



PDC580 Multi-mode Radio User Manual

Preface

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

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

This manual is applicable to the following product:

PDC580 Multi-mode Radio

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Documentation Information

Documentation Conventions

Instruction 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 box appears.
		Press the PTT key.
" "	Denotes messages, directories, file names, folder names, and parameter values.	The screen displays "Invalid Battery!".
		Open "PSS.exe".
		Go to "D:/opt/local".
		In the Port text box, enter "22".
>	Directs you to access a multi-level menu.	Go to File > New .
<i>Italic</i>	Denotes document titles.	For details about using the DWS, refer to <i>Dispatch Workstation User Guide</i> .
Courier New	Denotes commands and their execution results.	To set the IP address, run the following command: 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.
Press and hold	Keep the key pressed.

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	Antenna	1
Battery	1	Belt Clip	1
Power Adapter	1	Strap	1
Charger	1	Documentation Kit	1
SIM-removal Tool	2	/	/

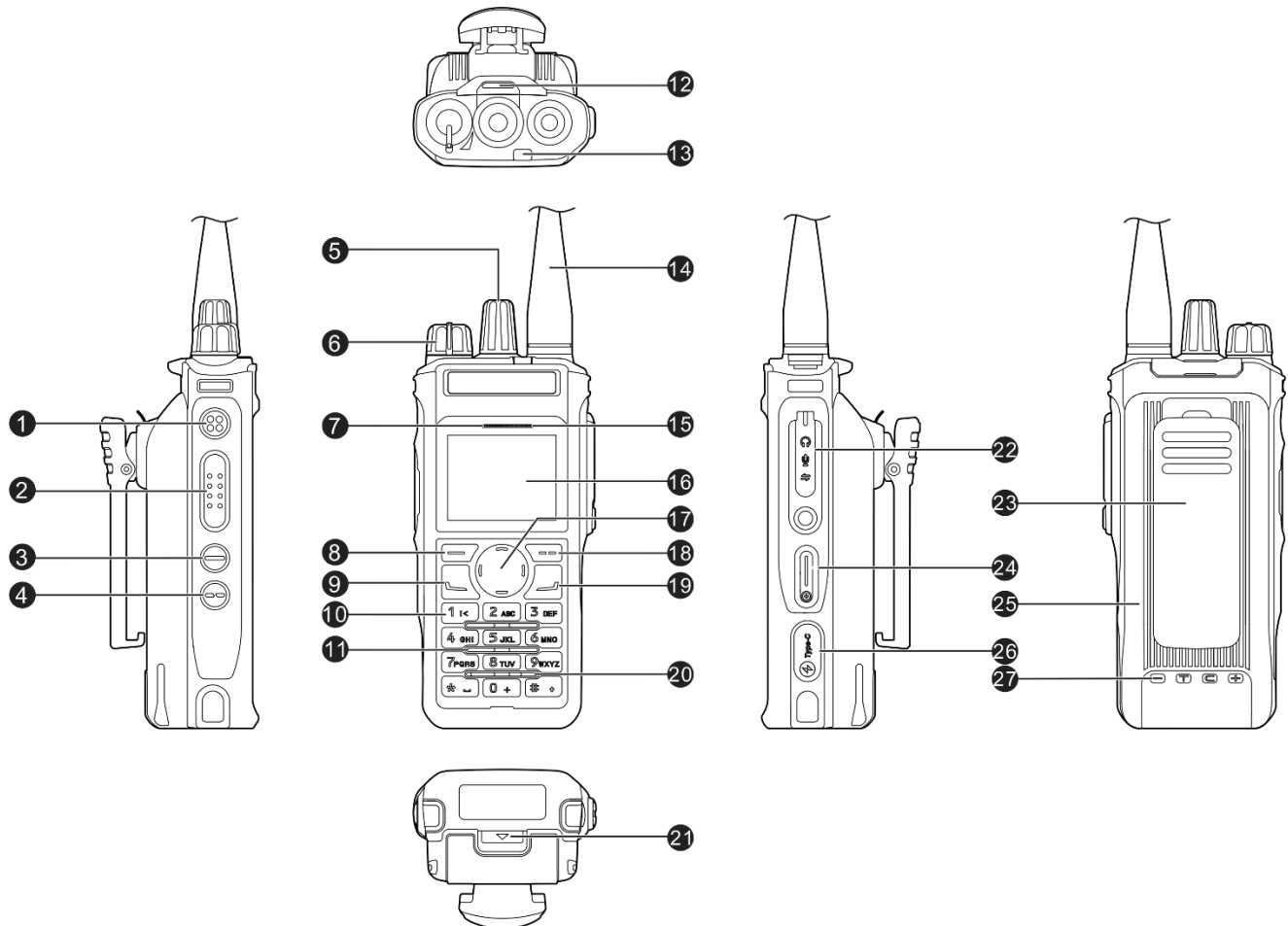


NOTE

- Figures in this manual are only for reference.
- Check that the radio label on the battery slot matches the product you bought. If not, contact your dealer.

2. Product Overview

2.1 Product Layout



No.	Part Name	No.	Part Name	No.	Part Name
1	Auxiliary Push-to-Talk (PTT) Key	10	Keypad	19	End Key
2	Primary PTT Key	11	Speaker	20	Microphone
