PDC680 Multi-mode Advanced Radio

User Manual

Hytera Communications Corporation Limited

SyncComms

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, dialog names, and hardware buttons.	To save the configuration, click **Apply**.
		The **Log Level Settings** dialog appears.
		Press the **PTT** key.
" "	Denotes messages, directories, file names, folder names, and parameter values.	The screen displays "Invalid Battery!"
		Open "PSS.exe".
		Go to "D:/opt/local".
		In the **Port** text box, enter "22".
>	Directs you to access a multi-level menu.	Go to **File** > **New**.
Italic	Denotes document titles.	For details about using the UNM5800, refer to *UNM5800 Operation Guide*.
`Courier New`	Denotes commands and their execution results.	To set the IP address, run the following command: `vos-cmd - m name IP`

Key Operations

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

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Operation	Description
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

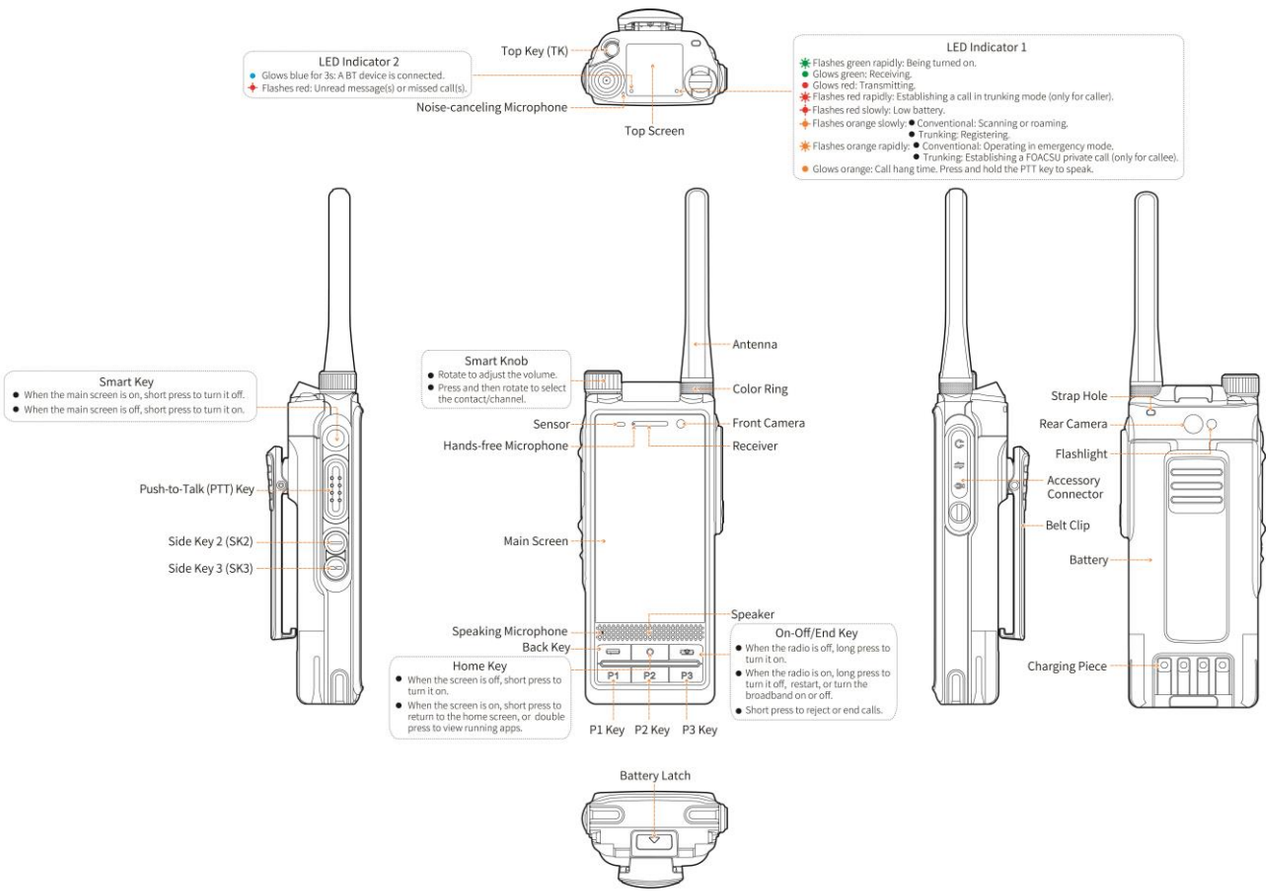
Please unpack carefully and check that you have received the following items. If any item is missing or damaged, contact your dealer.

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

2. Product Layout



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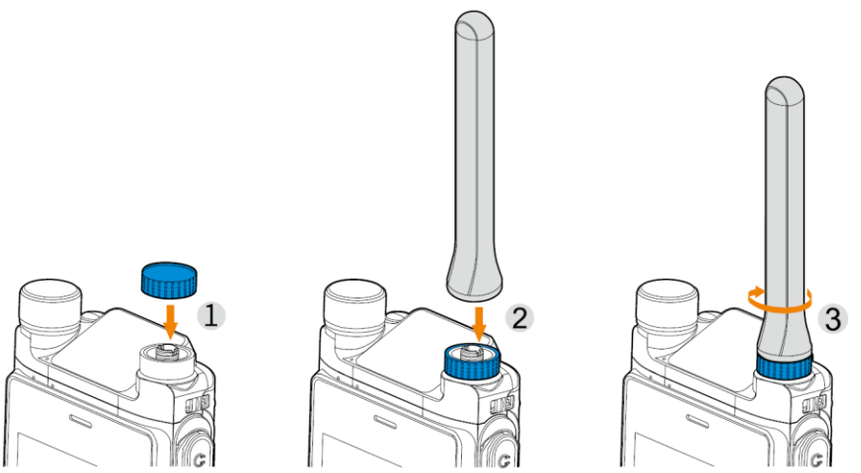
3. Before Use

3.1 Attach the Antenna

⚠ CAUTION

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

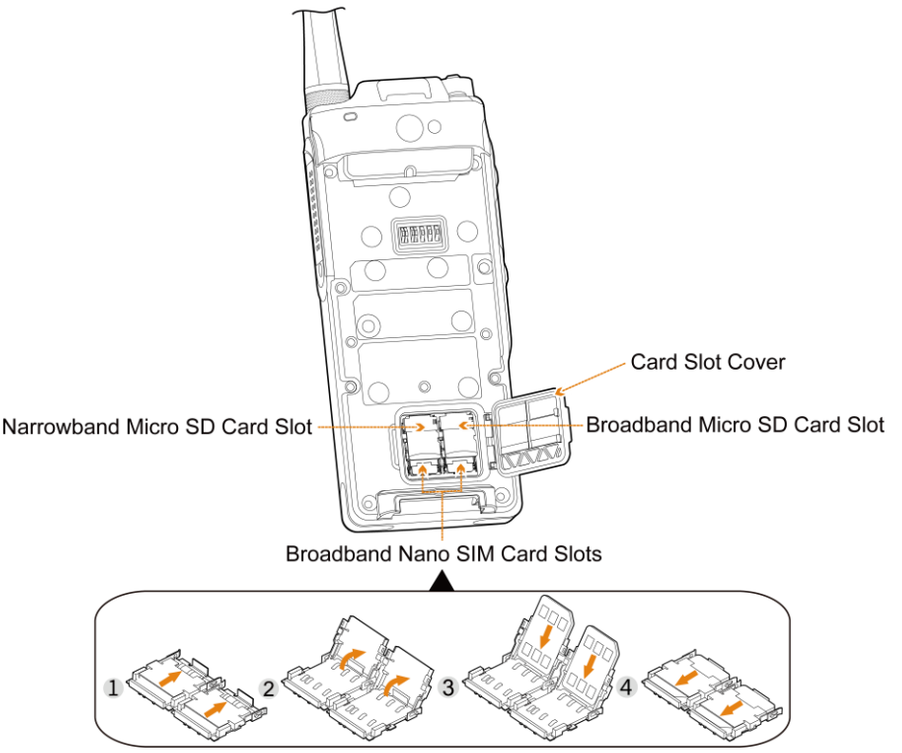
1. (Optional) Put the color ring (for identification) on the antenna connector.
2. Put the antenna on the antenna connector.
3. Rotate the antenna clockwise till hand tight.



