



PDC680 Multi-mode Advanced Radio User Manual

Preface

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

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

This manual is applicable to the following product:

[PDC680 Multi-mode Advanced Radio](#)

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Documentation Information

Icon Conventions

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

Notation Conventions

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

Key Operations

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

Main Screen Operations

Operation	Illustration	Description	Example
Tap		Touch an item once with your finger.	Tap  to open the Camera app.
Touch and hold		Touch an item with your finger and maintain contact.	Touch and hold  until it jiggles.
Swipe		Swipe your finger across the screen.	Swipe down from the top edge of any screen to access the notification panel.
Drag		Touch and press an item, and then move it to a new position.	Touch and press  until it jiggles, and then drag it to the proper position.
Pinch		Move two fingers together on the screen.	Pinch a photo to zoom out.
Spread		Move two fingers apart on the screen.	Spread a photo to zoom in.

1. Packing List

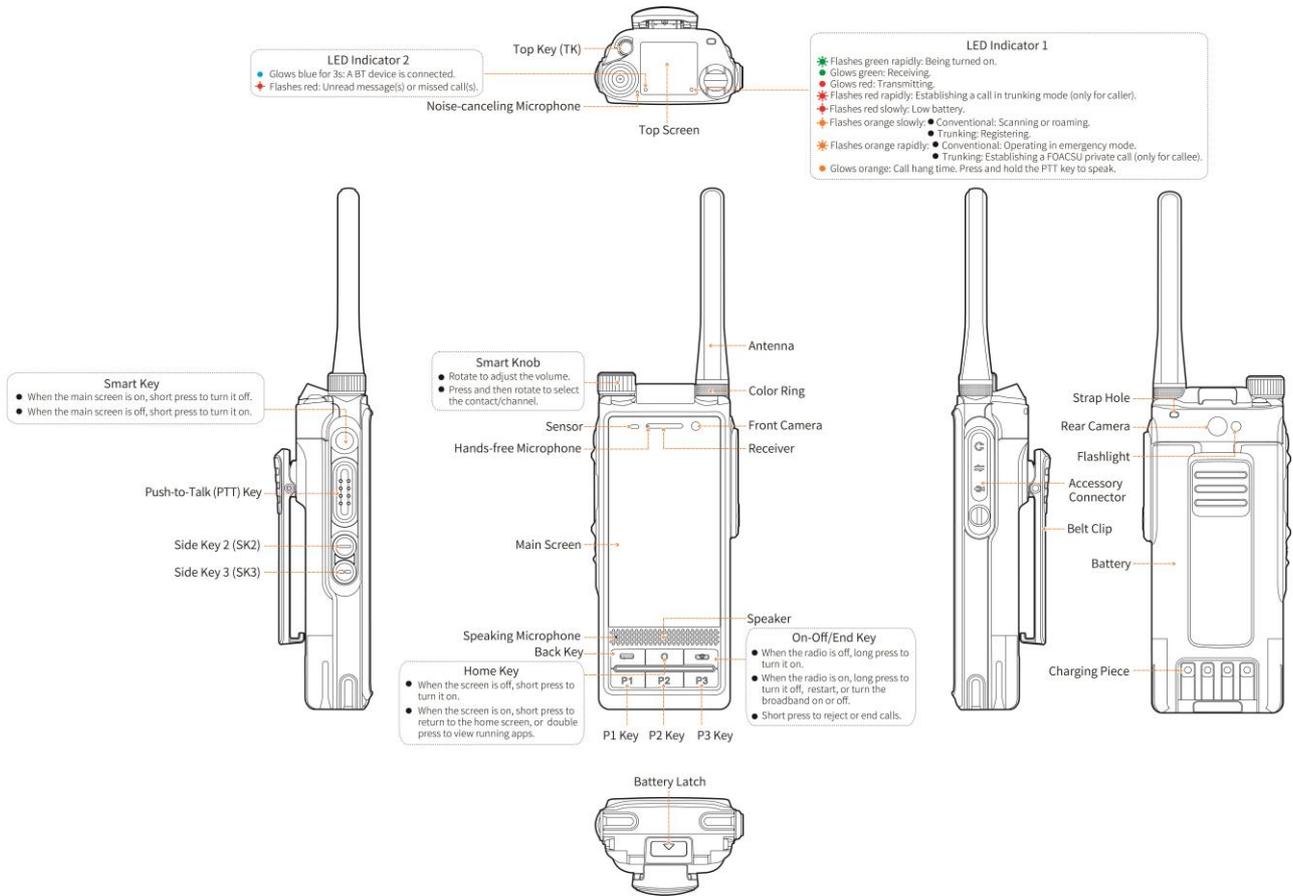
Please unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

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

2. Product Layout



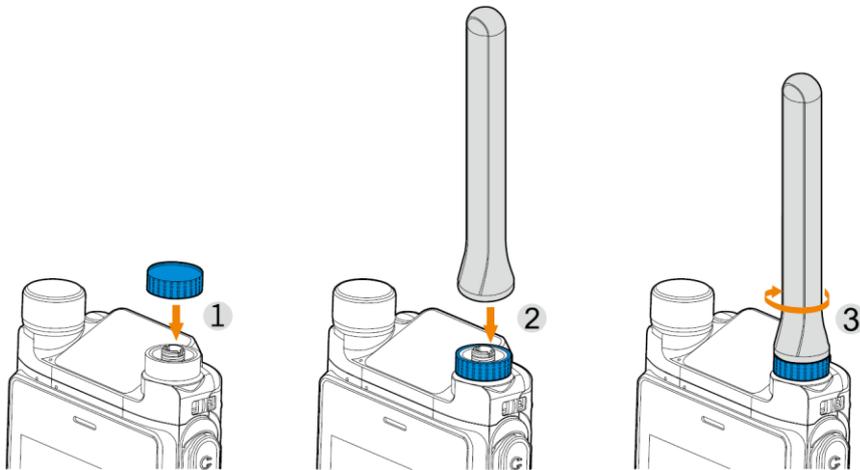
3. Before Use

3.1 Attaching the Antenna

CAUTION

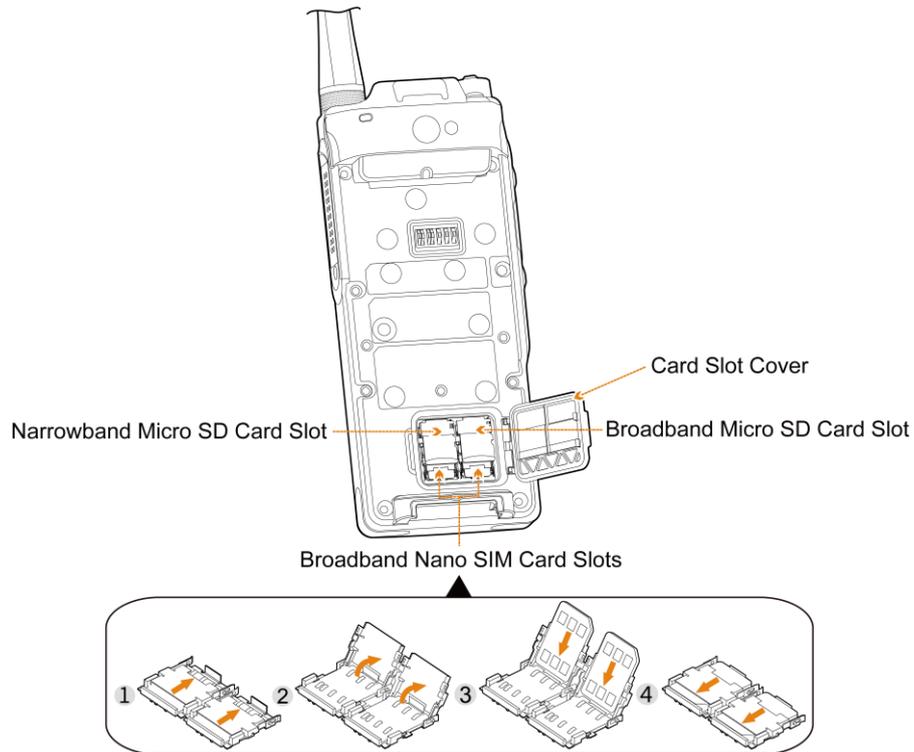
Do not hold the radio by the antenna and swing it. This may affect the antenna performance and shorten the life span of the antenna.

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 until hand tight.



3.2 Installing the Cards

1. Open the card slot cover.
2. Insert the Nano SIM cards into the corresponding slots.
3. (Optional) Insert the Micro SD cards into the corresponding slots with the metal contacts facing down.
4. Put the card slot cover back in place.



3.3 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

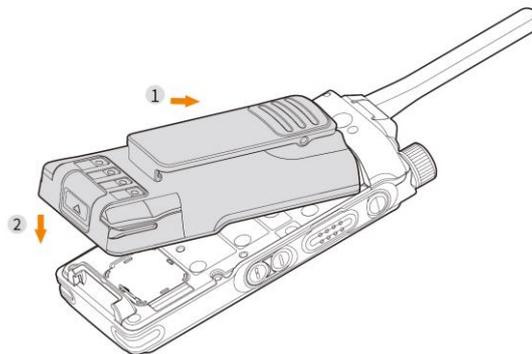
You can press and hold the belt clip spring plate and push the belt clip upwards to remove it.

3.4 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.



3.5 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.
Glowes red	The battery is being charged.
Glowes green	<ul style="list-style-type: none">● The battery attached to the radio is charged to 90% or above.● The stand-alone battery is charged to 95% or above.
Flashes red rapidly	The battery fails to be charged.

4. Battery

4.1 Viewing the Remaining Battery Power

1. Tap .
2. Tap **Battery**.
3. Enable **Battery percentage**.

The percentage of the remaining battery power is shown in the status bar.

