managing a Group

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

To manage a group, do as follows:

- 1. Tap 🔼
- 2. Tap GROUPS.
- 3. Tap the group.
- 4. 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 TMO, after enabling and registering in the Radio over IP (RoIP) network, the radio automatically switches between the broadband and narrowband networks according to the network signal. This realizes voice, data, and multi-media message 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 with the PTT Connect (PTTC) system and trunking system. After connecting the radio to a WLAN or LTE network, tap [6], and then enable RoIP settings.

For operations on voice and data services, see 3.1.1 Group Call, 3.1.2 Private Call, and 3.3.1 PMR Network.

4.3 Cellular Network

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

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

- Tap , tap Data usage under the Wireless & networks pane, and then tap Cellular data.
- In the control and notification center, tap the control widget of Data.

4.3.1 Setting the Cellular Network

- 1. Tap .
- 2. Under the Wireless & networks pane, go to More > Cellular networks.
- 3. Do any of the following:

- > To enable data roaming, tap Data roaming. You can access data services when you are outside the service area of your carrier.
- > To select the 2G, 3G, or 4G network, tap Preferred network type. Before accessing the 4G network services, ensure that you have installed the SIM card with 4G services enabled.
- > To enable the Voice over LTE (VoLTE) feature, tap Enhanced 4G LTE Mode. 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 the billing cycle, data warning, and data limit

4.4 WLAN

With 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 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 the radio to access the network through different protocols. To use a proxy server, set an IP address, or obtain an IP address automatically, go to Advanced options > Proxy or IP settings.

4.4.2 Setting the WLAN Network

In the WLAN interface, tap 🔹 , and then do any 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 network is available, enable Network notification.
- To set the WLAN connection status when the main screen is off, do one of the following:
 - > Tap Always.

The radio is always connected to the WLAN network.

> Tap Only when plugged in.

The radio is connected to the WLAN network only when being charged.

Tap Never.

The radio is not connected to the WLAN.

4.5 Tethering and Portable Hotspot

The Tethering & Portable Hotspot service allows the radio to share the mobile network connection with nearby devices.

To set up a WLAN hotspot, do as follows:

- 1. Tap **(0**).
- 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 the network name, security, and password.
- 5. Tap Save.

4.6 BT

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

4.6.1 Pairing a BT Device

- 1. Enable the BT feature in either of the following ways:
 - > 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 can also be detected by other BT devices.
- 2. Under the Available devices pane, tap 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 files with the BT device.



Under the **Paired devices** pane, you can tap on the right side of the device, and then tap **Forget** to forget the paired device.

4.6.2 Sending and Receiving Files

Many apps allow you to transmit data to other devices 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 to receive 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 feature enabled, tap 🚦 , go to BT location > Broadband BT location, and then do any 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.

4.6.4 Advanced BT Settings

With the BT feature enabled, tap 👢 , and then do any of 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.

4.7 Airplane Mode

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

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

- Tap , tap More under the Wireless & networks pane, and then tap 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 for fast and secure communications.

To enable or disable this feature, do as follows:

- 1. Tap .
- 2. Under the Wireless & networks pane, tap More.
- 3. Tap 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 enable the screen lock (pattern or password).

To set up a VPN, do as follows:

1. Tap **(**

- 2. Under the Wireless & networks pane, go to More > VPN.
- 3. Enable VPN, and then tap VPN settings.
- 4. Tap +, and then edit and save the VPN profile.
- 5. Tap the configured VPN, and then enter the username and password.
- 6. Tap Connect.

Note

For detailed configuration, consult your dealer.

4.10 USB

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

In the control and notification center, tap USB Connect this device, and then do one of the following:

• To only connect the radio, tap Connect this device.

The computer can only 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 Work Type (DMO Only)

The radio can switch among different work types to initiate calls or send messages. The work types are as follows:

- MS-MS: The radio directly communicates with another radio.
- Repeater: The radio communicates with another radio through a repeater.
- Gateway: The radio communicates with another radio through a gateway.
- GW+Rep: The radio communicates with another radio through a gateway or repeater.

To select the work type, tap o, and then tap Work type.



If Repeater, Gateway, or GW+Rep is selected, you need to enable Auto-select device or manually add the device address.

5.2 Mobility Management

5.2.1 Network Switch

A network is identified by its country code and network code.