3.2 Install the Cards

1. Open the card slot cover.
2. Install 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.

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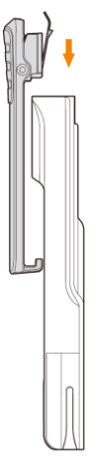


NOTE

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

3.3 Attach 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 spring plate on the belt clip and push the belt clip upwards to remove it.

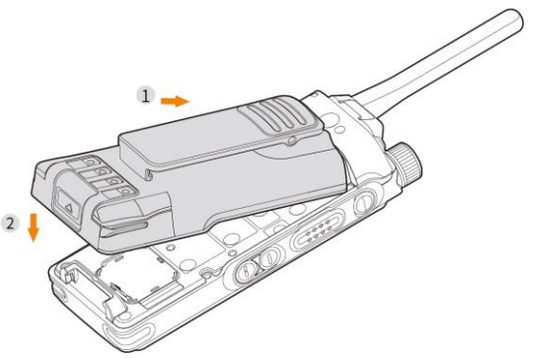
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3.4 Attach the Battery

CAUTION

- Use the battery approved by the Company 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 Charge the Battery

CAUTION

- Use the charger approved by the Company to charge the battery.
- Read the *Safety Information Booklet* before charging.
- The remaining lithium-ion battery power is limited to 30% pursuant to the new lithium battery shipment regulation approved by the International Air Transport Association (IATA).

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

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

LED Indicator	Charging Status
Flashes red slowly	No battery is placed on the charger.
Flashes orange slowly	The battery is being activated.
Glows red	The battery is being charged.
Glows green	● The battery attached to the radio is charged to 90% or above. ● The battery standalone is charged to 95% or above.
Flashes red rapidly	The battery fails to be charged.

4. Battery

4.1 View the Remaining Battery Power

1. Tap .
2. Tap **Battery**.
3. Turn on **Battery percentage**.

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

4.2 Turn on the Power Saving Mode

To turn on the power saving mode, do either of the following:

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

NOTE

You need to add  to the control and notification center first.

- Tap , go to **Battery** > **Battery Saver**, and then do either of the following operations:
  - Tap **TURN ON NOW**.

    The power saving mode is turned on immediately.
  - Turn on **Turn off when fully charged**.

    The power saving mode will be turned off when the battery power is above 90%.

4.3 Set the Work Type

1. Tap .
2. Go to **Battery** > **Work type**.
3. Select **Standard**, **Phone**, or **Radio**.
   - Standard: The radio works in both narrowband and broadband networks at the same time.
   - Phone: The radio only works in broadband network.
   - Radio: The radio only works in narrowband network.

4.4 View the Battery Health

1. Tap .

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

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

5. Basic Operations

5.1 Turn On or Off the Radio

5.1.1 Turn On the Radio

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

5.1.2 Turn Off the Radio

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

5.1.3 Restart the Radio

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

5.2 Use the SIM Cards

5.2.1 Enable or Disable the SIM Cards

1. Tap .
2. Go to **Network & internet** > **Advanced**.
3. Tap **SIM cards**.
4. In the **SIM cards** interface, turn on or off **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 Set the Default SIM Card

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

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

Two SIM cards cannot be used simultaneously. In other words, if you set one SIM card at the default card, the other card cannot register with the network.

5.2.3 Turn On Smart Switch

You can make the radio automatically switch to the SIM card with stronger signal for better data connectivity. To use Smart Switch, ensure that you have installed and enabled two 4G SIM cards.

1. Tap .
2. Go to **Network & internet** > **Advanced**.
3. Tap **SIM cards**.
4. Turn on **Smart switch**.

5.3 Adjust the Volume



If you use the earphones or headphones, be careful that excessive sound pressure from earphones and headphones may cause hearing loss.

5.3.1 Increase or Decrease 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 turn on **Volume control**.
- To adjust the volume singly of ring, call, or media, turn off **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.

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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 Switch 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, turn on or off **Silence**.

5.3.3 Set the Vibrate Mode

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

   In ring mode, the radio rings and vibrates when receiving calls, messages, or notifications.
4. Turn on **Vibrate on silent**.

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

5.4 Switch the Narrowband Work Mode

You can switch the narrowband work mode to conventional, digital trunking, or MPT trunking modes.

Manual Switch

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

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Auto Switch

1. Tap .
2. Turn on **Auto-change work mode**.

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

5.5 Switch 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. In conventional mode, tap .
2. In the **Channel** interface, select a zone.
3. Do either of the following:
   - Tap a channel.
   - Tap following a channel, and then turn on **Set to PTT channel**.

Method 3

1. In trunking mode, tap .
2. In the **Contact** interface, tap a group contact.

5.6 Switch 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**.

5.7 Use 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 Set the Programmable Keys

The programmable keys make your operations convenient.

To assign a feature to the programmable key, do as follows:

1. Tap .
2. Tap **Programmable keys**.
3. Under **Top Key**, **Side Key 2**, **Side Key 3**, **P1**, **P2**, or **P3**, select **Short press**, **Long press**, or **Double press**.
4. Select one of the features listed in the following table.

Option		Description
Call	Clear down	Allows you to end the voice call.
	Check zones/subgroup	Allows you to enter the **Zone** or **Subgroup** menu.
	Key priority	Allows you to switch key strategy between Radio first, Third party first, and PTT double transmit.
	Priority interrupt	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.
	Monitor	Allows you to turn on or off the Monitor feature.
	Squelch	Allows you to turn on or off the Squelch Off feature.
	Adjust squelch level	Allows you to adjust the squelch level between Open, Normal, and Tight.
	Switch audio path	Allows you to switch to an available audio path, when the radio is connected with a BT device or wired earpiece.
	VOX	Allows you to turn on or off the Voice Operated Transmit (VOX) feature.
	Talkaround	Allows you to switch the radio between the direct communication and repeater mode operation.

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Option		Description
	Zone/Subgroup up	Allows you to select the previous zone or subgroup.
	Zone/Subgroup down	Allows you to select the next zone or subgroup.
	Contact/Channel Up	Convention mode: Allows you to select the previous channel. Trunking mode: Allows you to select the previous contact.
	Contact/Channel Down	Convention mode: Allows you to select the next channel. Trunking mode: Allows you to select the next contact.
	One touch call/msg	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	Allows you to switch to a preset channel. The feature needs to be programmed and configured.
	Voice registration	Allows you to switch the registration strategies over PMR network and RoIP network.
	Home Group Switch	Allows you to switch to home group.
	Video Call	Allows you to switch between voice call and video call initiated by the press of the **PTT** key. In RoIP network, you can press the **PTT** key to initiate voice call or video call.
Scan	Scan	Allows you to turn on or off the Scan feature.
	Nuisance delete	Allows you to temporarily remove the channel from the scan list.
	Check adjacent sites	Allows you to open the menu of adjacent sites.
	Change control channel	Allows you to switch control channel.
	Handover	Allows you to turn on or off the Handover feature. 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	Allows you to turn on or off the Background Hunt feature.