4.2 Enabling the Power Saving Mode

To enable the power saving mode, do either of the following:

- Swipe down from the top to enter the control and notification center, and then enable .
- Tap , go to **Battery > Battery Saver**, and then do either of the following operations:
 - Tap **TURN ON NOW**.

The power saving mode is enabled immediately.

- Enable **Turn off when fully charged**.

The power saving mode will be enabled according to the remaining battery power.

4.3 Setting the Work Type

1. Tap .
2. Go to **Battery > Work type**.
3. Select **Standard**, **Phone**, or **Radio**.
 - **Standard**: The narrowband and broadband networks are enabled at the same time.
 - **Phone**: The broadband network is enabled, while the narrowband network is disabled.
 - **Radio**: The narrowband network is enabled, while the broadband network is disabled.

4.4 Viewing the Battery Health

1. Tap .
2. Go to **Battery > Battery status**.

You can view the battery version, health, temperature, and times of charge and discharge.

5. Basic Operations

5.1 Turning On or Off the Radio

- To turn on the radio, long press  until the startup screen appears.
- To turn off the radio, long press , and then select **Power off**.

5.2 Using the SIM Cards

5.2.1 Enabling or Disabling the SIM Cards

1. Tap .
2. Go to **Network & internet > Advanced**.
3. Tap **SIM cards**.
4. In the **SIM cards** interface, enable or disable **SIM 1** or **SIM 2**.

If the SIM card is disabled, the radio cannot make calls, send messages, or register with the network.

5.2.2 Setting the Default SIM Card

1. Tap .
2. Go to **Network & internet > Advanced**.
3. Tap **SIM cards**.
4. In the **SIM cards** interface, tap **Cellular data**, **Calls**, or **SMS messages**, and then select the default card.

NOTE

When two SIM 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.

5.3 Adjusting the Volume

5.3.1 Increasing or Decreasing the Volume

Method 1

Rotate the **Smart Knob** clockwise to increase the volume, or counter-clockwise to decrease the volume.

NOTE

- To adjust the volume simultaneously of ring, media, alarm, and call, tap , tap **Sound**, and then enable **Volume control**.
-

-
- To adjust the volume singly of ring, call, or media, disable **Volume control**, and then go to **Sound > Volume adjustment default control**, and then select **Ring**, **Call**, or **Media**.
-

Method 2

1. Rotate the **Smart Knob**, and then tap  on the main screen.
2. Drag the slider corresponding with  (ring),  (media),  (alarm) or  (call) to adjust the volume.

Method 3

1. Tap .
2. Tap **Sound**.
3. In the **Sounds** interface, drag the slider corresponding with  (ring),  (media),  (alarm), or  (call) to adjust the volume.

5.3.2 Switching Between Ring Mode and Silent Mode

Method 1

1. Swipe down from the top to enter the control and notification center.
2. Tap  or  to switch between the ring mode and the silent mode.

Method 2

1. Tap .
2. Tap **Sound**.
3. In the **Sounds** interface, enable or disable **Silence**.

5.3.3 Setting the Vibrate Mode

1. Tap .
2. Tap **Sound**.
3. In the **Sounds** interface, enable **Vibrate on ring**.

In ring mode, the radio rings and vibrates when receiving calls, messages, or notifications.

4. Enable **Vibrate on silent**.

In silent mode, the radio mutes and vibrates when receiving calls, messages, or notifications.

5.4 Switching the Channel or Contact

Method 1

To switch the channel or contact, 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 only.

Method 2

1. Tap  or .
2. Tap **Zone**.
3. In the **Zone** interface, tap the zone file.
4. Select  following the channel or contact to set it as the current channel or contact.

5.5 Switching the Communication Mode

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

- To enter the narrowband mode only, long press , and then tap **Broadband off**.
- To switch back to broadband & narrowband mode, long press , and then tap **Broadband on**.

5.6 Switching the Narrowband Work Mode

To switch between conventional mode and digital trunking mode, do either of the following:

Manual Switch

1. Tap .
2. Tap **Work mode**.
3. Select **Conventional** or **Digital trunking**.

Auto Switch

1. Tap .
2. Enable **Auto-change work mode**.

The radio will automatically switch between the conventional mode and digital trunking mode.

5.7 Using the Virtual Keyboard

In some apps, you can tap the textbox to open the virtual keyboard.

The default keyboard is **Gboard**. You can set the keyboard as follows:

1. Tap .
2. Tap **System**.
3. Go to **Language & input > Virtual keyboard > Gboard**.
4. Set the languages, preferences, theme, text correction, glide typing, voice typing, and more advanced settings.

5.8 Setting the Programmable Keys

The programmable keys make your operations convenient.

1. Tap , and then tap **Programmable keys**.
2. Program the **TK, SK2, SK3, P1, P2, P3** keys with functions shown in the following table and set the key operation modes to "short press", "long press", or "double press".

By the preset operation on the key, the preprogrammed feature can be enabled.

	Option	Description
Call	Clear down	It allows you to end the voice call.
	Check zones/subgroup	It allows you to enter the Zone or Subgroup menu.
	Third party first	The third-party app developed through the API has the priority to use the PTT key, Smart Knob , and Emergency key.
	Priority interrupt	It allows you to interrupt the ongoing call, call hang, and remote monitor on the current channel to release it. Then you can initiate a new call or a new data service on that channel.
	Switch audio path	When the radio is connected with a BT device or wired earpiece, you can switch to an available audio patch.
	Talkaround	It allows you to switch the radio between the direct communication and repeater mode operation.
	Zone/Subgroup up	It allows you to select the previous zone or subgroup.
	Zone/Subgroup down	It allows you to select the next zone or subgroup.
	One touch call/msg	It allows you to quickly initiate a call, send a short message, or use the auxiliary service. The feature needs to be programmed and configured.
	Preset channel	It allows you to switch to a preset channel. The feature needs to be

Option		Description
		programmed and configured.
	Voice registration	It allows you to switch the registration strategies over PMR network and RoIP network.
	Home Group Switch	/
	Video Call	<p>It allows you to enable or disable the Video Call feature.</p> <ul style="list-style-type: none"> ● With the Video Call feature enabled, if the voice registration is set to narrowband voice only, you can still make a video call. ● With the Video Call feature disabled, if the voice registration is set to narrowband voice only, you cannot make a video call.
Scan	Scan	It allows you to enable or disable the scan feature.
	Nuisance delete	It allows you to temporarily remove the channel from the scan list.
	Check adjacent sites	/
	Change control channel	/
	Handover	The signal strength received from a BS may fluctuate due to position change, affecting the communication quality of the radio. On such occasions, this feature allows the radio to automatically register with the BS with stronger signal.
	Background hunt	This feature allows an idle radio to keep detecting the signal strength of the BS with which it registers. If the signal strength goes below the threshold level preset by the dealer, the radio will automatically hunt for an adjacent BS with stronger signal strength and register with it.
	Home station hunt	In a BS overlapping area, this feature allows the radio to switch back to the home station channel when its signal strength reaches the preset threshold. It is recommended that you set your frequently used channel as the home station channel.
	Manual hunt	/
Roam	Narrowband roaming	It allows you to enable or disable the roaming feature.

	Option	Description
Secure	Emergency on	It allows you to initiate an emergency alarm service.
	Emergency off	It allows you to end the emergency alarm service.
	Man down	It allows you to enable or disable the Man Down feature.
	Lone worker	It allows you to enable or disable the Lone Worker feature.
	E2EE	It allows you to enable or disable the E2EE feature.
	Only receive encrypted air	It allows you to enable or disable the Only Receive Encrypted Air feature.
App	Camera	It allows you to open the camera to take photos.
	Video	It allows you to open the camera to record videos.
	Screenshot	It allows you to snapshot the current full screen.
	Screen recording	It allows you to start or end the screen recording.
	Control Center	It allows you to enable or disable the control center.
	Start recording	It allows you to start to record a video.
	Stop recording	It allows you to stop recording the video.
	Evidence photo	It allows you to take photos.
	Evidence recording	It allows you to start to record an audio.
	Custom	It allows you to quickly open the customized app developed through the API.
	One touch open app	It allows you to quickly open the assigned app.
Others	Switch work mode	It allows you to switch the work mode of the radio.
	Auto-switch work mode	It allows you to enable or disable the Auto Switch Work Mode.
	Adjust power level	It allows you to adjust the power level to high or low.
	Covert mode	It allows you to enable or disable the Covert Mode feature. The Covert Mode feature turns off all visual alerts of the radio such as the ring, vibration, and indicator, and reduces the brightness of the main screen to the lowest level.
	Location report	It allows you to report the location information.

	Option	Description
	Voice broadcast	It allows you to enable or disable the Voice Broadcast feature.
	Invert top screen	It allows you to change the orientation of the top screen for clear and fast access to the information
	Silence	It allows you to enable or disable the Silent Mode.
	Screen Lock	It allows you to enable or disable the Screen Lock Mode.
	Switch BT device	With a BT device connected, you can switch the BT device or the radio as the audio player. During the switchover, the BT device is still connected.
	Narrowband Network	It allows you to enable or disable the narrowband network.

5.9 Checking the Device Information

5.9.1 Checking the Device, Status, and Legal Information

- To view the device info, do the following:
 - a. Tap .
 - b. Tap **Device info**.
You can view the model, Android version, processor information, RAM and ROM total size, battery capacity, resolution, and serial number (SN).
- To view the status info, do the following:
 - a. In the **Device info** interface, tap **Status**.
 - b. Tap the corresponding tabs to check SIM card, International mobile equipment identity (IMEI), software version, baseband version, WLAN, BT, and more.

NOTE

To add the radio owner's information, tap **Emergency information** under **Status**, and then tap **Add information** to edit medical information and emergency contacts

- To view the legal info, do the following:
In the **Device info** interface, tap **Legal information**.
You can view the Hytera software license, Hytera privacy policy, Hytera version declare, third-party licenses, and system WebView licenses.