In DMO, the radio can only communicate with other radios in the same network.

In TMO, when the radio receives weak network signals or is out of service, it can switch to and register with other available networks to continue the communication.

5.2.1.1 Manual Switch

If the radio is configured with multiple networks, you can manually switch the network.





Tap 🔯, tap Management, and then select the network from the network list.

5.2.1.2 Automatic Switch

In TMO, with Auto-switch network enabled, the radio automatically switches to another network when it is out of service.

5.2.2 PSTN/PABX Gateway (TMO Only)

If the radio is configured with multiple gateway addresses, you can select the call gateway and the message gateway.

Tap , tap PSTN gateway or PABX gateway, and then set the gateway information.

5.2.3 LA Application (TMO Only)

5.2.3.1 Associate Folder with Fixed LA

A folder can be associated with a designated LA, and a LA allows association of multiple folders. This ensures that the radios participating in a call can quickly register to the designated LA, making full use of channel resources in the area.

If the radio is configured with the Associate Folder with Fixed LA feature, when you switch the folder, the radio switches to the associated LA for registration and stays in the LA until you switch to another folder.

5.2.3.2 Preferred LA

The radio can preferentially register to the designated LA according to the preset preferred LA list and the switch strategy.

You can configure the frequently used LA to the preferred LA list. The preferred LA has the following three strategies:

- Normal Behavior: The radio preferentially registers to the LA in the preferred LA list.
- Register to Preferred LA Immediately: If the radio registers to a non-preferred LA, the radio immediately switches to the preferred LA when the following occur:
 - The radio detects a preferred LA in the neighbor cell, and the switch condition is met.
- Only Permitted Register to Preferred LA: The radio registers only to the LA in the preferred LA list.

5.2.4 GSDM (TMO Only)

With the Graceful Service Degradation Mode (GSDM) feature enabled, when the signal is weak or no LA is available, the radio can still receive group calls, initiate or receive emergency calls, and send or receive emergency status messages.

If this feature is disabled, the radio will be out of service when the signal is weak.

5.3 Energy Saving Mode (TMO Only)

With the Energy Saving Mode feature enabled, when the radio is not transmitting or receiving, the radio receives data from the BS periodically instead of continuously. In this case, the radio can reduce traffic on the control channel and save energy.

The receiving interval is subject to the energy saving level. A higher level indicates a longer interval.

Tap on, tap Energy saving mode, and then select the energy saving level.



- Before entering the energy saving mode, the radio must send a request to the BS. If the BS supports energy saving and accepts the request, the radio can enter the mode.
- If receiving the energy saving level from the BS, the radio will adjust its energy saving level to that from the BS.

5.4 Transmit Inhibit (TMO Only)

With the Transmit Inhibit feature enabled, the radio cannot transmit voice or data. This feature applies to areas with RF exposure limits or potential security risks, such as hospitals or airplanes.

If this feature is configured, you can enable or disable it as follows:

- Tap 🗽, and then tap Transmit inhibit.
- Press the preprogrammed Transmit inhibit key.

5.5 Group Call Detector (TMO Only)

With the Group Call Detector feature enabled, the radio allows the dispatcher to confirm whether the radio joins a group call. When the radio receives a group call with a status message from the dispatcher, the radio automatically replies to the message. This allows the dispatcher to determine the number of participants in the call according to the received replies.

If this feature is configured, it is activated when the dispatch station initiates a group call and deactivated when the group call ends.

5.6 Power

The Power feature allows you to set the maximum transmission (TX) power of the radio.

To select the maximum TX power, tap 🗽, and then tap Power.

- In DMO, you can set the maximum TX power to 1.8W (32.5dBm), 1W (30dBm), 0.56W (27.5dBm), 0.3W
 (25dBm), or 0.18W (22.5dBm).
- In TMO, you can set the maximum TX power to 1.8W (32.5dBm), 1W (30dBm), or 0.56W (27.5dBm).

5.7 E2EE

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

If the radio is configured with this feature, you can enable it in any of the following ways:

- Tap the control widget of E2EE.
- Press the preprogrammed E2EE key.
- Tap 🔯, and then tap E2EE.

5.8 Call Settings

Call Settings allows you to configure the features about calls.

5.8.1 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.

5.8.2 Call Recording

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

- To record a PMR call, tap in the call interface.
- To record all PMR calls, tap and then enable Call Recording.