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Option		Description
		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	Allows you to turn on or off the Home Station Hunt feature. 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	Allows the radio to hunt based on the current scan mode.
Roam	Narrowband roaming	Allows you to turn on or off the Roaming feature.
Secure	Emergency on	Allows you to initiate an emergency alarm service.
	Emergency off	Allows you to end the emergency alarm service.
	Man down	Allows you to turn on or off the Man Down feature.
	Lone worker	Allows you to turn on or off the Lone Worker feature.
	Scrambler/E2EE	Allows you to turn on or off the Scrambler/E2EE feature.
	Only receive encrypted air	Allows you to turn on or off the Only Receive Encrypted Air feature.
App	Camera	Allows you to open the camera to take photos.
	Video	Allows you to open the camera to record videos.
	Screenshot	Allows you to snapshot the current full screen.
	Screen recording	Allows you to start or end the screen recording.
	Control Center	Allows you to show or hide the control center.
	Start recording	Allows you to start to record a video with the DECam app.
	Stop recording	Allows you to stop recording the video with the DECam app.

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Option		Description
	Evidence photo	Allows you to take photos with the DECam app.
	Evidence recording	Allows you to start to record an audio with the DECam app.
	Custom	Allows you to quickly open the customized app developed through the API.
	One touch open app	Allows you to quickly open the assigned app.
	Flashlight	Allows you to turn on or off flashlight.
Others	Switch work mode	Allows you to switch the work mode of the radio.
	Auto-switch work mode	Allows you to turn on or off the Auto Switch Work Mode.
	Adjust power level	Allows you to adjust the power level to high or low.
	Covert mode	Allows you to turn on or off 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	Allows you to report the location information.
	Voice broadcast	Allows you to turn on or off the Voice Broadcast feature.
	Invert top screen	Allows you to change the orientation of the top screen for clear and fast access to the information
	Silence	Allows you to turn on or off the Silent Mode.
	Screen Lock	Allows you to lock or unlock the screen.
	Switch BT device	Allows you to switch the BT device or the radio as the audio player, when a BT device is connected to the radio. During the switchover, the BT device is still connected.
	Narrowband Network	Allows you to turn on or off the narrowband network.
	Volume up	Allows you to increase the volume.
	Volume down	Allows you to reduce the volume.
	Recording playback	Allows you to play back the latest recording (including private call recording

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Option		Description
		and radio voice message).
	Single frequency repeater	Allows you to turn on or off the Single Frequency Repeater feature.

5.9 Check the Device Information

5.9.1 Check the Device, Status, and Legal Information

- To view the device info, do as follows:

  a. Tap .

  b. Tap **Device info**.

  You can view the model, Android version, processer information, RAM and ROM total size, battery capacity, resolution, and serial number (SN).

- To view the status info, do as follows:

  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.

- To view the legal info, do as follows:

  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 Check the Radio Information

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

   You can view PMR number, radio alias, and frequency.

5.9.3 View the Broadband Network Information

1. Tap .
2. In the right lower corner, tap .

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3. Enter "*#*#0328#*#*".

5.10 Connect 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**.

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6. Screens

CAUTION

- Do not hit or drop the radio with the screen toward the hard or sharp objects. Otherwise, the screen may be damaged or cracked.
- To see the screen clearly when wearing polarized sunglasses, make sure that the polarization axis is at either 0° or 45°.

6.1 Understand the Home Screen



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6.2 Understand the LCD Icons

Type	Top Screen	Main Screen	Radio Status
Battery power			The fuller the battery bar is, the more the battery power remains.
			The battery power is low.
Network and signal	/	E/G/3G/4G	The EDGE/2G/3G/4G cellular network is turned on.
			The radio is connected to the WLAN network.
			More bars indicate stronger signal of broadband network.
			The radio operates in airplane mode.
			The WLAN hotspot is turned on.
			The RoIP network is turned on, and the radio does not register voice services.
			The RoIP network is turned on, and the radio has registered voice services in the narrowband network.
			The RoIP network is turned on, and the radio has registered voice services in the broadband network.
			The RoIP network is turned on, and the radio has registered video services in the broadband network.
			The RoIP network is turned on, and the radio does not register video services.
			The narrowband network is turned off.
			The radio is standby in conventional mode.
			The radio detects no signal in trunking 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.

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Type	Top Screen	Main Screen	Radio Status
	B		The BT feature is turned on.
	·B·		A BT device is connected.
			The GPS feature is turned on, and valid positioning data has been received.
			The GPS feature is turned on, but no valid positioning data has been received.
Others	L/H	L/H	The radio operates in low or high power mode.
			The radio is roaming.
			The radio is scanning.
			The radio stays on an active channel.
			The radio stays on Priority Channel 1.
			The radio stays on Priority Channel 2.
			The End-to-End Encryption (E2EE) feature is turned on.
			The Over the Air Encrypt (OTAE) feature is turned on.
			The E2EE and OTAE features are turned on.
			The Scrambler feature is turned on.
			The Squelch Off feature is turned on.
			The Monitor feature is turned on.
			The radio operates in Covert mode.
			The radio operates in Silent mode.
			The PoC-to-PMR Audio Relay feature is turned on.
			The Single Frequency Repeater feature is turned on.
	/		The Micro SD card is abnormal.
			The Micro SD card is encrypted.

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Type	Top Screen	Main Screen	Radio Status
			No Nano SIM card is detected.
			The Nano SIM card is abnormal.
			The Background Video Recording feature is turned on.
			The Background Audio Recording feature is turned on.
			The Clock feature is turned on.

6.3 Manage 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:

- To view all widgets, swipe up or down.
- 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**.

You can also add widgets to the home screen.

1. On the home screen, touch and hold the blank area, and then tap **Widgets**.
2. Touch and hold a widget, and then drag it to the blank area on the home screen.

6.4 Manage 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 main screen.

In the control and notification center, you can do any of the following:

- To manage notifications, do any of the following:

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- To view details of a notification, tap the notification.
- 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 shortcut 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 Invert 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 .

6.6 Switch 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 inactive for the preset duration, the screen will automatically enter the sleep mode.

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

6.7 Lock or Unlock the Screen

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

- Lock the screen
  - Press the **Smart Key**.

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

- Unlock the screen

  Press the **Smart Key** or the **Home** key.

6.7.1 Set the Screen Lock Type

1. Tap .
2. Tap **Security**.
3. Tap **Screen lock**.
4. Tap **Swipe**, **Pattern**, or **Password**.

   With Screen Lock turned on, swipe up, draw the pattern, or enter the password to unlock the screen.

6.7.2 Set the Screen Lock Range

1. Tap .
2. Tap **Security**.
3. Tap **Lock screen operation restrictions**.
4. Do any of the following:
   - Turn on **Sync lock Control Center**.

     The control and notification center is locked when the screen is locked.
   - Turn on the knobs, **PTT** key, or programmable keys.

     These knobs or keys are locked when the screen is locked.
   - Turn on **Keys work when broadband off**.