3	Side Key 2 (SK2)	12	Strap Hole	21	Battery Latch
4	Side Key 3 (SK3)	13	LED Indicator	22	Accessory Connector
5	Channel Selector Knob	14	Antenna	23	Belt Clip
6	On-Off/Volume Knob	15	Receiver	24	SIM Card Slot
7	Microphone	16	LCD Display	25	Battery
8	OK/Menu Key	17	Navigation Key	26	USB Type-C Port

No.	Part Name	No.	Part Name	No.	Part Name
9	Answer Key	18	Back Key	27	Charging Contacts

2.2 Programmable Key

For convenience, you can assign the **Auxiliary PTT** key, **SK2**, and **SK3** as shortcuts to radio features. For details, consult your dealer.

3. Before Use

3.1 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).

- Use the charger to charge the battery alone or the battery attached to the radio.
You can learn about the charging status through the LED indicator on the charger. For details, refer to the label at the bottom of the charger.
- Connect the radio with battery attached to the power adapter, power bank, or PC through the USB Type-C cable.

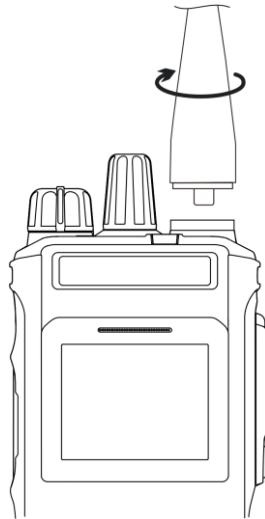
You can learn about the charging status through the LED indicator on the radio.

LED Indicator	Charging Status
Solid red	The battery is being charged.
Flashing red rapidly	The battery fails to be charged.
Solid green	The battery is fully charged.

3.2 Attach the Antenna

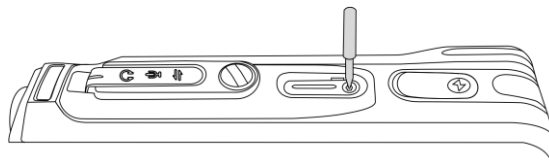
CAUTION

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.

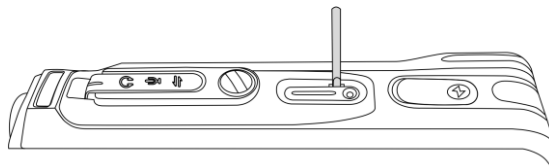


3.3 Install the SIM Card

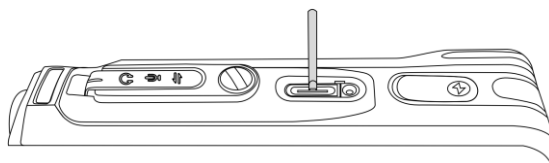
1. Use a Phillips screwdriver to loosen the screw on the SIM card cover.