5.8.3 Speed Dial

- 1. Tap
- 2. Tap Speed Dial.
- 3. Link the numbers (1–9) with contacts.
- 4. Tap

5. On the dialpad, touch and hold a number to initiate a call to the linked contact.

✓ Note

On the dialpad, when a numeric button is not linked to a contact, you can touch and hold the numeric button to create a link.

5.9 One Touch Call/Message

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

You can use this feature to implement the following services:

- Initiating private calls, PSTN/PABX calls, group calls, or all calls.
- Sending text or status messages to a private contact, or send status messages to a group contact.

If the radio is configured with this feature, press the preprogrammed One touch call/msg key to initiate the corresponding service.

5.10 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 TMO, the emergency call modes include Regular and Silent. In DMO, the emergency call mode includes Regular.

- Regular mode: When initiating an emergency call, the radio gives visible and audible indications.
- Silent mode: When initiating an emergency call, the radio gives no visible or audible indications.

5.10.1 Initiating an Emergency Service

5.10.1.1 TMO

If the radio is configured, you can initiate an emergency service to a private contact, a group contact, the default group, or a PABX/ PABX user. Press the preprogrammed Emergency on (short press TK by default) key.

5.10.1.2 DMO

You can initiate an emergency service to the default group.

Press the preprogrammed Emergency on key (short press TK by default).

5.10.2 Ending an Emergency Service

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

5.10.3 Emergency Cycle

In an emergency call, the called party cannot apply for the talk right until the calling party releases it by pressing the PTT key. The Emergency Cycle feature allows the calling party and the called party to obtain the talk right in turn.

With this feature enabled, after the transmitting duration of one party reaches the preset limit, the radio of the party automatically enters the receiving status. In this case, the other party can press the PTT key to speak. The process repeats until the cycle times expire.

✓ Note

In an emergency cycle, the calling party can still press the PTT key in the receiving status to preempt the talk right. After the talk right is preempted, the emergency cycle ends.

5.10.4 Default Group Switch Resend

With the Default Group Switch Resend feature enabled, an emergency call is automatically made to a switched group in the following scenario:

When the radio is in an emergency call initiated to the default group, the radio switches from the default group to another group.

5.10.5 Emergency Status Message (TMO Only)

If the Emergency Status Message feature is configured, the radio sends an emergency status code when initiating an emergency call. The receiver can be a private contact, a group contact, or a PABX/PSTN contact.

5.11 Location Report

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

The Location Report triggers include preset time, distance interval, power-on/off, enabling/disabling the Transmit Inhibit feature, and switching work mode.

5.12 Authentication (TMO Only)

In TMO, the BS authenticates the radio to ensure the legality of the radio in the network. If the radio fails authentication of a BS, it will not be able to register with the BS.

This feature is enabled by your dealer by default.

5.13 Temporary/Permanent Disable and Enable (TMO Only)

When the radio is temporarily disabled by the dispatch station or trunking system, both the top and main screens display the icon X. 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 permanently disabled by the dispatch station or trunking system, both the top and main screens display the icon $\stackrel{\bullet}{\searrow}$. In this case, the radio is incapable of all functions except power-on/off. To restore normal use, send the radio back to the Company.

The Temporary Disable, Permanent Disable, and Enable features are enabled by your dealer by default.

6. Security

6.1 Location

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

- 1. Tap 🔘.
- 2. Under the Personal pane, tap Location.
- 3 Fnable 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 any keys, rotate the Smart Knob, or press the PTT key and speak 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.



- 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 or replace the radio, or install or uninstall the SIM card, 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.



- Contact the carrier to get 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.
- 4. Tap 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 (a), 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	 With Ringtone enabled, the radio emits an alert tone when receiving, queuing in, or ending a call. You can set the tone for call services. Options include Broadband, Narrowband, and Vibrations. 	
Message tone	 With Message tone enabled, the radio emits an alert tone when receiving a message or failing to send the message. 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	 With Mobile service tone enabled, the radio emits an alert tone when registering. 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 as follows:

- 1. Tap **()**.
- 2. Under the Device pane, tap Sounds.
- 3. Tap VOX.



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 Audio Mode

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

7.2.4.1 Ring Tone and Media

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

7.2.4.2 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
×	V	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 **(0)**.
- 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 while wearing gloves. With this mode, the sensitivity of the touch screen is increased.