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

6.8 Capture or Record the Screen

6.8.1 Capture the Screen

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

- Press **SK2** and **SK3** simultaneously.
- Press the preprogrammed **Screenshot** key.
- Swipe down from the top to enter the control and notification center, and then tap .

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6.8.2 Record the Screen

You can record screen operations with or without ambient sounds.

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

6.9 Set the Wallpaper

1. Enter the wallpaper gallery.
   - 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**.

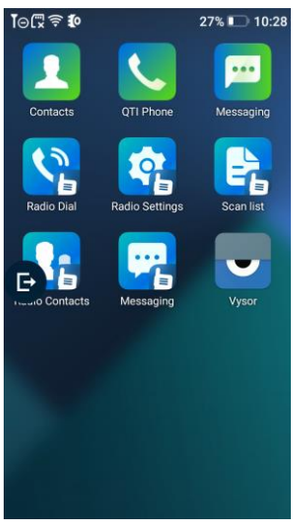
6.10 Enter the Kiosk Mode

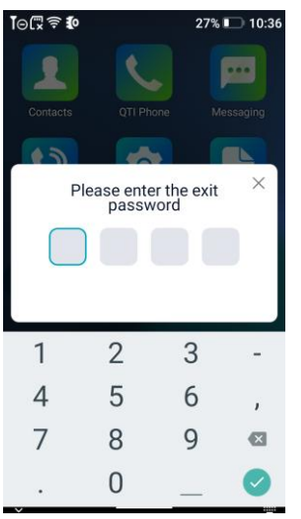
Kiosk Mode allows you to focus on the work with the specific apps and features.

Customized Kiosk Mode

The customized Kiosk mode is configured to the radio by the administrator on MDM Pro. You can only use designated applications and features.

- To exit Kiosk mode, tap , and then enter password on the radio.





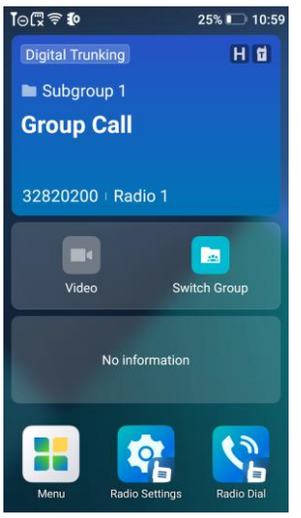
- To enter Kiosk mode again, tap , and then tap **Kiosk mode**.

Default Kiosk Mode

After the administrator turns off the Kiosk mode on MDM Pro, you can turn on the Kiosk mode which allows the radio to display narrowband-related applications only.

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1. Tap .
2. Tap **Kiosk mode**.



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.

7.1 PMR Contacts

7.1.1 Add a Contact

Manual Adding

1. Enter the **New contact** interface.
   - Tap , and then tap + in the right upper corner.
   - Tap , 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 **Save**.

Auto Adding

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

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

7.1.2 Edit or Delete a Private Contact

1. Tap .
2. Tap **PRIVATE**.
3. Tap a contact, and then tap .
4. Edit or delete the contact.
   - To edit the contact, edit the contact information including avatar, name, radio ID, and phone number, and then tap **Save**.

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- To delete the contact, tap **DELETE CONTACT**, and then tap **OK**.

7.1.3 Set a Favorite Contact

1. Tap .
2. Do either of the following:
   - Tap a group or private contact, and then turn on **Set as star contact**.
   - Touch and hold a group or private contact, and then tap **Set as star contact**.

7.1.4 Search for a Contact

1. Tap .
2. Tap **GROUP** or **PRIVATE**.
3. Tap , and then enter the name, initials, and radio ID of the contact.

   The radio displays the search results below the search box.

7.1.5 Share a Contact

You can share a contact with others through message. For details, see 9.1.1 Send a Text Message.

7.1.6 Send the Caller Alias

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

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

7.1.7 Manage Zones/Subgroups

Zone

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

Tap . You can do either of the following:

- Switch the channel according to 5.5 Switch the Channel or Contact.
- Edit the channel
  a. Tap following a 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**.

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b. Tap **Save**.

Subgroup

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

To switch the contact, see 5.5 Switch the Channel or Contact.

7.2 Phone Contacts

7.2.1 Add 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 a 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 to Contact**.
3. Create a new contact or add to existing contact.
4. Set the contact information including avatar, name, phone number, and email address.
5. Tap **Save**.

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7.2.2 Edit a Contact

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

NOTE

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

7.2.3 Set a Favorite Contact

1. Tap .
2. Tap the contact.
3. In the contact details interface, tap .

7.2.4 Search for a Contact

1. Tap .
2. Tap .
3. In the search box, enter the contact name or initials.

   The radio displays the search results below the search box.

7.2.5 Share a Contact

- Through Messaging app
  a. Tap .
  b. Tap .
  c. Tap , and then tap **Insert contact info**.
  d. Select the contact, and then send the contact information to other contacts.
- Through Contacts app
  e. Tap , and then tap the contact.
  f. Tap , and then tap **Share**.
  g. Select a sharing method.

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8. Call Services

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 turned on 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 Initiate 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 PTT, and then tap **Group**.
   - In trunking mode, tap PTT.
4. Press the **PTT** key.

Through Contact List

1. Tap .
2. Do either of the following:
   - Tap a group contact, and then press and hold the **PTT** key, or tap .
   - Touch and hold a group contact, and then tap **Call**.

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Through One Touch Call

With the One Touch Call feature turned on, 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 Receive a Group Call

You can answer a group call without any operation.

8.1.1.3 End 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 via Contact Switch feature turned on, 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.

8.1.2.2 Initiate 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**.

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- In trunking mode, tap .

4. Press the **PTT** key.

Through Contact List

1. Tap .
2. Do either of the following:
   - Tap a private contact, and then press and hold the **PTT** key, or tap .
   - Touch and hold a private contact, and then tap **Call**.

Through One Touch Call

With the One Touch Call feature turned on, 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.

8.1.2.3 Receive 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.

8.1.2.4 End 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.

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- 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 via Contact Switch feature turned on, 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.

8.1.3.2 Initiate 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 .
2. Do either of the following:
   - Tap an all call contact, and then press and hold the **PTT** key, or tap .
   - Touch and hold an all call contact, and then tap **Call**.

Through One Touch Call

With the One Touch Call feature turned on, 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.

8.1.3.3 Receive an All Call

You can answer an all call without any operation.

8.1.3.4 End 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 turned on, 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.

8.1.4.2 Initiate a Broadcast Call

Through Contact List

1. Tap .
2. Tap a group contact.
3. Tap .

Through One Touch Call

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

8.1.4.3 Receive a Broadcast Call

You can answer a broadcast call without any operation.

8.1.4.4 End a Broadcast Call

A broadcast call ends in one of the following cases:

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- 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 via Contact Switch feature turned on, 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

8.1.5.2 Initiate a PSTN/PABX Call

Through Contact List

1. Tap .
2. Tap **PRIVATE**.
3. Tap a 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 turned on, press the preprogrammed **One touch call/msg** key.

8.1.5.3 Receive a PSTN/PABX Call

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

8.1.5.4 End a PSTN/PABX Call

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

- The calling or called party taps  or presses .

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- 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 via Contact Switch feature turned on, 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 Initiate a Group Call.
2. Tap , tap a 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 turned on, 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 turned on 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 , and then tap a 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 turned on by your dealer, tap , tap **Call forwarding**, turn on **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 turned on by your dealer, you can hang up to cancel queuing and end the call. This feature is turned on 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 call, private call, all call, or analog 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 turned on 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 Initiate a Video Call

Through Contact List

1. Tap .
2. Tap a 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 .

8.2.2.2 End a Video Call

Tap or press .