2. Use a flathead screwdriver to remove the SIM card cover.



3. Use a flathead screwdriver to extract the SIM card tray.



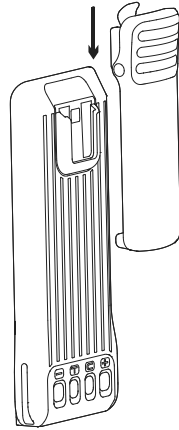
4. Place the SIM card into the tray.

Make sure that the notch on the SIM card is aligned with the notch on the tray.

5. Insert the SIM card tray into the radio.
6. Put the SIM card cover back in place, and then secure it with a screw.

3.4 Attach the Belt Clip

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



NOTE

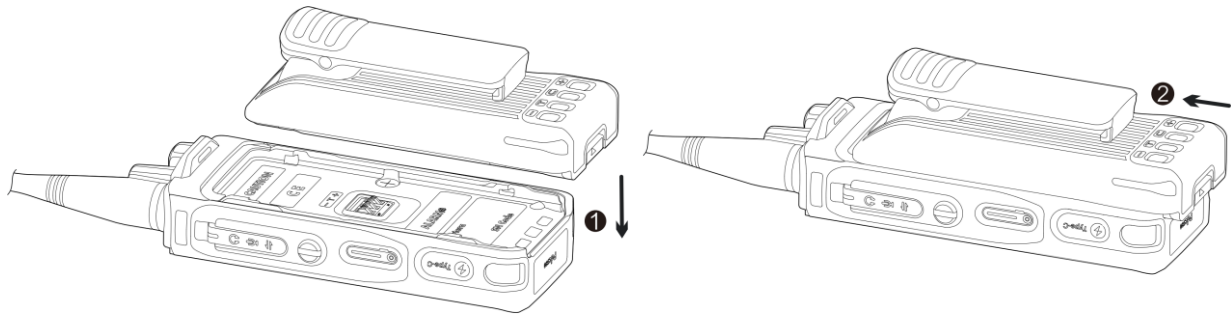
You can press and hold the spring plate on the belt clip and push the belt clip upwards to remove it.

3.5 Attach the Battery

CAUTION

- Use the approved battery 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. Align the tabs on the battery with the grooves in the battery slot.
2. Press and push the battery into the battery slot until a click is heard.

**NOTE**

To remove the battery, make sure that the radio is turned off, and then lift the battery latch.

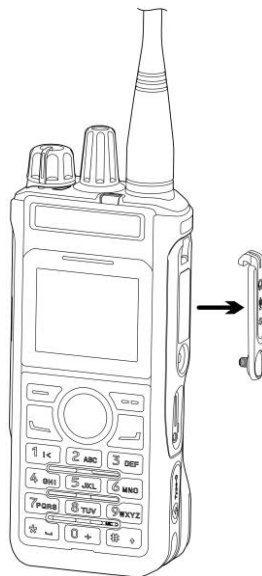
3.6 Attach the Audio Accessory

CAUTION

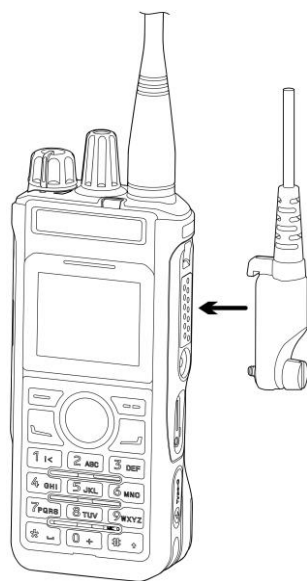
For optimal waterproof and dustproof performance, do as follows:

- To avoid scraping the silicone rubber surrounding the accessory connector screw hole, attach the accessory with care.
- After removing the accessory, close the accessory connector cover and fasten the screw.