5.9.2 Checking the Radio Information

1. Tap .
2. Tap **Radio information**.

You can view network, PMR number, frequency, and power level.

5.9.3 Viewing the Broadband Network Information

1. Tap .
2. In the right lower corner, tap .
3. Enter "***#0328###**".

5.10 Connecting to the PC

1. Connect the radio to the PC through the USB data cable.
2. On the main screen, swipe down from the top.
3. 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**.

6. 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.

6.1 Understanding the Home Screens



6.2 Understanding the LCD Icons

Type	Top Screen	Main Screen	Radio Status
Battery power			The fuller the battery bar is, the stronger the battery power remains.
			The battery power is low.
Network and signal	/	E/G/3G/4G	The EDGE/2G/3G/4G cellular network is enabled.
			The radio is connected to the WLAN network.
			More bars indicate stronger signal of broadband network.

Type	Top Screen	Main Screen	Radio Status
			The radio has not registered with the broadband network.
			The radio operates in airplane mode.
			The WLAN hotspot is enabled.
			The VoIP network is enabled, and the radio has registered voice services in the broadband network.
			The VoIP network is enabled, and the radio has registered video services in the broadband network.
			The VoIP network is enabled, and the radio has registered voice and video services in the broadband network.
			The VoIP network is enabled, and the radio has registered with the broadband network.
			The narrowband network is disabled.
			<ul style="list-style-type: none"> • The radio detects no signal in trunking mode. • The radio is standby in conventional mode.
			More bars indicates the stronger signal of the narrowband network.
			In trunking single base station (BS) mode, more bars indicates the stronger signal of the narrowband network.
Accessory			An accessory is connected.
		B	The BT feature is enabled.
		·B·	A BT device is connected.
			The GPS feature is enabled, and valid positioning data has been received.
			The GPS feature is enabled, but no valid positioning data has been received.
Others		L/H	The radio operates in low or high power mode.
			The radio is roaming.
			The radio is scanning.

Type	Top Screen	Main Screen	Radio Status	
			The radio stays on an active channel.	
			The radio stays on Priority Channel 1.	
			The radio stays on Priority Channel 2.	
			The End-to-End Encryption (E2EE) feature is enabled.	
			The Over the Air Encrypt feature is enabled.	
			The Monitor feature is enabled.	
			The radio operates in Covert mode.	
				The radio operates in Silent mode.
	/			The Micro SD card is abnormal.
				The Micro SD card is encrypted.
				No Nano SIM card is detected.
				The Nano SIM card is abnormal.
				The NFC feature is enabled.
				The Background Video Recording feature is enabled.
				The Background Audio Recording feature is enabled.
			The Alarm feature is enabled.	

6.3 Managing the 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 or double press the **Smart Key**.

In the **Widgets** interface, you can do any of the following:

- Swipe up or down to view all widgets.
- To fold or unfold a widget, tap  or  at the right of the widget.
- 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 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**.

6.4 Managing the 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 home screen. You can do any of the following:

- To manage notifications, do any of the following:
 - To view details of a notification, tap the notification.
 - To view earlier notifications, swipe upwards.
 - To block a notification, swipe left, and then tap .
 - To clear a notification, swipe right, and then tap **Clear**.
 - To clear all notifications, tap  at the bottom.
- To add or remove displayed features, tap , and then touch and drag the feature icons.
- To quickly access the **Settings** interface, tap .
- To adjust the main screen brightness, drag the brightness slider. For more options, tap .

6.5 Managing the 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 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.

6.6 Viewing the Notifications

You can view the notification in the control and notification center or on the screen.

1. Tap .
2. Tap **Apps & notifications**.

3. Select an app.
4. Tap **Notifications**.
5. Enable **Show notifications**, and then change the display mode.

6.7 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.
- Swipe down from the top to enter the control and notification center, and then tap .

6.8 Switching Between Sleep and Wake Mode

- To automatically enter the sleep mode, do as follows:
 - a. Tap .
 - b. Go to **Display > Brightness level**.
 - c. Tap **Screen timeout**, and then select the preset duration.

If the radio is inactivity for the preset duration, the screen will automatically enter the sleep mode.

- To manually enter the sleep mode, press the **Smart Key**.
- To wake up the screen, press the **Smart Key** or .

6.9 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.

6.9.1 Setting the Screen Lock Type

1. Tap .
2. Go to **Security > Screen lock**.
3. Select **None**, **Swipe**, **Pattern**, or **Password**.
 - **None**: The screen lock feature is disabled.
 - **Swipe**: Swipe up to unlock the screen.
 - **Pattern**: Draw the pattern to unlock the screen.
 - **Password**: Enter the pattern to unlock the screen.

6.9.2 Setting the Screen Lock Range

1. Tap .
2. Go to **Security > Lock screen operation restrictions**.
3. Do any of the following:
 - Enable **Sync lock Control Center**.
The radio locks the control and notification center when the screen is locked.
 - Enable **Keys work when broadband off**.
You can use the **Smart Knob**, the **PTT** key, **SK2**, **SK3**, and **TK** when the screen is locked with the broadband off.
 - Enable **Knobs, PTT, or Programmable keys**.
The radio locks these knobs or keys when the screen is locked.

6.10 Capturing or Recording the Screen

6.10.1 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.

6.10.2 Recording the Screen

You can record screen operations in video format. Do either of the following:

- Swipe down from the top to enter the control and notification center, and then tap .
- Press the preprogrammed **Screen recording** key.

6.11 Setting the Wallpaper

1. Enter the wallpaper gallery by either of the following:
 - On the home screen, touch and hold the blank area, and then select **Wallpapers**.
 - Tap , and then go to **Display > Wallpaper**.
2. Select a wallpaper, and then tap **OK**.

7. Contacts

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

NOTE

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

7.1 PMR Contacts

7.1.1 Searching for a Contact

1. Tap  or .
2. Tap **Contacts**.
3. In the search box, enter the name or radio ID of the contact.

The radio displays the search results below the search box.

7.1.2 Sharing a Contact

You can share a contact with others through message. For details, see [9.1.1 Sending a Message](#).

7.1.3 Adding a Favorite Contact

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

7.1.4 Adding a Contact

Manual Adding

1. To enter the **New contact** interface, tap  or , and then do any of the following:
 - Select **Contacts** at the bottom, and then tap **+** in the right upper corner.
 - Go to **Contacts > Call log**, long press a private contact that has not saved, and then select **Add contacts**.
 - Select **Conversation**, tap a private contact that has not saved, tap **≡** in the right upper corner, and then select **Add contacts**.
 - Tap  and then tap .
2. Enter the contact information including avatar, name, radio ID, and phone number.
3. Tap .

Auto Adding

1. Tap .
2. Tap **Talker alias**, and then enable **Auto-add contacts**.

If the caller has enabled the **Send Talker alias** feature, your radio will automatically add the caller to the contact list.

7.1.5 Editing or Deleting a Contact

1. Tap  or .
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.

7.1.6 Sending the Caller Alias

1. Tap .
2. Tap **Talker alias**, and then enable **Send talker alias**.

When initiating a private call, the radio sends its alias to the callee.

7.1.7 Managing Zones/Subgroups

Zone

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

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

- Switch the channel
 - a. Tap the zone.
 - b. Tap  on the right side of the channel to set it as the current channel.
- Edit the channel
 - a. Tap the channel, tap , and then do either of the following:
 - For the digital channel, edit **Roam list**, **Scan list**, **Preferred scan list**, **Contact**, **RX group list**, and **TX power**.
 - For the analog channel, edit **Scan list**, **TX power**, and **Squelch level**.

- b. Tap .

Subgroup

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

To switch the contact, do as follows:

1. Tap  or .
2. Tap **Subgroups**.
3. Tap the subgroup.
4. Tap  on the right side of the contact to set it as the current contact.

7.2 Phone Contacts

7.2.1 Searching for a Contact

1. Tap .
2. Tap .
3. In the search box, enter the contact name or other related information.

The radio displays the search results below the search box.

7.2.2 Sharing a Contact Through the Messaging App

For details, see [9.3.1 Sending a Message](#).

Through the Contacts App

1. Tap , and then tap the contact.
2. Tap , and then tap **Share**.
3. Select a sharing method.

7.2.3 Adding a Favorite Contact

1. Tap .
2. Tap the contact.
3. Tap .

7.2.4 Adding a Contact Through the Contacts App

1. Tap .
2. Tap .
3. Set the contact information including avatar, name, phone number, and email address.
4. Tap **Save**.

Through the Call App

1. Tap .
2. Do any of the following:
 - Go to **Contacts > Create new contact**.
 - Tap **Recents**, tap a phone number, and then select **Add contact**.
 - Tap , enter the phone number, and then select **Create new contact** or **Add to a contact**.
3. Set the contact information including avatar, name, phone number, and email address.
4. Tap **Save**.

Through the Messaging App

1. Tap , and then tap a history message.
2. Tap , and then select **Add contact**.
3. Tap **Add to contacts**.
4. Create a new contact or add to existing contact.
5. Set the contact information including avatar, name, phone number, and email address.
6. Tap **Save**.

7.2.5 Editing a Contact

1. Tap .
2. Tap the contact.
3. Tap **Edit contact**.
4. Edit the contact information including avatar, name, phone number, and email address.



NOTE

To delete, or share, or block the contact, in the contact details interface, tap .

5. Tap **Save**.

8. Calls

8.1 PMR Calls

NOTE

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

8.1.1 Group Call

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

8.1.1.1 Initiating a Group Call

Through Preset Contact

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

Through Manual Dialing

1. Tap .
2. On the dialpad, enter the group ID.
3. Do either of the following:
 - In conventional mode, tap , and then tap **Group**.
 - In trunking mode, tap .
4. Press the **PTT** key.