8.3 Phone Call

8.3.1 Initiate 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.

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4. Tap .

Through Call Logs

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

8.3.2 Receive or Decline a Phone Call

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

8.3.3 End a Phone Call

To end a phone call, tap  or press .

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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 Send a Text Message

Through Messaging

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

Through Contact List

1. Tap .
2. Tap **GROUP** or **PRIVATE**.
3. Do either of the following:
   - Tap a contact, and then tap .
   - Touch and hold a contact, and then tap **Message**.
4. Edit and send the message.

   For detailed operation, see steps 5 to 6 in Through Messaging.

9.1.2 View Messages

1. Tap .
2. Tap a contact to enter the conversation interface.

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3. Tap •••, and then do any of the following:

   - To search for history messages, tap **find chat content**.

     ●By key words: Enter the keywords in the **Search** field.

     ●By date: Tap .

   - To pin the conversation to the top, tap **top chat**.
   - To clear all history messages with the contact, tap **clear all chat**.

     The cleared messages cannot be recovered.

9.1.3 Reply to a Message

1. Tap .
2. Tap a contact to enter the conversation interface.
3. Tap the **Type message** field.
4. Enter the content and send the message.

9.1.4 Manage Messages

1. Tap .
2. Tap a contact to enter the conversation interface.
3. Touch and hold the message text, and then do any of the following:

   - To select multiple messages, tap **Multi check**.
   - To copy and paste the text message, tap **Copy**.

     NOTE

     To paste the copied content, touch and hold the **Type message** field, and then tap **Paste**.

   - To forward the text or location message, tap **Forward**.
   - To delete the message, tap **Delete**.

     The deleted messages cannot be recovered.

   - To add messages to the favorite list, tap **Favorite**.

     NOTE

     To view messages in the favorite list, in the **Messaging** interface, tap .

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9.1.5 Send a Status Message

In trunking mode, you can send a status message to the contact by touching and holding the linked number in the **Dialer** interface.

You can send a status message to a contact by either of the following:

- Method 1
  a. Tap .
  b. Tap **Quick dialing & Status Message**.
  c. Select a number, asterisk (*), or pound sign (#), and then tap **Status Message**.
  d. Select a private or group contact, and then send a status message.
- Method 2
  a. Tap , and then touch and hold a number, asterisk (*), or pound sign (#).
  b. In the displayed interface, tap **Status Message**
  c. Select a private or group contact, and then send a status message.

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 Send a Message

Through the Messaging App

1. Tap .
2. Tap .
3. Enter the phone number in the search box, or tap  to select a contact.
4. Tap the **Send message** field, and then enter the content.
5. (Optional) Tap  to add subject, pictures, videos, audio, recording, slideshow, contract info, contact vCard, and more.

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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 Search for the Message

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

9.3.3 Delete the Conversation

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

9.3.4 Manage Message Text

1. Tap .
2. Tap the conversation.
3. Long press the message text, and then do any of the following:

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- To forward the text message, tap .
- To copy and paste the text message, tap .
- To delete the text message, tap .

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10. Audio and Call Settings

10.1 Profile

The Profile 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 profiles when the radio outputs audio through a speaker or an audio accessory.

Tap > **Profile**, and then select the equalization mode. If **Custom** is selected, you need to manually set the listed parameters.

Audio Path	Profile	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.

Tap , select and then turn on **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 (BT device).

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- 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 .

10.5 Radio Voice Message

You can record what each group member talks during group call. This voice recording is stored in the Conversation of the Radio app, allowing you to replay it at any time. Also the voice recording can contain the location information of the speaker.

To turn on Radio Voice Message, tap , and then tap **Radio voice message**.

To turn on Radio Voice Message Retain GPS, tap , and then tap **Radio voice message retain GPS**.

10.6 Quick Dialing

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

To link the number to a contact for quick dialing, do either of the following:

Method 1

1. Tap .
2. Tap **Quick dialing & Status Message**.
3. Select a number, asterisk (*), or pound sign (#), and then select a contact.

Method 2

1. Tap , and then touch and hold a number, asterisk (*), or pound sign (#).
2. In the displayed interface, tap **Settings**.
3. Select a number, asterisk (*), or pound sign (#), and then select a contact.

10.7 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 L or H.
- 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

  b. Tap a zone, and then tap following a channel.

  c. Tap .

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

10.8 Soft PTT Key

To turn on or off this feature, tap and then tap **Soft PTT button**.

With the feature turned on, you can see in the call panel.

10.9 VOX

The VOX feature gives you hands-free capability. When the microphone on the earpiece detects your voice reaching the preset volume level, the radio automatically starts transmitting. So you do not need to press and hold the **PTT** key.

To ensure your best experience, set the VOX sensitivity according to your normal conversation volume and surroundings.

To turn on or off VOX, do either of the following:

- Press the preprogrammed **VOX** key.
- Tap , and then tap **VOX**.

10.10 PoC-to-PMR Audio Relay

PoC-to-PMR Audio Relay allows the radio to relay audio between PoC and PMR networks as a gateway.

Tap , and then tap **PoC-to-PMR audio relay**.

NOTE

PoC-to-PMR Audio Relay should be licensed before use.

11. Connectivity

11.1 PMR Network

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

To turn on the PMR network, do either of the following:

- Tap , and then turn on **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 turn on **RoIP network**.

11.3 Cellular Network

11.3.1 Turn on 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 prolong battery life.

To turn on or off 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 Set the Cellular Network

1. Tap .
2. Tap **Network & internet**, and then tap **Mobile Network Settings**.
3. Do any of the following:
   - To turn on data roaming, tap **Roaming**. You can access data services when you are outside the service area of your carrier.

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- 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 turned on.
- To turn on 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 Monitor or Limit 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 Connect to the WLAN

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

To turn on or off the WLAN, do as follows:

1. Tap .
2. Tap **Network & internet**, and then tap **WLAN**.
3. Turn on **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 Set the WLAN

1. Tap .
2. Tap **Network & internet**, and then tap **WLAN**.
3. In the **WLAN** interface, do any of the following:

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- To check, delete, or share saved networks, tap **Saved networks**.
- To automatically turn on WLAN, tap **WLAN preferences**, and then turn on **Turn on WLAN automatically**.
- To receive a notification when a WLAN network is available, tap **WLAN preferences**, and then turn on **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 Pair a BT Device

1. Turn on 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.

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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 Set 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 turned on, tap .
2. Go to **Connected devices** > **Connection preference** > **BT**.
3. Turn on **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 Send and Receive 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. Select the picture or video.
3. Tap **Share**, and then tap **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 turn on or off this feature, do as follows:

1. Tap .
2. Tap **Connected devices**.

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3. Go to **Connection preference** > **NFC** to turn on 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 turn on or off 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. Turn on **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 turn on the screen lock (pattern or password).

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12. Location

12.1 Location Services

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

1. Tap .
2. Tap **Location**, and then turn on **Use location**.
3. (Optional) To turn on or off 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 turn on or off 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 turn on or off 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.

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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.

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Emergency Mode	Description
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 Initiate an Emergency Alarm Service

With the Emergency feature turned on 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 turned on 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 Receive an Emergency Alarm Service

You can answer an emergency alarm service without any operation.