1. Loosen the screw on the accessory connector cover, and then remove the cover.



2. Insert the audio accessory plug into the accessory connector.



3. Tighten the screw on the audio accessory plug.

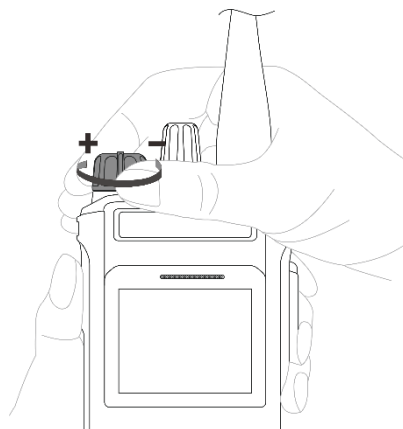


4. Basic Operations

4.1 Turn On or Off the Radio



4.2 Adjust the Volume



4.3 Switch the Mode

You can switch the radio to Broadband mode, Narrowband mode, Broadband & Narrowband mode, or Repeater mode.

NOTE

Repeater mode requires a license. In Repeater mode, the radio can relay audio between public network and PMR network.

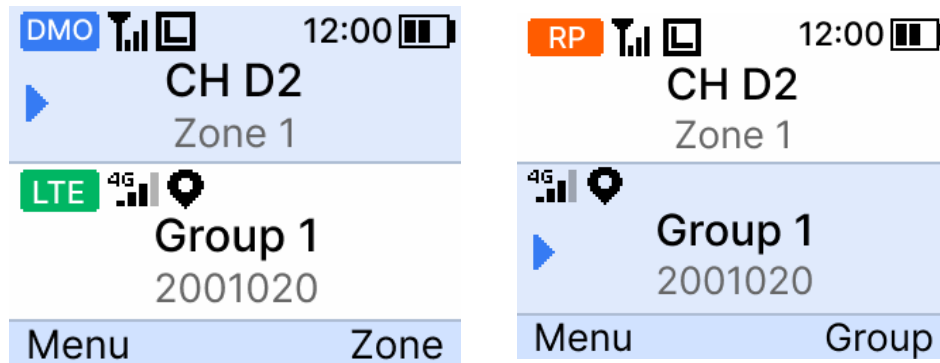
To switch the work mode, do either of the following:

- On the home screen, go to **Menu > Mode**, select a mode, and then press the  key.
- Press the preprogrammed **Mode Switch** key.

In Broadband & Narrowband or Repeater mode, the upper part of the screen shows the narrowband information, and lower part of the screen shows the broadband information.

You can press **Up** key or **Down** key to select the desired area.

The icon  on the left indicates the selected area.



4.4 Select the Standby Group

Broadband Mode

- Rotate the **Channel Selector** knob.
- On the home screen, press the **Left** key or **Right** key.

Broadband & Narrowband Mode or Repeater Mode

1. On the home screen, press the **Up** key or **Down** key to select the broadband information area.
2. Do either of the following:
 - Rotate the **Channel Selector** knob.
 - On the home screen, press the **Left** key or **Right** key.

4.5 Select the Zone

Narrowband Mode

- On the home screen, press the **Up** key or **Down** key.
- Press the preprogrammed **Zone Up** or **Zone Down** key.

Broadband & Narrowband Mode or Repeater Mode

1. On the home screen, press the **Up** key or **Down** key to select the narrowband information area.
2. Press the preprogrammed **Zone Up** or **Zone Down** key.

4.6 Select the Channel

Narrowband Mode

- On the home screen, press the **Back** key, select a zone, and then select a channel.
- Rotate the **Channel Selector** knob.
- On the home screen, press the **Left** key or **Right** key.

Broadband & Narrowband Mode or Repeater Mode

1. On the home screen, press the **Up** key or **Down** key to select the narrowband information area.
2. Do either of the following:
 - On the home screen, press , select a zone, and then select a channel.
 - Rotate the **Channel Selector** knob.
 - On the home screen, press the **Left** key or **Right** key.

4.7 Lock or Unlock the Keypad

When the keypad is idle, it is recommended that you lock it to avoid misoperations.

- Auto lock
 - a. On the home screen, go to **Menu > Settings > Preferences > Keypad Lock**.
 - b. Select **Auto Lock**, and then press .
 - c. (Optional) Select **Timer**, press , and then set the auto lock time.

If the radio remains idle beyond the preset auto lock time, the keypad will be locked automatically.

- Manual lock or unlock
 - On the home screen, press , and then press .
 - Press the preprogrammed **Keypad Lock/Unlock** key.