Through Contact List

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

Through One Touch Call

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

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

8.1.1.2 Receiving a Group Call

You can answer a group call without any operation.

8.1.1.3 Ending a Group Call

Conventional Mode

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

Trunking Mode

A group call ends in one of the following cases:

- The calling party taps  or presses the  key.
The called party can do so to exit the call, and can rejoin the call later.
- The call hang time expires.
- The call duration exceeds the preset time.
- The BS signal is lost.
- A pre-emptive call or an emergency call occupies the channel.
- With the Clear Down feature enabled, the calling party changes the contact.

8.1.2 Private Call

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

8.1.2.1 Initiating a Private Call

Through Preset Contact

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

Through Manual Dialing

1. Tap .
2. On the dialpad, enter the private ID complying with the dialing rules.
3. Do either of the following:
 - In conventional mode, tap , and then tap **Private**.
 - In trunking mode, tap .
4. Press the **PTT** key.

Through Contact List

1. Tap  or .

2. Go to **Contacts** > **Private**, and then tap a private contact.
3. Press and hold the **PTT** key, or tap .

Through One Touch Call

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

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

8.1.2.2 Receiving a Private Call

Conventional Mode

You can answer a private call without any operation.

Trunking Mode

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

- Full Off Air Call Set-Up (FOACSU)
When receiving a FOACSU private call, the radio rings and vibrates. To answer the call, press the **PTT** key within the preset time.
- Off Air Call Set-Up (OACSU)
When receiving an OACSU private call, the radio can answer the call without any operation.

8.1.2.3 Ending a Private Call

Conventional Mode

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

Trunking Mode

A private call ends in one of the following cases:

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

8.1.3 All Call

Conventional Mode

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

Trunking Mode

An all call is a call from an individual user to all the other users within a specific BS, area, or system. The all call can be either of the following types:

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

8.1.3.1 Initiating an All Call

Through Preset Contact

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

Through Manual Dialing

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

Through Contact List

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

Through One Touch Call

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

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

8.1.3.2 Receiving an All Call

You can answer an all call without any operation.

8.1.3.3 Ending an All Call

Conventional Mode

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

Trunking Mode

An all call ends in one of the following cases:

- The calling party taps  or presses .

The called party can do so to exit the call, and can rejoin the call later.

- The preset transmission time of the calling party expires.
- The call duration exceeds the preset time.
- The BS signal is lost.
- With the Clear Down feature enabled, the calling party changes the contact.

8.1.4 Broadcast Call (Trunking Only)

A broadcast call is a special group call.

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

8.1.4.1 Initiating a Broadcast Call

Through Contact List

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

Through One Touch Call

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

8.1.4.2 Receiving a Broadcast Call

You can answer a broadcast call without any operation.

8.1.4.3 Ending a Broadcast Call

A broadcast call ends in one of the following cases:

- The calling party taps  or presses .
The called party can do so to exit the call, and can rejoin the call later.
- The call duration exceeds the preset time.
- The BS signal is lost.
- A pre-emptive call or an emergency call occupies the channel.
- With the Clear Down feature enabled, the calling party changes the contact.

8.1.5 PSTN/PABX Call (Trunking Only)

A PSTN/PABX call is a call initiated through the wired telephone network.

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

8.1.5.1 Initiating a PSTN/PABX Call Through Contact List

1. Tap  or .
2. Go to **Contacts > Private**.
3. Tap the PSTN/PABX contact.
4. Press the **PTT** key.

Through Manual Dialing

1. Tap .
2. On the dialpad, enter the PSTN/PABX ID complying with the dialing rules.
3. Tap , and then tap **PSTN** or **PABX**.
4. Press the **PTT** key.

Through One Touch Call

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

8.1.5.2 Receiving a PSTN/PABX Call

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

8.1.5.3 Ending a PSTN/PABX Call

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

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

8.1.6 Include Call (Trunking Only)

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

To initiate an include call, do as follows:

1. Initiate a group call. For details, see [8.1.1.1 Initiating a Group Call](#).
2. Tap  or , tap the group contact, and then tap .

8.1.7 DGNA (Trunking Only)

The Dynamic Group Number Assignment (DGNA) feature allows you to initiate a call to or receive a call from a dynamic group temporarily created by a dispatch station. The created dynamic group is saved in a dynamic group list on the radio. You can receive a call from the dynamic group no matter which group contact the **Smart Knob** is turned to. After the dynamic group is dismissed by the dispatch station, you cannot use it.

For operations of initiating, receiving, or ending a DGNA call, see [8.1.1 Group Call](#).

8.1.8 Affiliation Group Call (Trunking Only)

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

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

8.1.9 Group Combine (Trunking Only)

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

8.1.10 Priority Group (Trunking Only)

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

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

- Tap , tap **Priority groups**, and then set the group contacts to priority level 1, 2, or 3.
A larger number represents a higher priority.
- Tap  or , tap **Contacts**, and then tap the group contact.

8.1.11 Call Forwarding (Trunking Only)

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

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

8.1.12 Call Queuing

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

8.1.13 Call on Analog Channel

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

To initiate such a call, press and then rotate the **Smart Knob** to select the analog channel, and then press and hold the **PTT** key.

You can answer a call on an analog channel without any operation.

8.1.14 TOT

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

8.2 RoIP Call

8.2.1 Voice Call

For details, see [8.1.1 Group Call](#) and [8.1.2 Private Call](#).

8.2.2 Video Call

8.2.2.1 Initiating a Video Call

Through Contact List

1. Tap  or .
2. Go to **Contacts** > **Group/Private**, and then tap the group or private contact.
3. Tap .

Through Manual Dialing

1. Tap .
2. On the dialpad, enter the group or private contact ID complying with the dialing rules.
3. Tap .

Through Conversation

1. Tap  or , and then tap **Conversation**.
2. Tap , and then tap **New Conversation**.
3. Do either of the following:
 - Tap the **To** field to enter the contact ID.
 - Tap  to select the contact from the contact list.
4. Tap , and then tap **Video Call**.

8.2.2.2 Ending a Video Call

Tap  or press .

8.3 Phone Call

8.3.1 Initiating a Phone Call

Through Contact List

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

Through Manual Dialing

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

Through Call Logs

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

8.3.2 Receiving or Declining a Phone Call

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

8.3.3 Ending a Phone Call

To end a phone call, tap  or press .

9. Messages

9.1 PMR Messages

You can send text messages or status messages.

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

9.1.1 Sending a Message

1. Tap  or .
2. To enter the message editing interface, do either of the following:
 - Through Conversation
 - i. Tap **Conversation**.
 - ii. Tap  in the right upper corner, and then select **New Conversation**.
 - iii. Tap the **To** field to enter the contact ID, or tap  to select the contact from the contact list.
 - Through Contact List
 - i. Tap **Contacts**, and then tap a contact under **Group** or **Private**.
 - ii. Tap .
3. Tap the **Type message** field to enter the content.
4. (Optional) do either of the following:
 - In narrowband network, tap , and then swipe right or left to add or edit quick reply texts, to send location information or contacts, or to make a voice call.
 - In RoIP network, tap  to send real-time voice; or tap , and then swipe right or left to add or edit quick reply texts, to send pictures from gallery, real-time photos or videos, or location information, or to make a voice call or video call.
5. Tap .

9.1.2 Managing Conversations

You can search for and clear history messages, and pin the conversation to the top.

1. Tap  or .
2. Tap **Conversation**.
3. In the **Conversation List** interface, do any of the following:
 - To search for history messages, enter the keywords in the search box.

- To pin the conversation to the top, touch and hold it, and then select **Stick**.
 - To delete the conversation, touch and hold it, and then select **Delete**.
4. Tap a conversation, and then tap .
 5. In the **Session information** interface, do any of the following:
 - To search for history messages, tap **find chat content**, and then enter the keywords in the search box.
 - To pin the conversation to the top, enable **top chat**.
 - To clear all history messages with the contact, tap **clear all chat**, and then tap **OK**.

9.1.3 Managing Message Text

1. Tap  or , and then tap **Conversation**.
2. In the **Conversation List** interface, tap the conversation.
3. Touch and hold the message text, and then do any of the following:
 - To copy and paste the text message, tap **Copy**.
 - 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**.
 - To view messages in the favorite list, in the **Conversation** interface, tap , and then tap **My favorites**.

9.2 RoIP Messages

For details, see [9.1 PMR Messages](#).

9.3 Phone Messages

You can send text messages or multimedia messages.

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

9.3.1 Sending a Message Through the Messaging App

1. Tap .
2. Tap **Start chat**.
3. Enter the phone number in the search box, or select a contact from the list.
4. (Optional) To send a message to multiple contacts, tap .

5. Tap the **Text message** field, and then enter the content.

- To send a picture, tap .
- To send emoji, location, audio, or files, tap .

6. Tap .

Through the 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 the Messaging App](#).

Through the Phone App

1. Tap .
2. Do either of the following:
 - Tap , and then enter the phone number.
 - Tap **Recents**, and then select a contact from the call logs.
3. Tap **Send SMS**.
4. Edit and send the message.

For detailed operations, see steps 4 to 6 in [Through the Messaging App](#).

9.3.2 Searching for the Message

1. Tap .
2. Tap .
3. In the search box, enter keywords.

9.3.3 Deleting the Conversation

1. Tap .
2. Long press the conversation.
3. Tap .

9.3.4 Managing Message Text

1. Tap .

2. Tap the conversation.
3. Long press the message text, and then do any of the following:
 - To copy and paste the text message, tap .
 - To delete the text message, tap .