13.2.4 End 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 via Contact Switch feature turned on, 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 turn on this feature, do either of the following:

- Tap , 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 turn on this feature, do either of the following:

- Tap , 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.

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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 turn on this feature, do either of the following:

- Do as follows:
  a. Tap .
  b. Tap **PRIVATE**, and then select a contact.
  c. In the contact details interface, turn on 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 turn on 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.
- In Trunking mode, 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.

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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 turned on, you need to use an audio accessory to output audio.

To turn on or off the feature, do as either of the following:

- Tap , tap **Sound**, and then tap **Covert mode**.
- Press the preprogrammed **Covert Mode** key.

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.

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14. Apps

14.1 Basic Operations

14.1.1 Install an App

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

14.1.2 Uninstall 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. On the home screen, touch and hold the app icon, and then tap **Uninstall App**.
2. 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 Manage App Permission

When you open an app, the app may request access to a specific function or information. You can tap **ALLOW** or

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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 Set 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**.

14.2 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.

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14.3 Documents

The **Documents** app allows you to view, download, and manage documents from the Mobile Device Management (MDM) Pro 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 View 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 View or Download 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 Manage 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.

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- 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 Set Auto Start Upon Power-On

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

14.4.2 Set 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 Take 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 .

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14.5.2 Record Videos

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

14.5.3 Adjust the Focus

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

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

14.5.4 Set 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**.
- Watermark: It allows you to add the watermark to the photo or video. The default setting is **Close**, and you can also turn on **Time watermark** and **Image watermark**.
- 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.
- Video stabilization: It allows the camera to reduce or eliminate the unwanted shaking or jittering motion in a video. This helps you to record stable and clear videos even in fast movement.

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- 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 turn off 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 View Photos

1. Tap .
2. Select the photo.

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

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14.6.2 Replay Videos

1. Tap .
2. Select the video.
3. (Optional) Tap to pause the video.

14.6.3 Manage Photos or Videos

1. Tap .
2. Touch and hold the photo or video file until appears, and then select files or tap to select all files.
3. Do any of the following:
   - To share the photo or video via **Radio**, **BT**, or **Messaging**, tap **Share**.
   - To delete the photo or video, tap **Delete**, and then tap **Delete**.
   - To move or copy the photo or video to another album, tap **More**, and then tap **Add to album** or **Copy to album**.

14.6.4 Create an Album

1. Tap .
2. Tap **Albums**.
3. Tap , and then enter the album name.
4. Tap **Save**.

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 .

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14.7.1 Record 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 Play an Audio File

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

14.7.3 Manage 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.

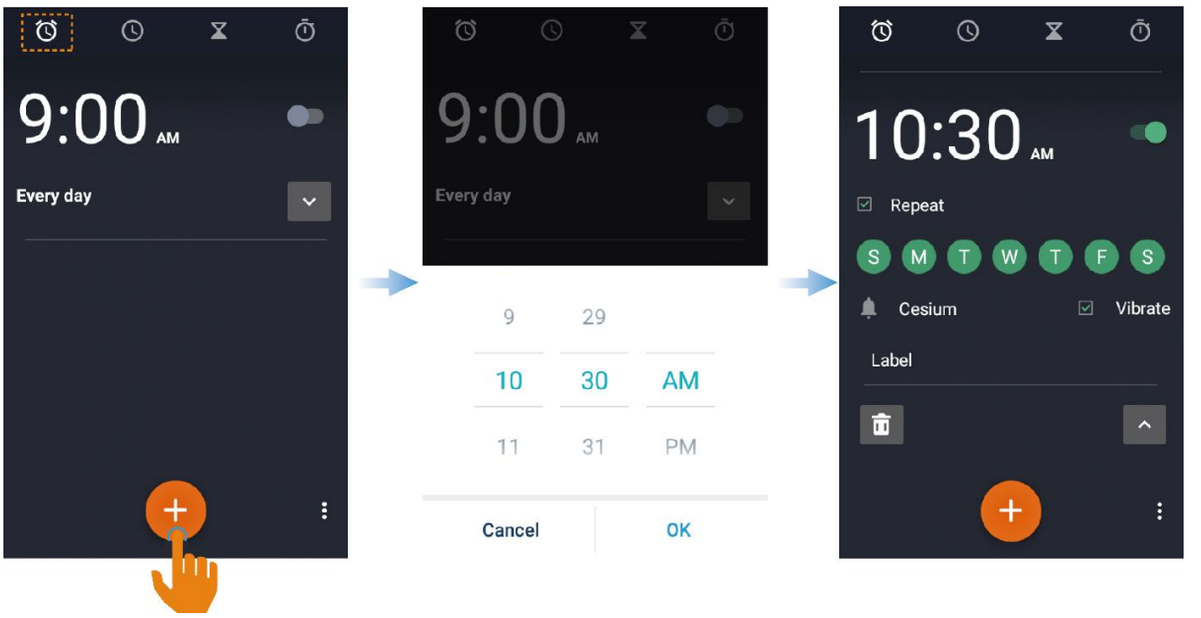
14.8 Clock

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

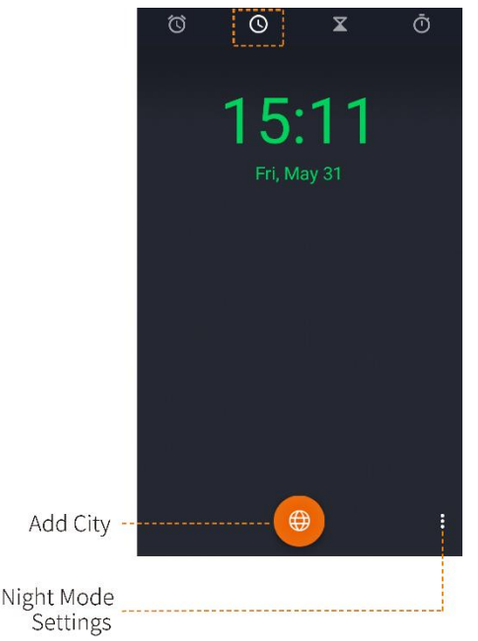
To open the clock, tap .