- 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 and manage the internal storage space of the radio and the storage space of the installed Micro SD card.

Tap (), tap Storage under the Device pane, and then do any of the following:

• To clear the cache for a specific app, tap Apps, tap the app, and then tap Clear cache.

The pictures, texts, and records temporarily stored will be deleted.

- To clear the data for a specific app, tap Apps, tap the app, and then tap Clear data.
 - All data of the app will be deleted permanently.
- To clear all app cache, tap Cached data, and then tap OK.

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 the control widget of 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 (a), 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 the screen is locked, 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 \mathbb{H} , 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 unused 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 you open an app, the app may request access to a specific function or information. You can tap Allow or Deny to accept or 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

or







10.1 Taking Photos

To take a photo, tap



You can also do any of the following:

- Tap **M** 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, or Night: You can select different modes as required.
- Tap **1** to set the flash as follows:
 - Select On to turn on the flash during shooting.
 - Select Off to turn off the flash during shooting.
 - Select Auto to allow the camera to automatically turn on the flash depending on the ambient light.
 - Note
 - The flash is available only for the rear camera.
 - The flash and HDR mode cannot be turned on simultaneously.
- Tap uto switch between the front and rear camera.

10.2 Recording Videos

- Tap to start recording.
- (Optional) Tap to take a photo.
- 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 (11) to pause the video.

11.3 Managing Photos or Videos

- 1. Tap ...
- 2. Touch and hold the file until 🕢 appears or 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

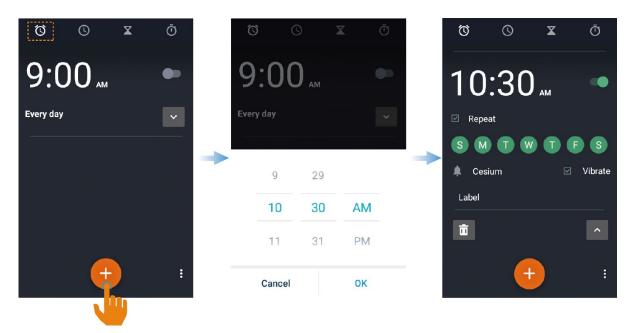
In the gallery interface, you can tap o in the upper right corner to open the camera.

12. Clock

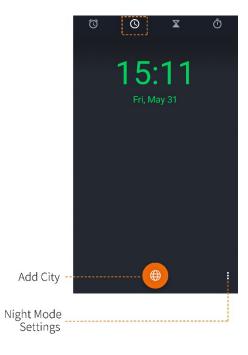
The Clock app allows you to set the alarm, view the world clock, and use the timer or stopwatch.

To open the clock, tap .

12.1 Alarm



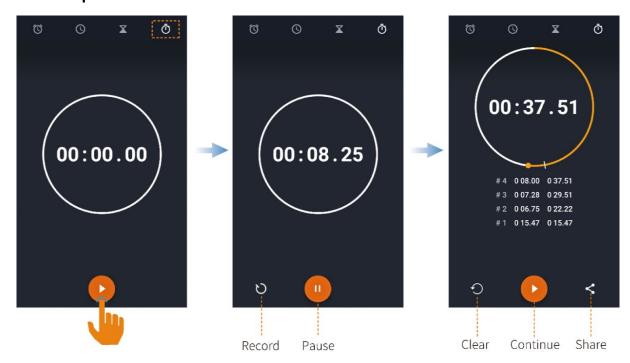
12.2 World Clock



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 **25**.
- 2. Swipe left or right to view the calendar or tap \blacksquare to view a specific date.
- 3. Tap 25 to jump back to the current date.

13.2 Managing an Event

13.2.1 Creating an Event

- 1. Tap **25**.
- 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 **25**.
- 2. Tap **Q**.
- 3. Enter keywords in the Search field.
- 4. Tap Search.

13.2.3 Editing or Deleting an Event

- 1. Tap **25**.
- 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.
- Enable Use home time zone to display calendar and event times in your home time zone during traveling.
- Enable 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 destination. 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 coordinates 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 0 or 1





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

14.2 Sending a Position Message

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

- Тар 🪮. 1.
- Tap Send in the lower right corner.
- 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.