10. Audio and Call Settings

10.1 Three-Band Equalization

The Three-Band Equalization 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  > **Three-band equalizer**, and then select the equalization mode. 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)	Hands-free Frequency Gain
External	Treble Boost	0	0	8	3
	Square	0	3	3	3
	Downtown	1	3.5	7	3
	Indoor	3.5	1.5	-1.5	0
	Custom	-10 to 10	-10 to 10	-10 to 10	-6 to 6
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	/

10.2 Noise Cancellation

The Noise Cancellation feature allows the radio to filter the background noise when receiving or transmitting a voice to deliver clear audio.

If the feature is configured, you can tap , select and then enable **Noise cancellation**.

10.3 Audio Mode

If the radio is connected with a BT device or audio accessory, during a call, you can switch the audio mode by either of the following:

- In the call panel, tap  (speaker),  (earphone), or **B** (BT device).
- Press the pre-programmed **Switch audio path** key.

10.4 Call Recording

You can record the current or all calls. The recorded audio files are stored to the path of recorder files.

- To record the current call, in the call panel, tap .
- To record all calls, tap , and then enable **Call recordings**.

10.5 Quick Dialing

You can initiate a call to the contact just by touching and holding the linked number in the **Dialer** interface.

Link the number to a contact for quick dialing by either of the following:

Method 1

1. Tap .
2. Tap **Quick dialing**.
3. Select a number from 1 to 9, and then select a contact.

Method 2

1. Tap , and then touch and hold a number.
2. In the displayed interface, tap **Settings**.
3. Select a number from 1 to 9, and then select a contact.

10.6 Power Level

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

To set the power level, do one of the following:

- Swipe down from the top to enter the control and notification center, and then tap  or .
- Press the preprogrammed **Adjust power level** key.
- In trunking mode, tap , and then tap **Power Level** to select **High** or **Low**.
- In conventional mode, do as follows:
 - a. Tap  or .
 - b. Tap **Zone**, and then select a channel.

- c. Tap  .
- d. Tap **TX power**, and then tap **High** or **Low**.

10.7 Soft PTT Key

To enable or disable this feature, tap  and then tap **Soft PTT button**.

With the feature enabled, you can see  in the call panel.

11. Connectivity

11.1 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**.
- Swipe down from the top to enter the control and notification center, and then tap .

11.2 RoIP Network

In trunking mode, after registering in the Radio over IP (RoIP) network, the radio automatically switches between the broadband and narrowband networks according to the network signal. This allows the radio to provide both the two network services, such as voice, data, video, 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 Push-to-Talk over Cellular (PoC) system and trunking system.

After connecting the radio to a WLAN or LTE network, tap , and then enable **RoIP network**.

11.3 Cellular Network

11.3.1 Enabling the 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 **Network & internet**, and then tap **Mobile network**.
- Swipe down from the top to enter the control and notification center, and then tap .

11.3.2 Setting the Cellular Network

1. Tap .
2. Tap **Network & internet**, and then tap **Mobile Network Settings**.
3. Do any of the following:
 - To enable data roaming, tap **Roaming**. You can access data services when you are outside the service area of your carrier.
 - To select the 2G, 3G, or 4G network, go to **Advanced > 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, go to **Advanced** > **Enhanced 4G LTE Mode**. This feature allows the radio to use LTE services to improve voice communications.

11.3.3 Monitoring or Limiting the Data Usage

1. Tap .
2. Tap **Network & internet**, and then tap **Mobile Network Settings**.
3. Tap **Data usage**.
4. 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.

11.4 WLAN

11.4.1 Connecting to the 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, do as follows:

1. Tap .
2. Tap **Network & internet**, and then tap **WLAN**.
3. Enable **Use WLAN**, and then select a network from the list.
 - If you select an open network, the radio automatically connects to it.
 - If you select a secure network with the  icon, you need to enter a password before connection.
 - If no network in the list, do as follows:
 - i. Swipe to the bottom, and then tap **Add network**.
 - ii. Enter the network name or scan the QR code to add the network.

11.4.2 Setting the WLAN

1. Tap .
2. Tap **Network & internet**, and then tap **WLAN**.
3. In the **WLAN** interface, do any of the following:
 - To check, delete, or share saved networks, tap **Saved networks**.

- To automatically enable WLAN, tap **WLAN preferences**, and then enable **Turn on WLAN automatically**.
- To receive a notification when a WLAN network is available, tap **WLAN preferences**, and then enable **Open network notification**.
- To view WLAN traffic usage in total or of each app, tap **WLAN data usage**.

11.4.3 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 .
2. Go to **Network & internet > Hotspot & Tethering > WLAN hotspot**.
3. Tap toggle following **Off**.
Off changes into **On**.
4. Set the network name, security, and password.

11.5 BT

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

11.5.1 Pairing a BT Device

1. Enable the BT feature in either of the following ways:
 - Tap , and then go to **Connected devices > Connection preference > BT**.
 - Swipe down from the top to enter the control and notification center, tap , and then touch and hold the icon .

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

2. In the **Connected devices** interface, tap **Pair new device**.
3. From the **Available devices** list, tap a device to pair.
4. 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.

NOTE

Under the **Previously connected devices** list, you can tap  on the right side of the device, and then tap

FORGET to cancel the paired device.

11.5.2 BT Location

The BT Location feature is an indoor positioning technology. 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.

1. With the BT feature enabled, tap .
2. Go to **Connected devices > Connection preference > BT**.
3. Enable **Broad 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**.
 - To get the MAC address of the radio, tap **QR code**.

11.5.3 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.
3. Tap , and then select BT.
4. Tap the BT device from the available BT device list.
5. (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.

11.6 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. Tap **Connected devices**.
3. Go to **Connection preference > NFC** to enable it.

11.7 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 , go to **Network & internet > Advanced**, and then tap **Airplane mode**.
- Swipe down from the top to enter the control and notification center, and then tap .

11.8 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.

1. Tap .
2. Go to **Network & internet > Advanced**, and then tap **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.
 - Before setting up a VPN, you must enable the screen lock (pattern or password).
-

12. Location

12.1 Enabling the Location Services

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

1. Tap .
2. Tap **Location**, and then enable **Use location**.
3. (Optional) To enable or disable the app's permission to access the location information, do as follows:
 - a. Tap **App permission**, and then tap the app.
 - b. Under **LOCATION ACCESS FOR THIS APP**, select **Allow all the time**, **Allow only while using the app**, or **Deny**.

12.2 Voice with Location

The Voice with Location feature allows the radio to report its location information to the receiving party when transmitting voice during a private, group, or emergency call.

To enable or disable this feature, tap , and then tap **Voice with Location**.

12.3 Call Location

During a call, if the calling radio is enabled with the Voice with Location and Call Location features, the called radio can display the location information of the calling radio after receiving valid positioning data. Both the calling party and the called party can tap  to view the coordinates and map, or enter the call location interface to obtain and send the location information.

To enable or disable this feature, tap , and then tap **Call location**.

12.4 Location Report

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

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

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

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

13. Safety and Security

13.1 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 .

13.2 Emergency Alarm Services

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 alarm service even when your radio is transmitting or receiving.

13.2.1 Emergency Alarm Types

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

Type	Description
Siren Only	The radio emits a siren, but does not transmit any emergency signal to the control center.
Regular	The radio gives visible and audible indications when transmitting the emergency signal to the control center.
Silent	The radio gives no visible or audible indication.
Silent w/Voice	The radio gives an audible indication only upon receiving a call. Otherwise, the radio gives no audible or visible indication.
Alarm w/Siren	The radio transmits the emergency signal to the control center, and then emits a siren.

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

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

13.2.2 Initiating an Emergency Alarm Service

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

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

13.2.3 Receiving an Emergency Alarm Service

You can answer an emergency alarm service without any operation.

13.2.4 Ending an Emergency Alarm Service

Conventional Mode

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

Trunking Mode

An emergency service ends in any of the following cases:

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

NOTE

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

13.3 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 **Alarms**, and then tap **Man down**.
 - Press the preprogrammed **Man down** key.
-

NOTE

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

13.4 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 **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 **Alarms**, and then tap **Lone worker**.
 - Press the preprogrammed **Lone worker** key.
-

NOTE

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

13.5 Stun, Revive, and Kill

NOTE

The features are configured by your dealer.

Conventional Mode

The Stun feature allows you to deprive of all functions of the radio, excluding registration, authentication, reviving, killing, and GPS polling. The Revive feature allows you to recover all functions of the radio.

To enable this feature, do either of the following:

- Do as follows:
 - a. Tap  or .
 - b. Go to **Contacts > Private**, and then tap a contact.
 - c. In the contact details interface, enable the Stun or Revive feature.

- Press the preprogrammed **One touch call/msg** key.

Trunking Mode

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

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

13.6 E2EE

The E2EE feature allows the radio to encrypt voice and data to prevent eavesdropping and protect communication privacy.

You can enable the feature in one of the following ways:

- Swipe down from the top to enter the control and notification center, and then tap .
- Press the preprogrammed **E2EE** key.
- Tap , and then tap **E2EE**.
- Switch to the channel configured with the **E2EE**

NOTE

- In conventional mode, enabling the Encryption feature is to enable encryption for the current channel. Therefore, when switching to the current channel, the radio automatically enables encryption.
 - This feature is configured by your dealer.
-

13.7 Covert Mode

The Covert Mode feature turns off all visual alerts of the radio such as the ring, vibration, and indicator, and reduces the brightness of the main screen to the lowest level.

With the feature enabled, you need to use an audio accessory to output audio.

To enable or disable the feature, do as follows:

1. Tap .
2. Tap **Sound**, and then tap **Covert mode**.

13.8 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 .
2. Go to **Security > SIM card lock**.
3. In the **SIM card lock settings** interface, tap **Lock SIM card**, and then enter the PIN number.
4. Tap **OK**.
5. (Optional) Tap **Change SIM PIN** to change the PIN number.