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14.8.1 Alarm

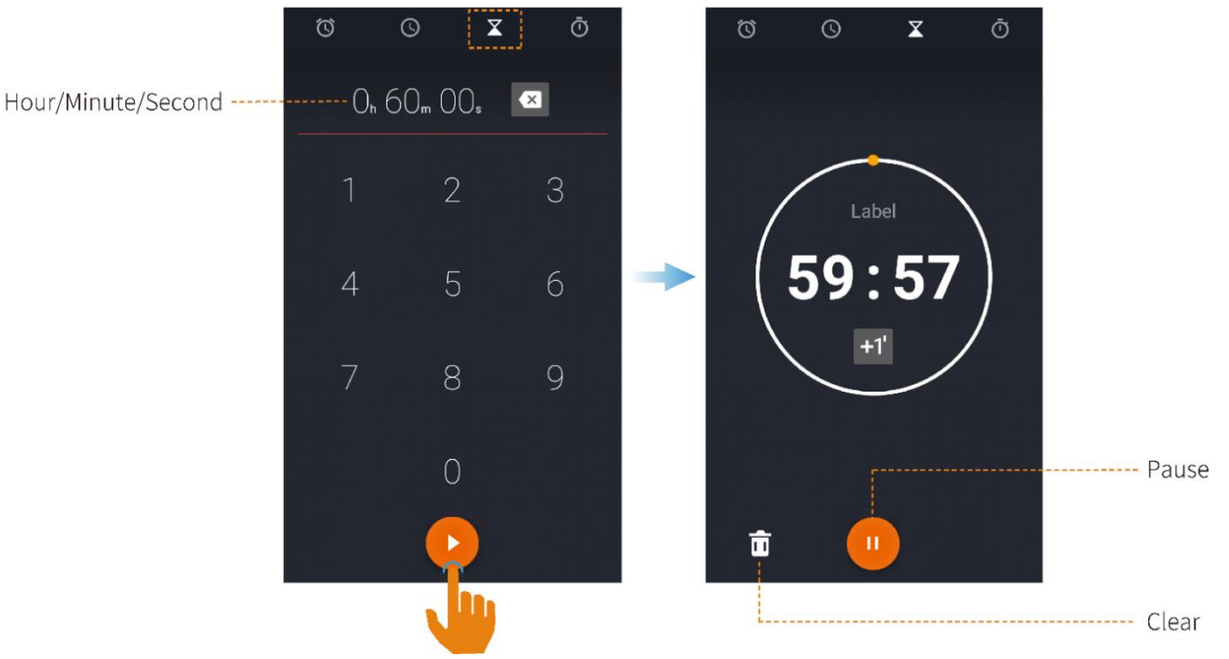


14.8.2 World Clock

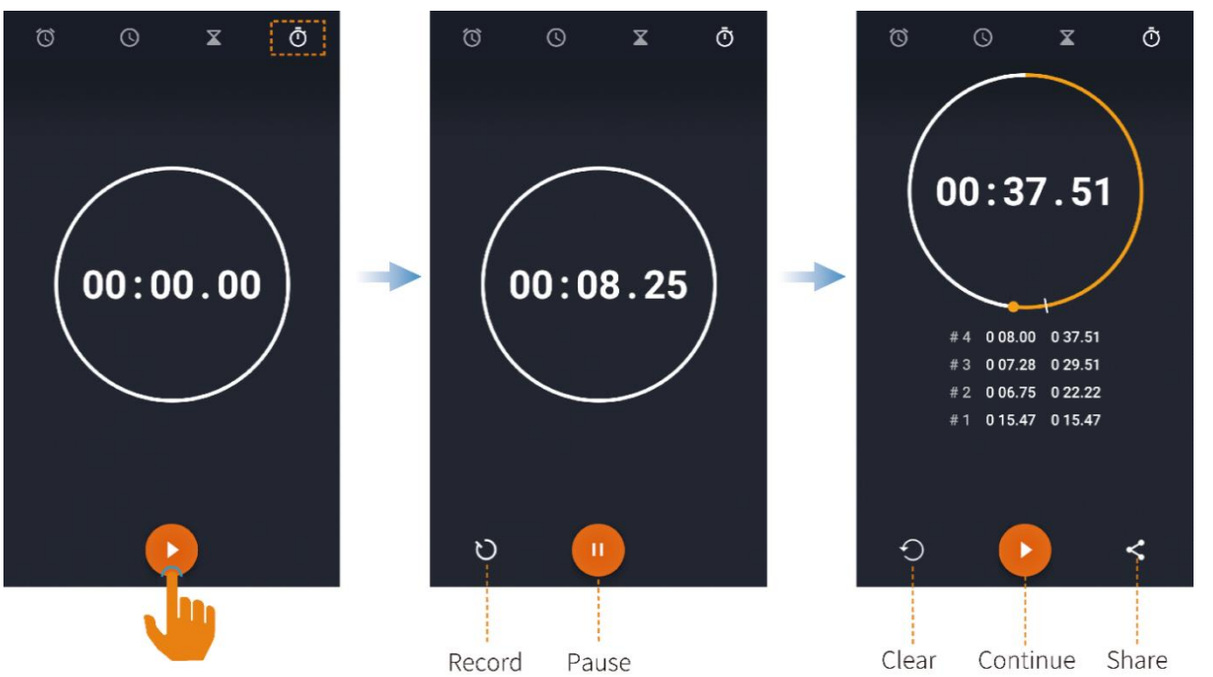


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14.8.3 Timer



14.8.4 Stopwatch



14.9 Calendar

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

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14.9.1 View the Calendar

1. Tap 19.
2. Swipe up or down to view the calendar.
3. Select a date.
4. Tap the date in the upper right corner of the screen to jump back to the current date.

14.9.2 Manage an Event

14.9.2.1 Create an Event

1. Tap 19.
2. Tap the date.
3. Tap +.
4. Enter the details including event name, reminder time, repetition cycle, and location.
5. Tap ✓.

14.9.2.2 Search an Event

1. Tap 19.
2. Tap 🔍.
3. Enter keywords in the **Search** field.
4. Tap **Search**.

14.9.2.3 Edit or Delete an Event

1. Tap 19.
2. Tap the event.
3. Tap **Edit** or **Delete**.

14.9.3 Set the Calendar

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

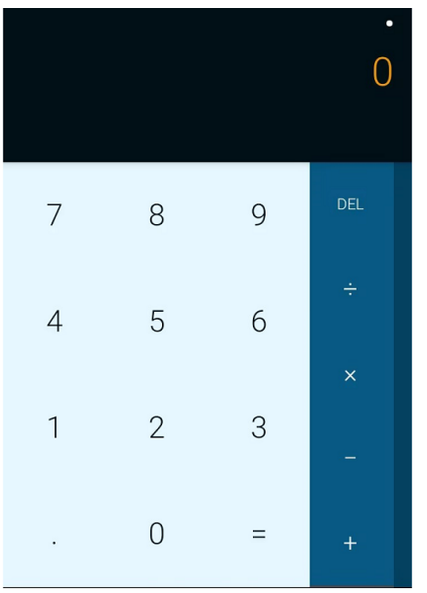
- Turn on **Show week number**.
- Tap **Week starts on** to select **Locale default**, **Saturday**, **Sunday**, or **Monday** as the first day of the week.
- Turn on **Use home time zone** to display calendar and event times in your home time zone during traveling.
- Turn on **Notifications** to set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

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14.10 Calculator

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

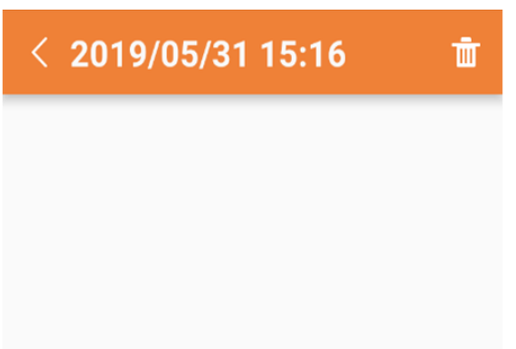
To open the calculator, tap .

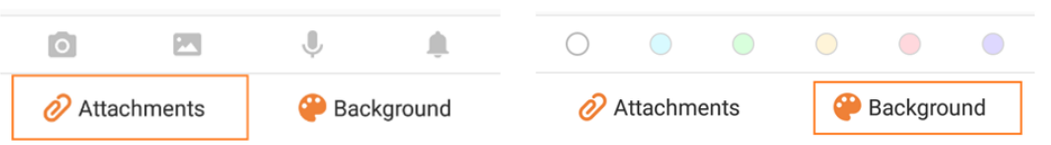


14.11 Notes

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.

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- 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**.

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14.13.1 Manage 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 View Bookmarks or History

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

14.13.3 Set 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 Manage 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 Set 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.

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c. Tap **Set as homepage**.