- 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 \equiv , and then view files by type, or tap \mathbf{Q} 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 **a** 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 from 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 **Q**, 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

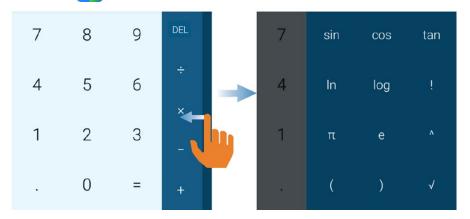
Once the download is complete, tap Download > Downloaded, and then do any of the following:

- 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.

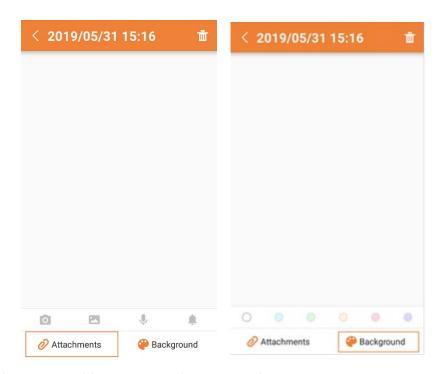
To open the calculator, tap



15.4 Notes

The Notes app records and stores information including texts, images, and audios.

- 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.
- 3. Tap \checkmark to save the edited content.

15.5 Recorder

The Recorder app allows you to record voice and manage the audio files. You can record the incoming and outgoing calls or on-site sounds.



15.5.1 Recording an Audio File

- Tap to start recording.
- (Optional) Tap 10 to pause, and then tap 0 to continue.
- Tap to stop recording.

15.5.2 Playing an Audio File

Tap (iii), 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 **T** to delete the file.

15.6 Compass

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

When you use 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

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.
- Enter the web address. 2.
- 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 **X** in the upper right corner to close multiple webpages.
- To view bookmarks or history, tap \mathbf{q} , and then tap Bookmarks or History.

15.7.3 Advanced Browser Settings

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 font displayed on the webpage, go to Settings > Accessibility, and then drag the sliders.
- To set whether the images appears on the webpage, 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 work 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 dealer or Hytera technicians for maintenance.	
	The radio may operate in DMO.	Switch to TMO.	
Network registration fails or network cannot be found.	The radio may be out of the network coverage.	Check the signal strength. Make sure the radio is within the network coverage.	
	The radio may not be granted network access.	Contact the network operator for authorization.	
Calls cannot be established.	The radio or the called party may be out of the network coverage.	Check the signal strength. Make sure your radio is within the network coverage.	
	The radio may operate in an improper mode.	Check the operation mode. Make sure the radio operates in the proper mode.	

Phenomena	Analysis	Solution	
Group calls cannot be	The radio may not be a member of the target group.	Contact your dealer to add the radio to the group.	
initiated or received.	The group call services may not be enabled.	Contact your dealer to enable the group call services.	
Calls are always interrupted.	The current channel is assigned to emergency calls or other calls with higher priority.	Wait until the channel becomes available and try again.	
Half-duplex calls cannot be established.	The predefined time period for establishing a call may expire.	Make sure that the call is established within the predefined time period.	
	The channel is occupied by another radio with higher call priority.	Initiate another call when the channel becomes available.	
	The channel resources may be allocated to other services due to overloaded network.	Initiate another call when the network becomes available.	
Abnormal disconnection occurs during a call.	The radio may be out of the network coverage (in TMO).	Check the signal strength. Make sure the radio is within the network coverage.	
	The radio may be at an unfavorable position. For example, the signal may be blocked by tall buildings or frustrated in the underground areas (in DMO).	Move to an open and flat area, and restart the radio.	
The content of the status message for the receiving and transmitting parties is different.	Both parties have associated the same status message ID with different contents.	Make sure the status message ID is associated with the same content.	
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	Move to an open and flat area, and try again.	

Phenomena	Analysis	Solution
	be blocked by tall buildings or frustrated in the underground areas.	
	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. The radio may be at an unfavorable 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 mobile data.	The SIM card fails to work properly or is out of service because of unpaid charges.	Make sure the SIM card works properly or pay the charges.
	The data connection feature is disabled for the SIM card.	Contact the carrier to enable the mobile data 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
GPS	Global Positioning System
GSDM	Graceful Service Degradation Mode
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
NTG	Notice Talk Group
PTT	Push-to-Talk
Volte	Voice over LTE
VPN	Virtual Private Network
WLAN	Wireless Local Area Networks



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