NOTE

- 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.
-

14. Apps

14.1 Basic Operations

14.1.1 Installing an App

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

14.1.2 Uninstalling an App

It is recommended to uninstall unused non-system apps to release the storage space and improve the system running speed. Do any of the following:

Method 1

1. Open the app center.
2. Touch and hold the app icon, and then drag it to the **Uninstall** field.
3. Tap **OK**.

Method 2

1. Go to  > **Management**, and then select the app.
2. Tap **Uninstall**.
3. Tap **OK**.

Method 3

1. Go to  > **Apps & notifications**.
2. Tap **SEE ALL APPS**, and then tap the app.
3. Tap **UNINSTALL**.
4. Tap **OK**.

Method 4

1. On home screen, touch and hold the app icon, and then tap **App info**.
2. Tap **UNINSTALL**.
3. Tap **OK**.

14.1.3 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 of the third-party apps, do as follows:

1. Tap .
2. Go to **Privacy > Permission manager**, or go to **App & notifications > Permission manager**.
3. Tap the permission type, and then select the app.
4. Select from **Allow** or **Deny**.

14.1.4 Setting the App Lock

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

1. Tap .
2. Tap **Application lock**.
3. Set the app lock password, and then tap **Continue**.
4. Enter the password again to confirm, and then tap **OK**.
5. In the **App lock** interface, tap the apps that need to be locked.



NOTE

To turn off the app lock, in the **App lock** interface, tap , and then tap **App lock**.

14.1.5 Closing Running Apps

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

Double press , and then do either of the following:

- Swipe left or right to choose an app, and swipe up to end it.
- Tap **CLEAR ALL** to end all apps.

14.2 Files

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

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

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

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

14.3 Documents

The **Documents** app allows you to view, download, and manage documents from the Smart Mobile Device Management (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.

14.3.1 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.

14.3.2 Viewing or Downloading a Document

1. Tap .
2. Tap **Files**, and then view documents in either of the following ways:
 - Tap **CAT** to view the documents by category.
 - Tap , and then enter the keywords of the document. The radio displays the search results below the search box.
3. Select and download the document.

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

14.3.3 Managing Downloads

- For Documents Being Downloaded

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

- For Downloaded Documents

Once the download is complete, go to **Download > Downloaded**, and then do either 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.

14.4 Launch

The **Launch** app allows you to set whether to automatically start the apps in background upon power-on, and set the network permission of apps.

14.4.1 Setting Auto Start Upon Power-On

1. Tap .
2. Turn on or off the toggle following the app.

14.4.2 Setting the Network Permission of Apps

1. Tap .
2. Tap the app.
3. Turn on or off the toggle following **Cellular data** or **WLAN**.

14.5 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 .

14.5.1 Taking Photos

To take a photo, tap .

You can also do any of the following:

- Tap  to set the flash as follows:
 - Select **Auto** to allow the camera to automatically turn on the flash depending on the ambient light.
 - Select **On** to turn on the flash during shooting.
 - Select **Off** to turn off the flash during shooting.

NOTE

The flash is available only for the rear camera.

- To switch between the front and rear camera, tap .

14.5.2 Recording Videos

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

14.5.3 Adjusting the Focus

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

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

14.5.4 Setting the Camera

1. In the shooting interface, you can tap .
2. (Optional) To reset all settings to the default value, swipe down to the bottom, and then tap **Restore default settings**.
3. Access the following advanced settings:

General

- **Location tags:** 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**.
- **Anti banding:** It reduces the flickering on the image under different light sources. For example, the alternative current frequency is 50 Hz, so when you shoot a photo under light bulb, you can set the **Anti banding** to **50 Hz** to avoid flickering. The default setting is **Auto**. Other options include **50 Hz**, **60 Hz**, and **Off**.
- **Grid lines:** It provides you a visual reference to position the object precisely in the scene when taking photos or recording videos.

Video Recording

- **Video duration:** It allows the camera to automatically stop recording the video when the recording time exceeds the preset duration. You set it to **30 seconds**, **10 minutes**, **30 minutes**, or **no limit**. **no limit** indicates that the camera will always keep recording until you manually stop it.

- Time lapse recording: It allows the camera to shot multiple photos, and then generate these photos into a short video.
- Background video: It allows the camera to keep recording in the background.
- BACK CAMERA: You can set the resolution of the rear camera to **HD 1080p**, **HD 720p**, or **SD 480p**. Higher resolution indicates clearer videos and more storage.
- FRONT CAMERA: You can set the resolution of the front camera to **HD 1080p**, **HD 720p**, or **SD 480p**. Higher resolution indicates clearer videos and more storage.

Photo Taking

- Countdown timer: It allows you to take a photo with a delay. You can set the delay time from **3 SECONDS** and **10 SECONDS** or select **Close** to disable the feature.
- Redeye Reduction: It removes red eyes from the photo in dark environment when shooting.
- Face Detection: It automatically detects faces and focus.
- Continuous Shot: It allows you to take multiple photos every time.
- 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.
- Picture quality: You can set the quality level to **Low**, **Standard**, or **High**. Higher quality level indicates higher quality photos.
- BACK CAMERA: Higher resolution indicates clearer photos and more storage.
- FRONT CAMERA: Higher resolution indicates clearer photos and more storage.

14.6 Photos

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

14.6.1 Viewing Photos

1. Tap .
2. Select the photo.

You can also swipe right or left to view other photos.

14.6.2 Replaying Videos

1. Tap .

2. Select the video.
3. (Optional) To pause the video, tap the screen.

14.6.3 Editing the Photo or Video

1. Select a photo or video, and then tap  at the bottom.
2. Crop, adjust, filter, and mark the photo, or crop and adjust the video.

14.6.4 Managing Photos or Videos

1. Tap .
2. Touch and hold the photo or video.
3. Do any of the following:
 - To share the photo or video via **Radio, BT, or Messaging**, tap .
 - To move the photo or video to trash, tap , and then tap **Move to trash**.
 - To delete the photo or video, tap , and then tap **Delete**.

14.7 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.

To open the recorder, tap .



14.7.1 Recording an Audio File

1. Tap  to start recording.

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

14.7.2 Playing an Audio File

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

14.7.3 Managing Audio Files

In the **Local**, **Phone**, or **Radio** list, touch and hold the audio file until  appears. You can select multiple files at the same time

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

14.8 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 .

14.8.1 Alarm

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

14.8.2 World Clock

1. Tap .
2. Tap .
3. In the search box, enter the city.
4. Tap the displayed city to add it.

14.8.3 Timer

1. Tap .

2. Set the time.
3. Do any of the following:
 - Tap  to start the countdown.
 - Tap  to stop the countdown.
 - Tap **Delete** to delete the current countdown.

14.8.4 Stopwatch

1. Tap .
2. Do any of the following:
 - Tap  to measure the time.
 - Tap  to stop measuring the time.
 - Tap **Reset** to clear the records.

14.9 Calendar

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

14.9.1 Viewing the Calendar

1. Tap .
2. Swipe up or down to view the calendar.
3. Select a date.
4. Tap the month in the top left corner of the screen to show or hide all days in this month.

14.9.2 Setting the Calendar

You can go to  > **Settings** > **General**, and then do any of the following:

- Tap **Start of the week** to select **Locale default**, **Saturday**, **Sunday**, or **Monday** as the first day of the week.
- Enable **Use device time zone** to display calendar and event times in your home time zone during traveling.
- Enable **Show week number** to display the week number in the main interface of the Calendar app.

14.10 Calculator

The **Calculator** app facilitates basic and advanced arithmetic calculations.

To open the calculator, tap .

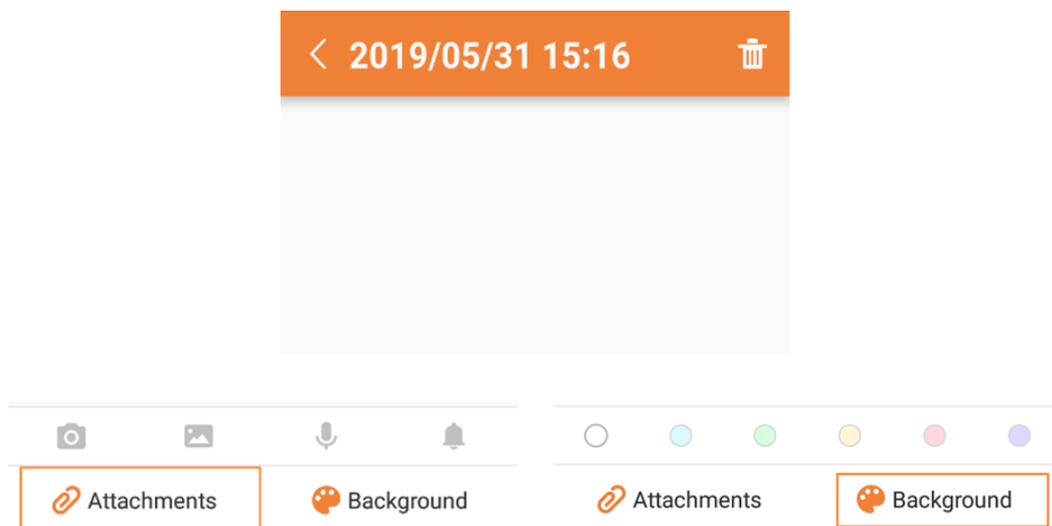
DEG



14.11 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.