4.8 Log In to or Log Out of Hytera HyTalk

4.8.1 Log In

NOTE

The radio automatically logs in to Hytera HyTalk after being turned on.

- Broadband mode

On the home screen, press .

- Broadband & Narrowband mode or Repeater mode
 - a. On the home screen, press the **Up** key or **Down** key to select the broadband information area.
 - b. Press .

4.8.2 Log Out

- Broadband mode

On the home screen, go to **Menu > Settings**, select **Log Out**, and then press .
- Broadband & Narrowband mode or Repeater mode
 - a. On the home screen, press the **Up** key or **Down** key to select the broadband information area.
 - b. Go to **Menu > Settings**, select **Log Out**, and then press .

4.9 View Radio Information

On the home screen, go to **Menu > Settings > About Radio**, and then view radio information including model, serial number, frequency, software version, and more.

5. Status Indications

You can learn about the radio status through LCD icons and the LED indicator.

5.1 LCD Icons

Type	Icon	Radio Status
Common		Battery level
		Charging
		Low battery
		Accessory connected
		Silent mode
		BT turned on
		BT accessory connected
		TF card abnormal
		TF card full
		Recording
Broadband		Signal strength in 2G/4G mobile network
		Airplane mode turned on.
		No SIM card
		GPS turned on, but no valid positioning data received
		GPS turned on, and valid positioning data received
Narrowband		Standby or transmitting in digital mode (D: Direct mode; R: Repeater mode)
		Signal strength in narrowband network
		Transmitting in analog mode
		Low Power mode
		High Power mode
		Scanning

Type	Icon	Radio Status
		Staying on active channel
		Staying on Priority Channel 1
		Staying on Priority Channel 2
		Roaming
		Staying on site
		Monitor turned on
		Scrambler turned on
		Squelch Off turned on
		Emergency call
		Encryption turned on
		Missed call
		New message or unread message

5.2 LED Indicator

LED Indicator		Radio Status
Flashing green		Turning on
Solid green		Receiving
Solid red		Transmitting
Flashing orange slowly		Scanning in narrowband mode
Flashing orange rapidly		Emergency in narrowband mode
Solid orange		Call hang time in narrowband digital mode In such a period, you can press and hold the PTT key to call back.
Flashing blue	Once every 3s	BT turned on, but no BT device connected
	Once every 1.5s	BT device connected
	Once every 0.1s	Turning off BT

6. Call Services

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

6.1 PoC Call

Only when the following conditions are met, you can make a PoC call.

- The radio has been connected to public network according to [3.3 Install the SIM Card](#) and [9.1 Mobile Data](#).
- The radio mode has been set to **Broadband** or **Broadband & Narrowband** according to [4.3 Switch the Mode](#).
- You have logged in to Hytera HyTalk according to [4.8.1 Log In](#).

6.1.1 Private Call

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

6.1.1.1 Set Favorite Contact

1. On the home screen, go to **Menu > Contacts > Private**.
2. Select a private contact, and then press .
3. Select **Favorite**, and then press .

6.1.1.2 Initiate a Private Call

Through the Contact List

1. On the home screen, go to **Menu > Contacts**.
2. Press **Left** key or **Right** key to select **Private** or **Fav**.
3. Select a private contact.
4. Initiate a call through either of the following:
 - Press and hold the **Primary PTT** key.
 - Press , select **Half Duplex Private**, and then press .

When the call is established, press and hold the **Primary PTT** key to speak. When you finish speaking, release the **Primary PTT** key.

Through the Call Log

1. On the home screen, go to **Menu > Recents**.

2. Select a private call log, and then press .
3. Select **View**, and then press .
4. Press and hold **Primary PTT** key.

When the call is established, press and hold the **Primary PTT** key to speak. When you finish speaking, release the **Primary PTT** key.

6.1.1.3 Answer a Private Call

For a private call, the answer mode is subject to the configuration.

- OACSU: Answer it without any operation.
- FOACSU: Press the **Answer** key.

6.1.1.4 End a Private Call

When either the calling party or the called party presses , a private call ends.