- To set the current or other webpage as the homepage, go to **Settings** > **General** > **Set homepage**.

14.13.6 Set 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 Set 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 turn on or off **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 turned on by your dealer, tap  to open the app.

14.14.1 Find 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 .

1. Tap a contact, and then tap its location information.

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2. Tap **Map**.

14.14.2 Send 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 Download an Offline Map

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

1. Tap .
2. Tap .
3. Tap **Download map**.
4. Select the city and download the map.

14.15 Voice Assistant

Voice Assistant allows you to use voice commands to control the radio, which improves your efficiency.

1. To activate Voice Assistant, tap or long press the **Smart Key** for three seconds.
2. (Optional) Tap ? to view the voice commands the radio supports.
3. Speak voice commands to the radio within 10s.

NOTE

This feature requires the license.

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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:
  - To adjust the brightness of the main screen, tap **Brightness level** below **Main screen**, and then drag the pop-up slider.
  - To adjust the brightness of the top screen, drag the slider below **Top screen**.
- To allow the radio to automatically adjust the brightness of the main screen, tap **Brightness level**, and then turn on **Adaptive brightness**.
- To set the duration for main screen sleep, tap **Brightness level**, tap **Main Screen timeout**, and then select a time.
- To set the sleep time of top screen backlight, tap **Brightness level**, tap **Top Screen timeout**, and then select a time.
- To allow the main screen to wake up only by the press of the specified key, turn on **Manually light up main screen**.
- To allow the main screen to wake up when receiving a notification, turn on **Wake the screen when the notification arrives**.
- To display the LED indicator status, turn on **LED**.
- To protect your eyes with warm color, tap **Eye comfort mode**, tap **TURN ON NOW**, and then drag the slider below **Intensity** to adjust the screen color intensity.
- To allow the screen to automatically switch to landscape or portrait, turn on **Auto-rotate screen**.
- To allow the screen to be readable in bright light, turn on **Bright light**.
- 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	Turn on **Silence** to enter the Silent mode. Turn off **Silence** to enter the Ring mode.	/

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Option	Audio Profile	
	Standard Mode	Covert 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.	
Call tone	With **Call tone** turned on, 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** turned on, 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** turned on, the radio emits an alert tone when receiving a notification. Options include **Broadband** and **Narrowband Vibrations**.	
Mobile service	With **Mobile service** turned on, the radio emits an alert tone when registering. You can set the alert tone type. Tap **Talkaround tone**, and then 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 turn on **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**, and then touch and drag the language to the top.
- To select the keyboard and input method, tap **Virtual keyboard**.

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15.4 Date and Time

15.4.1 Set the Date and Time

1. Tap .
2. Go to **System** > **Date & time**.
3. Do either of the following:
   - To manually set the date and time, turn off **Auto date & time**, and then tap **Date** and **Time** to set them respectively.
   - To automatically set the date and time, tap **Auto date & time**.
   - To turn on or off 24-hour format, tap **Use 24-hour format**.
   - To allow the radio to use the time zone provided by the network, tap **Auto time zone**.
   - To manually select the time zone, turn off **Auto time zone**, and then tap **Select 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. Turn on **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 turn on or off this feature, do either of the following:

- Tap , tap **Feature**, and then tap **Voice broadcast**.
- Press the preprogrammed **Voice broadcast** key.

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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:
  - Turn on **Storage manager**, and then tap **OK**.
  - Tap ☰ at the left side of **Storage manager**, and then turn on **Use Storage manager**.

NOTE

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

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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

Turn on 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 turn on **Scan**.
- Switch to the channel configured with the Auto Scan feature.

With this feature turned on, the radio scans according to 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.

Set the Scan List

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

1. Tap .
2. Tap a zone, and then tap following a 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 select short hunt,
Comprehensive	This feature allows the radio to hunt all the channels within the	

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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.	● Tap , tap **Scan**, and then turn on **Background hunt**, **Home station hunt**, **Handover**, or Timeout auto hunt. ● Press the preprogrammed **Background hunt**, **Home station hunt**, **Handover**, or **Timeout auto hunt** 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.	
Timeout auto hunt	When the radio failed to send audio or data in a preset time, the radio will automatically hunt for an adjacent available BS and register with it, and then re-send them.	

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 , tap **PRIVATE**, select a contact, and then tap **Alert call**.

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- 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 , tap **PRIVATE**, select a contact, and then tap **Radio check**.
- 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 , tap **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.
  - Receive stunned command.

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 Mode	On a digital channel, you can do any of the following: ● 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.	● For call services on a digital channel, press the **One Touch Call/msg** key, and then press and hold the **PTT** key. ● For other services, press the preprogrammed **One touch call/msg** key.
Trunking Mode	● 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 should be licensed before use.

16.7.1 Convectional Mode

Turn on 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 turned on, the radio roams according to the roam list.

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Set the Roam List

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

1. Tap .
2. Tap a zone, tap following a channel.
3. Tap  to edit the roam list.

NOTE

- Either the Scan feature or the Roam feature can be turned on 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 turned on by your dealer.

NOTE

The feature should be licensed before use.

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 turn on or off 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

The feature should be licensed before use.

16.9 Single Frequency Repeater

In direct mode, the Single Frequency Repeater feature allows the radio to assign one slot to receive signals and the other slot to transmit signals with the same frequency and color code. When the radio is out of network coverage area, the radio still can transmit voice, data, and signaling, extending the communication range and saving frequency resources.

NOTE

The feature should be licensed before use.

To turn on the feature, do one of the following:

- Tap , and then tap **Single frequency repeater**.
- Press the preprogrammed **Single frequency repeater** key.
- If the digital channel has configured with the Auto Open SFR feature, the radio will automatically turn on the Single Frequency Repeater feature when switching to the channel.

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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 MDM Pro system.

- After the MDM Pro server sends an upgrade notification to the radio, you can manually upgrade the system. If you delay upgrading, the notification will appear periodically.
- The MDM Pro 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 MDM Pro server after registration, and then can be managed through the MDM Pro server.

1. Tap , tap **Accounts**.
2. Tap **MDM ID**, and then do any of the following:
   - If the status is disconnected, turn on 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 MDM Pro. 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

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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	Move to an open and flat area, and try again.

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Phenomena	Analysis	Solution
	unfavorable position. For example, the signal may be blocked by tall buildings or frustrated in the underground areas.	
	The radio may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
The GPS cannot locate your position.	The radio may be at an unfavorable position. For example, the signal may be blocked by tall buildings or frustrated in the underground areas.	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 turned off for the SIM card.	Contact the carrier to turn on the mobile data feature.
	The signal may be weak.	Make sure the radio is within the network coverage.
	Both Data and WLAN are turned	Turn off WLAN.

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Phenomena	Analysis	Solution
	on, but the WLAN connection is unstable.	
The battery fails to be charged.	The battery may be placed into the charger improperly.	Remove and reinsert the battery.
	The power adapter plug may be inserted into the socket improperly.	Remove and reinsert the plug.

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

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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℃ to 45℃.
- 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.

1. Use the non-metal brush to clean up the dust or dirt on the radio surface.
2. Use the lint-free cloth with proper neutral cleanser to clean the surface, screen, keys, knobs, and interfaces.
3. Use another lint-free cloth with proper pure water to clean up the cleanser or residue.
4. 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 ≥ 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℃ to 25℃ 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

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21. Statement

21.1 Copyright

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21.2 Disclaimer

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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.

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- 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.

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

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.

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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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