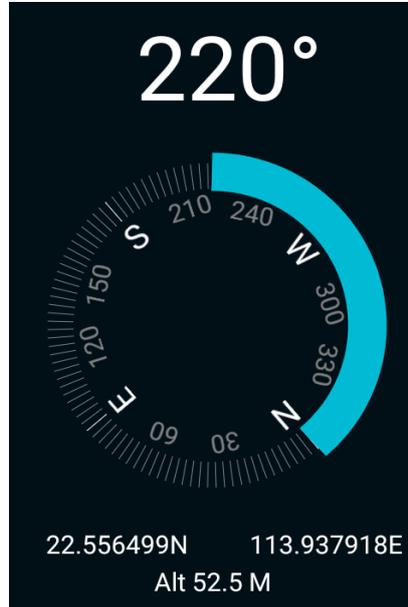


- Tap **Attachments** to add an image, audio, or reminder.
 - Tap **Background** to change the background color.
3. Tap  to save the edited content.

14.12 Compass

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

To open the compass, tap .



NOTE

- When you use the compass for the first time, calibrate the compass according to the on-screen instructions.
 - To normally use the compass, allow the compass to access your location information.
-

14.13 Browser

CAUTION

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

To use the browser to access a website, do the following:

1. Connect the radio to the network.
2. Tap  to open the browser.
3. Enter the URL in the address bar.
4. Tap **Go**.

14.13.1 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.

14.13.2 Viewing bookmarks or history

1. Tap .
2. Tap .
3. Tap **BOOKMARKS** or **HISTORY**.

14.13.3 Setting the Current Webpage

Tap  on the right side of the address bar to make more settings for the 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**.

14.13.4 Managing the Bookmark

Tap  on the right side of the address bar to make more settings for the 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.

14.13.5 Setting the Homepage

Tap  on the right side of the address bar to make more settings for the homepage.

- To set a bookmark as the homepage, do as follows:
 - a. Tap **Bookmarks**.
 - b. Touch and hold the bookmark.
 - c. Tap **Set as homepage**.
- To set the current or other webpage as the homepage, go to **Settings > General > Set homepage**.

14.13.6 Setting the Privacy and Security

Tap  on the right side of the address bar to make more settings for the privacy and security.

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.

14.13.7 Setting the Font and Image Display

- To set the text font displayed on the webpage, go to **Settings > Accessibility**, and then drag the sliders.
- To set search engine, open new tabs behind the current tab, enable JavaScript, allow multiple tabs per app, enable plug-ins, or set more page content, tap **Settings > Advanced**.
- To set whether the images appears on the webpage, go to **Settings > Bandwidth management**, and then enable or disable **Load images**.

14.14 Navigator

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.

14.14.1 Finding a Place

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

You can also find a place through  or .

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

14.14.2 Sending a Position Message

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

1. Tap .
2. Tap **Send** in the lower right corner.

3. Enter the contact number or select the contact from the contact list.

14.14.3 Downloading an Offline Map

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

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

15. Personalization

15.1 Display

Tap , tap **Display**, and then do any of the following:

- To adjust the screen brightness, tap **Brightness level**, and then do as follows:
 - Tap **Brightness level** under **Main screen**, and then drag the brightness slider for the main screen.
 - Drag the brightness slider under **Top screen** for the 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 for screen sleep, tap **Screen timeout**, and then select a time.
- To allow the main screen to wake up only by the press of the specified key, enable **Manually light up main screen**.
- To allow the main screen to wake up when receiving a notification, enable **Wake the screen when the notification arrives**.
- To display the LED indicator status, enable **LED**.
- To protect your eyes with warm color, tap **Eye comfort mode**, tap **TURN ON NOW**, and then drag the slider under **Intensity** to adjust the screen color intensity.
- To allow the screen to automatically switch to landscape or portrait, enable **Auto-rotate screen**.
- To set the text size displayed on the main screen, tap **Font size**, and then drag the slider.

15.2 Audio Profile

Tap , and then tap **Sound**. You can set the audio profile of the radio, adjust the volume, and set the alert tone.

Option	Audio Profile	
	Standard Mode	Covert Mode
Ring or Silent	Enable Silence to enter the Silent mode. Disable Silence to enter the Ring 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.	

Option	Audio Profile	
	Standard Mode	Covert Mode
Call tone	With Call tone enabled, the radio emits an alert tone when receiving a call. You can set the tone for call services. Options include Broadband , Narrowband , and Narrowband 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 Narrowband Vibrations .	
Notification tone	With Notification tone enabled, the radio emits an alert tone when receiving a notification. Options include Broadband and Narrowband Vibrations .	
Mobile service	With Mobile service enabled, the radio emits an alert tone when registering. You can set the alert tone type. Tap Talkaround tone , select None or Default tone .	
Alarm tone	You can select a custom tone in the list as your alarm tone.	
Other sounds and vibrations	Tap Other sounds and vibrations , and then enable Dial pad tones , Screen locking sounds , Touch sounds , Vibrate on tap , or/and Startup sound .	

15.3 Languages and Input

Tap , and then go to **System > Language & input**. 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**.

15.4 Date and Time

15.4.1 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 , go to **System > Date & time**, and then tap **Reference clock**.

15.4.2 Setting Time Format

1. Tap .
2. Go to **System > Date & time**.
3. Enable or disable **Use 24-hour format**.

15.4.3 Selecting Time Zone

Tap , go to **System > Date & time**, 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 **Auto time zone**.

15.5 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. Tap **Features**.
3. Enable **Glove mode**.

15.6 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.

15.7 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**, and then do any of the following:

- To clear the cache for a specific app, tap **Other apps**, tap the app, and then do either of the following:
 - To delete the temporarily stored pictures, texts, and records, tap **CLEAR CACHE**.
 - To clear the data of the app, tap **CLEAR STORAGE**.
- To automatically remove the pictures and videos stored beyond the preset time, do as follows:
 - Enable **Storage manager**, and then tap **OK**.
 - Tap  at the left side of **Storage manager**, and then enable **Use Storage manager**.

NOTE

To set the time duration for photo and video removal, tap **Remove photos & videos**, and then select from **Over 30 days old**, **Over 60 days old**, and **Over 90 days old**.

16. Advanced PMR Features

16.1 Scan/Hunt

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

16.1.1 Conventional Mode

Enabling the Scan Feature

- Swipe down from the top to enter the control and notification center, and then tap .
- Press the preprogrammed **Scan** key.
- Tap , and then enable **Scan**.
- Switch to the channel configured with the Auto Scan feature.
- With this feature enabled, the radio searches the scan list and stays on an active channel.

NOTE

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

Setting the Scan List

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

1. Tap  or .
2. Tap **Zone**, and then select the channel.
3. Tap  to edit the scan list.

16.1.2 Trunking Mode

Pre-registration Hunt

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

Hunt Mode	Description	Operation
Short Hunt	This feature allows the radio to hunt the fixed TSCC in the defined hunt list.	Tap  , go to Scan > Hunt mode , and then
Comprehensive	This feature allows the radio to hunt all the channels within the	select short hunt,

Hunt Mode	Description	Operation
Hunt	preset frequency range.	comprehensive hunt, or team hunt.
Team Hunt	This feature allows the radio to hunt the fixed TSCC in the defined team hunt list.	

Post-registration Hunt

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

Hunt Mode	Description	Operation
Background Hunt	This feature allows an idle radio to keep detecting the signal strength of the BS with which it registers. If the signal strength goes below the threshold level preset by the dealer, the radio will automatically hunt for an adjacent BS with stronger signal strength and register with it.	<ul style="list-style-type: none"> ● Tap , tap Scan, and then enable Background hunt, Home station hunt, or Handover. ● Press the preprogrammed Background hunt, Home station hunt, or Handover key.
Home Station Hunt	In a BS overlapping area, this feature allows the radio to switch back to the home station channel when its signal strength reaches the preset threshold. It is recommended that you set your frequently used channel as the home station channel.	
Multi-site Handover	The signal strength received from a BS may fluctuate due to position change, affecting the communication quality of the radio. On such occasions, this feature allows the radio to automatically register with the BS with stronger signal.	

16.2 Alert Call

In conventional mode, the Alert Call feature allows you to send a call alert to a private contact. After seeing the alert, the contact can call you back.

To initiate the feature, do either of the following:

- Tap  or , go to **Contacts > Private**, select a contact, and then tap the service.
- Press the preprogrammed **One touch call/msg** key.

16.3 Radio Check

In conventional mode, the Radio Check feature allows you to check whether a private contact's radio is powered on or operating on a channel without disturbing the contact.

To initiate the feature, do either of the following:

- Tap  or , go to **Contacts > Private**, select a contact, and then tap the service.
- Press the preprogrammed **One touch call/msg** key.

16.4 Remote Monitor

In conventional mode, the Remote Monitor feature allows you to remotely activate the microphone of a private contact's radio to monitor its activities.

To initiate the feature, do either of the following:

- Tap  or , go to **Contacts > Private**, select a contact, and then tap the service.
- Press the preprogrammed **One touch call/msg** key.



NOTE

This feature is authorized by your dealer.

16.5 Priority Interrupt

In conventional mode, the Priority Interrupt feature allows you to manually or automatically interrupt the ongoing call on the current channel to release it. Then you can initiate a new call or a new data service on that channel.

- To manually interrupt a call, press the preprogrammed **Priority interrupt** key.
- To automatically interrupt a call, do any of the following:
 - Initiate an emergency alarm service.
 - Initiate a callback.
 - Initiate an all call.
 - Send a short message.



NOTE

This feature is authorized by your dealer.

16.6 One Touch Call/Message

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

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

Mode	Description	Operation
Conventional	On a digital channel, you can do any of the following:	<ul style="list-style-type: none">● For call services on a digital

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

16.7 Roam

The Roam feature allows the radio to automatically select a BS with a strong signal, which ensures seamless communication across sites or networks.

NOTE

This feature is authorized by your dealer.

16.7.1 Convectional Mode

Enabling the Roam Feature

- Swipe down from the top to enter the control and notification center, and then tap .
- Press the preprogrammed **Narrowband roaming** key.
- Tap , and then tap **Roaming**.
- Switch to the channel configured with the Auto Roam feature.