6.1.2 Group Call

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

6.1.2.1 Initiate a Group Call

Through the Standby Group

1. Select a standby group according to [4.4 Select the Standby Group](#).
2. Press and hold the **Primary PTT** key.

Through the Contact List

1. On the home screen, go to **Menu > Contacts**.
2. Select a group contact, and then press and hold the **Primary PTT** key.

Through the Call Log

1. On the home screen, go to **Menu > Recents**.
2. Select a group call log, and then press .
3. Select **View**, and then press .
4. Press and hold **Primary PTT** key.

6.1.2.2 Answer a Group Call

You can answer a group call without any operation.

6.1.2.3 End or Exit a Group Call

- The calling party presses  to end the group call.
- The called party presses  to exit the group call.

6.2 PMR Call

Only when the radio mode has been set to **Narrowband** or **Broadband & Narrowband** according to [4.3 Switch the Mode](#), you can make a PMR call.

6.2.1 Private Call

6.2.1.1 Initiate a Private Call

Through the Preset Contact

1. Rotate the **Channel Selector** knob to select a digital channel with a preset private contact.
2. Initiate a call through either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

Through the Contact List

1. Enter the **Contacts** interface through either of the following:
 - On the home screen, go to **Menu > Contacts**.
 - Press the preprogrammed **Contact List** key.
2. Press **Left** key or **Right** key to select **Private**.
3. Select a private contact.
4. Initiate a call through either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

Through the Call Log

1. Enter the call log interface through either of the following:
 - On the home screen, go to **Menu > Recents**.
 - Press the preprogrammed **Call Log** key.
2. Select a private call log.
3. Initiate a call through either of the following.

- In Narrowband mode, press and hold the **Primary PTT** key.
- In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

6.2.1.2 Answer a Private Call

You can answer a private call without any operation.

6.2.1.3 End a Private Call

A private call ends when no party presses the **Primary PTT** key or **Auxiliary PTT** key to apply for talk permit before the call hang time expires.

6.2.2 Group Call

6.2.2.1 Initiate a Group Call

Through the Preset Contact

1. Rotate the **Channel Selector** knob to select a digital channel with a preset group contact.
2. Initiate a call through either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

Through the Contact List

1. Enter the **Contacts** interface through either of the following:
 - On the home screen, go to **Menu > Contacts**.
 - Press the preprogrammed **Contacts** key.
2. Select a group contact.
3. Initiate a call through either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

Through the Call Log

1. Enter the call log interface through either of the following:
 - On the home screen, go to **Menu > Recents**.
 - Press the preprogrammed **Call Log** key.
2. Select a group call log.
3. Initiate a call through either of the following:

- In Narrowband mode, press and hold the **Primary PTT** key.
- In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

6.2.2.2 Answer a Group Call

You can answer a group call without any operation.

6.2.2.3 End a Group Call

A group call ends when no party presses the **Primary PTT** key or **Auxiliary PTT** key to apply for talk permit before the call hang time expires.

6.2.3 All Call

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



NOTE

The All Call feature is preprogrammed by your dealer.

6.2.3.1 Initiate an All Call

Through the Preset Contact

1. Rotate the **Channel Selector** knob to select a digital channel with a preset all call contact.
2. Do either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

Through the Contact List

1. Enter the **Contacts** interface through either of the following:
 - On the home screen, go to **Menu > Contacts**.
 - Press the preprogrammed **Contacts** key.
2. Select an all call contact.
3. Initiate a call through either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

6.2.3.2 Answer an All Call

You can answer an all call without any operation.

6.2.3.3 End an All Call

- In Narrowband mode, an all call ends when the calling party releases the **Primary PTT** key.
- In Broadband & Narrowband mode, an all call ends when the calling party releases the **Auxiliary PTT** key.

6.2.4 Broadcast Call

A broadcast call is a special group call, during which only the calling party can transmit voice.



NOTE

The Broadcast Call feature is preprogrammed by your dealer.

6.2.4.1 Initiate a Broadcast Call

1. Enter the **Contacts** interface through either of the following:
 - On the home screen, go to **Menu > Contacts**.
 - Press the preprogrammed **Contacts** key.
2. Select the group contact, and then press .
3. Select **Broadcast Call**, and then press .
4. Press and hold the **Primary PTT** key.

6.2.4.2 Answer a Broadcast Call

You can answer a broadcast call without any operation.

6.2.4.3 End a Broadcast Call

A broadcast call ends when the calling party releases the **PTT** key.

6.2.5 Call on Analog Channel (Without Signaling)

On an analog channel without signaling, you can initiate a call to all the other users on the channel.

1. On the home screen, select an analog channel.
2. Initiate a call through either of the following:
 - In Narrowband mode, press and hold the **Primary PTT** key.
 - In Broadband & Narrowband mode, press and hold the **Auxiliary PTT** key.

7. Message Services

You can send and receive text messages on the radio.

7.1 Send a Message

1. Go to **Menu > Messages > New Msg.**
2. Enter the text, and then press .
3. Select **Send**, and then press .

You can also select **Save**. This will save the message as draft.

4. Select either of the following:
 - **Contacts List:** Select a group contact from the contacts list.
 - **Dial:** Manually enter a private contact.
5. Press  to send the message.

7.2 Send a Quick Text

1. Go to **Menu > Messages > Quick Text.**
2. Select a quick text, and then press .
3. Select either of the following:
 - **Contacts List:** Select a group contact from the contacts list.
 - **Dial:** Manually enter a private contact.
4. Press  to send the quick text.

7.3 View a Message

You can view a message in either of the following ways:

- When a message is received, press  to view the message.
- Go to **Menu > Messages > Inbox/Outbox**, select a message, and then press .

7.4 Related Operations

For messages in Inbox, Outbox, or Drafts, you can perform the following operations:

- **Edit:** Edit the message.
- **Reply:** Reply a message with text or quick text.

- Forward: Send the message to another contact.
 - Delete: Delete the selected message.
 - Delete All: Clear all messages in **Inbox** or **Outbox**.
-

**NOTE**

In Drafts, only the Edit and Delete operations are available.

8. Basic Settings

8.1 Display

8.1.1 Adjust the Brightness

You can adjust display brightness according to your need.

1. On the home screen, go to **Menu > Settings > Preferences**.
2. Select **Display**, and then press .
3. In the **Display** interface, press the **Up** key or **Down** key to select a brightness level.
4. Press .



NOTE

Higher level indicates brighter display.

8.1.2 Set the Sleep Time

When the radio is idle for a preset time, the screen automatically goes off to save battery power.

1. On the home screen, go to **Menu > Settings > Preferences**.
2. Select **Display**, and then press .
3. In the **Display** interface, press the **Right** key to select **Sleep**.
4. Select a time, and then press .

8.2 Call Priority

In Broadband & Narrowband mode, Call Priority allows you to determine whether a PoC or a PMR call is handled first if both calls arrive simultaneously.

1. Switch the radio to Broadband & Narrowband mode according to [4.3 Switch the Mode](#).
2. On the home screen, go to **Menu > Settings > Radio > Call Priority**.
3. Select one of the following priority:
 - **PoC Call**: The radio initiates or receives the PoC call first.
 - **PMR Call**: The radio initiates or receives the PMR call first.
 - **FCFS**: The radio initiates or receives the call that comes first.
4. Press .

8.3 Simulcall

In Broadband & Narrowband mode, Simulcall allows you to press the **Primary PTT** key to initiate a PoC call and PMR call simultaneously.

NOTE

This feature requires a license.

1. Switch the radio to Broadband & Narrowband mode according to [4.3 Switch the Mode](#).
2. On the home screen, go to **Menu > Settings > Radio**.
3. Select **Simulcall**, and then press .

8.4 Alert Tone

You can turn on or off the alert tone.

1. On the home screen, go to **Menu > Settings > Preferences > Sound > Tone**.
2. Select **Mute All**, and then press .

8.5 BT

BT is a wireless technology that supports short-distance communications and data exchange between devices. You can connect the radio to a BT device through the built-in BT module.