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

Setting the Roam List

The roam list is a list of digital repeater channels where the radio roams.

1. Tap  or .
2. Tap **Zone**, and then select the channel.
3. Tap  to edit the roam list.

 **NOTE**

- Either the Scan feature or the Roam feature can be enabled for the same digital channel.
 - The direct channel cannot be set the roam list.
-

16.7.2 Trunking Mode

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

This feature is configured and enabled by your dealer.

 **NOTE**

This feature is authorized by your dealer.

16.8 Talk Around

In conventional mode, the Talk Around feature allows you to continue communication in direct mode when the repeater malfunctions or the radio is out of the repeater's coverage.

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

- Swipe down from the top to enter the control and notification center, and then tap .
 - Press the preprogrammed **Talkaround** key.
-

 **NOTE**

This feature is authorized by your dealer.

17. System

17.1 Restart

If the radio work abnormally, you can restart the radio.

Long press , and then select **Restart**.

17.2 System Upgrade

CAUTION

- Do not upgrade the radio system with unauthorized software.
 - 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 the WLAN to download the upgrade package. During the upgrade process, the radio terminates the ongoing services. The upgrade method is configured through the Smart MDM system.

- After the Smart 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 Smart MDM server automatically upgrades the radio system.
- Tap , tap **System upgrade**, and then tap **UPGRADE**.

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

17.3 Accounts

With the network connected, the radio can log in to the Smart MDM server after registration, and then can be managed through the Smart MDM server.

1. Tap , tap **Accounts**.
2. Tap **Hytera ID**, and then do any of the following:
 - If the status is disconnected, enable the mobile data or connect to the WLAN network.
 - If the status is unregistered, tap **Register**.
 - If the status is unlogged, tap **Log in**, and then enter the user information.

17.4 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 Smart MDM. 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.

18. 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.	Too many apps may be 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 may be incorrect.	Contact your local dealer or Hytera technicians for maintenance.
The radio cannot register.	The radio may detect no signal from the BS.	Make sure the radio is within the coverage of the BS.
	The radio may not be authorized.	Contact the BS manager to check if the radio is authorized in the network management system.
The radio registers repeatedly.	The signal may be intermittent.	Make sure the radio is within the coverage of the BS.
The radio cannot establish a call.	The signal may be weak.	Make sure the radio is within the coverage of the BS.
No voice is heard after a call is established.	The radio ID may be repeated.	Contact the BS manager to check whether the radio ID is repeated in the network management system.
The called party disconnects	The signal may be intermittent or	Make sure the radio is within the coverage

Phenomena	Analysis	Solution
repeatedly during communication.	weak.	of the BS.
The voice is unclear.	The signal may be weak.	Make sure call participants are within the communication range.
During receiving, the voice is weak, discontinuous, or totally inaudible.	The battery voltage may be low.	Recharge or replace the battery.
	The volume may be low.	Increase the volume or contact your local dealer to turn the Mic AGC feature off.
	The antenna may be loosened or installed improperly.	Turn off the radio, and then remove and reattach the antenna.
	The speaker may be blocked or damaged.	Clean the external surface of the speaker.
You cannot communicate with group members.	The frequency or signaling type may be inconsistent with that of other members.	Make sure your TX/RX frequency and signaling type are consistent with that of other members.
	The channel type (digital/analog) may be set inconsistently.	Make sure all members are on the same digital/analog channel.
	You may be too far away from the group members.	Move towards other members.
	The signal may be weak.	Make sure all members are within the communication range.
You hear unknown voices or sounds.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio may be set with no signaling.	Set signaling for all radios operating at the same frequency to avoid interference.
You are unable to hear anyone because of too much noise and hiss.	The signal may be weak.	Make sure call participants are within the communication range.
	The radio may be at an unfavorable position. For example, the signal may be blocked by tall buildings or frustrated in the	Move to an open and flat area, and try again.

Phenomena	Analysis	Solution
	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.	Move to an open and flat area, and try again.
The camera does not work.	The radio cannot detect the front or rear camera.	Restart the radio.
	The storage space may be insufficient.	Clear up the storage space.
The radio fails to detect the Nano SIM card or Micro SD card.	The Nano SIM card or Micro SD card may be installed improperly.	Remove and reinstall the Nano SIM card or Micro SD card.
	The Nano SIM card or Micro SD card may suffer from poor contact caused by dirtied or damaged metal contacts.	Clean the metal contacts of the Nano SIM card or Micro SD card.
You cannot use the mobile data.	The SIM card may fail to work properly or may be out of service because of unpaid charges.	Make sure the Nano SIM card works properly or pay the charges.
	The mobile data feature may be 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	The battery may be placed into the	Remove and reinsert the battery.

Phenomena	Analysis	Solution
charged.	charger improperly.	
	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.

19. Radio Care

19.1 Radio

CAUTION

If the radio is seriously wet inside, do not turn on it. Contact the dealer or maintenance center for maintenance in time.

To guarantee optimum performance as well as a long service life of the radio, follow the tips below:

- Do not disassembly the radio.
- Do not throw, crack, or hammer the radio.
- Do not pierce or scrape the radio, especially the interfaces.
- Do not expose the radio to the extreme temperature.
- Keep the radio away from substances that can corrode it.
- Close the accessory connector cover when no accessory is in use.
- Do not connect the radio to the incompatible device.
- Do not hold the radio by its antenna.

To avoid liquid penetration into the radio, follow the tips below:

- Do not expose the radio to the environment with high temperature and high humidity.
- Keep the radio away from salty water, ionized water, alcoholic beverage, lotion, or other impure water.
- Before connecting the accessory or charger to the radio, ensure the radio and the interface are dry.

If the radio has been wet, follow the tips below:

- Do not turn on the radio.
- Do not connect the accessory or charger to the radio.
- Do not dry the radio by microwave, hair dry, or other external heat sources.
- Do not insert the cotton buds or tissue into the interface.
- Use the clean and soft cloth to dry the water on the radio surface, and then put the radio to the well-ventilated place until it is dry.

19.2 Battery

To guarantee optimum performance as well as a long service life of the battery, follow the tips below:

- Use the approved charger to charge the battery.
- Keep the radio turned off during charging.

- Do not use the radio during charging.
- Charge the battery under the temperature from 0°C to 45°C.
- When the low battery alert occurs, replace or charge the battery in time.
- When the battery is fully charged, disconnect the charger in time.
- Do not drop the battery by force.
- Do not make the battery wet.
- To avoid short circuit, do not use the conductive substance such as iron wire to touch the anode and cathode of the battery.

19.3 Cleaning

CAUTION

- Turn off the radio and remove the battery before cleaning.
 - Ensure no external devices are connected to the radio.
 - Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations.
 - Do not directly spray the neutral cleanser on the radio.
 - Do not use the radio before it is fully dry.
 - After cleaning the accessory connector, put the cover back in place.
-

It is recommended to clean the radio regularly. During cleaning, you can check whether the components are damaged. If damages exist, contact the local dealer or the Company.

4. Use the non-metal brush to clean up the dust or dirt on the radio surface.
5. Use the lint-free cloth with proper neutral cleanser to clean the surface, screen, keys, knobs, and interfaces.
6. Use another lint-free cloth with proper pure water to clean up the cleanser or residue.
7. When cleaning the battery slot, use the non-metal brush to clean up the dust and dirt in the slot, and then use the dry and soft lint-free cloth to clean the contacts.

19.4 Sterilizing

CAUTION

- Turn off the radio and remove the battery before sterilizing.
 - Ensure no external devices are connected to the radio.
 - Do not directly spray the alcohol on the radio.
-

-
- Keep the radio away from the power supply and fire.
 - Do not use the radio before it is fully dry.
 - After sterilizing the accessory connector, put the cover back in place.
-

It is recommended to sterilize the radio regularly.

Use the lint-free cloth with proper rubbing alcohol (density $\geq 70\%$) to clean the radio surface, screen, keys, knobs, and interfaces.

19.5 Storing

CAUTION

- Turn off the radio and remove the battery before storage.
 - Ensure no external devices are connected to the radio.
 - The battery capacity and performance may decrease if not used for a long time.
-

When storing the radio, follow the tips below:

- Keep the radio in the well-ventilated place with the temperature from -5°C to 25°C and with the humidity from 45% to 75%.
- Keep the radio away from the acidic and corrosive substances.
- Keep the radio away from the fire or other heat sources.
- Do not store the radio in direct sunlight.
- During storing, charge the battery once every three months, and care the battery once every six months.

20. 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.

Type	Model	Name
Audio	ACN-02	PTT & MIC Cable (used with receive-only earpiece)
	EH-02	Receive-Only Swivel Earset (used with PTT & MIC cable)
	EHS24	Earset
	ES-01	Receive-Only Earbud (used with PTT & MIC cable)
	POA121	Wireless PTT
	SM26N1	Waterproof Remote Speaker Microphone
	EHW07	Wireless Earpiece
	EHW08	
	SM27W2	Wireless Remote Speaker Microphone
	VM220-N1	Portable Camera
Power Supply	BP4009	Smart Li-polymer Battery (4,000 mAh)
	CH20L13	Charger

21. Statement

21.1 Copyright

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

The product described in this manual may include the Company's computer programs stored in memory or other media. Laws in PRC and/or other countries or areas protect the exclusive rights of the Company with respect to its computer programs. The purchase of this product shall not be deemed to grant, either directly or by implication, any rights to the purchaser regarding the Company's computer programs. Any of the Company's computer programs may not be copied, modified, distributed, decompiled, or reverse-engineered in any manner without the prior written consent of the Company.

21.2 Disclaimer

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

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

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

21.3 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.

21.4 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

21.5 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.

21.6 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 autorisé aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

21.7 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.

22. Abbreviations

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



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