CAUTION

- To derive optimal communication quality, it is recommended that you use the BT devices approved by the Company.
 - If BT earpieces of other companies are used, you must use them with the wireless ring PTT of the Company. Otherwise, the earpieces cannot transmit.
-

8.5.1 Connect to a BT Device

1. On the BT device, turn on BT and enter the pairing status.
For details, refer to the related user manual of the BT device.
2. On the radio, turn on BT.
 - On the home screen, go to **Menu > BT**, select **BT**, and then press .
 - Press the preprogrammed **BT** key.

 NOTE

BT applies only to radios with the BT module.

3. On the home screen, go to **Menu > BT > Search Device**.
4. Select the BT device from the detected device list.
5. Press .

After the radio is connected to the BT device, the screen shows "BT connected", and the LED indicator flashes blue every 1.5 seconds.

8.5.2 View BT Information

1. On the home screen, go to **Menu > BT**.
2. Select **Device Information**, and then press .

You can view the BT name and MAC address.

8.6 Call Record

The Call Record feature allows you to record the current call. After the call ends, you can press the preprogrammed **Record Playback** key to play back the recording, and press the key again to stop playback.

 NOTE

The Call Record feature is preprogrammed by your dealer.

9. PoC Features

9.1 Mobile Data

Before you connect the radio to the mobile network, make sure that the Nano SIM card is installed and the cellular data service is activated.

1. On the home screen, go to **Menu > Settings > Wireless & Network**.
2. Select **Mobile Data**, and then press .

9.2 Airplane Mode

When you are in an airplane or in an area with radio restrictions, you may be required to turn off your radio or make your radio enter the airplane mode. In airplane mode, your radio automatically disables the mobile network. In this case, you cannot use voice or data services.

1. On the home screen, go to **Menu > Settings > Wireless & Network**.
2. Select **Airplane Mode**, and then press .

9.3 Location

9.3.1 Turn On Location

1. On the home screen, go to **Menu > Settings > Preferences > Location**.
2. Select **Location**, and then press .

9.3.2 Set Location System

You can set the location system according to your need.

1. On the home screen, go to **Menu > Settings > Preferences > Location**.
2. Select **Location System**, and then press .
3. Select any of the following systems:
 - Location
 - BD
 - Location & BD & GALILEO
 - Location & GLONASS & GALILEO
4. Press .

9.3.3 Turn on High Accuracy

To turn on high accuracy, do as follows:

1. On the home screen, go to **Menu > Settings > Preferences > Location**.
 2. Select **High Accuracy**, and then press .
- When you turn on high accuracy, the radio reports location information more frequently. This allows the platform to receive more accurate positioning data.
 - When you turn off high accuracy, the radio reduces the frequency of location reports. This saves power and extends battery life.

9.3.4 Check Radio Location

You can check the location information of the radio, including status, longitude, latitude, altitude, direction, and speed.

1. On the home screen, go to **Menu > Settings > Preferences > Location**.
2. Select **Details**, and then press .

10. PMR Features

10.1 CH Display

CH Display allows you to set the information to be displayed on the home screen.

1. On the home screen, go to **Menu > Settings > Preferences > CH Display**.
2. Select **CH Number**, **Alias**, or **Frequency**, and then press .

10.2 Power Level

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

To adjust the power level, do either of the following:

- On the home screen, go to **Menu > Settings > Radio > Power Level**, select **High Power** or **Low Power**, and then press .
- Press the preprogrammed **Power Level Adjustment** key.

10.3 Scan

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

Turn on Scan

- Go to **Menu > Scan**, select **Scan**, and then press .
- Press the preprogrammed **Scan** key.

With this feature turned on, the radio scans according to the scan list preset for the current channel and the LED indicator flashes orange slowly.

When detecting activities on a channel, the radio stays on the channel. The LED indicator glows green. If the radio stays on a non-priority channel, the screen shows . If the radio stays on Priority Channel 1 or Priority Channel 2, the screen shows  or .

Set the Scan List

The scan list is a list of up to 32 channels that the radio scans, which includes analog channels and digital channels.

Go to **Menu > Scan > Scan List**, select the scan list, and then do any of the following:

- Select **View** to view or manage all channels on the current list.

To prioritize scanning a specific channel, set the channel as **Priority CH1** or **Priority CH2**.

- Select **Set Default** to set the list as the default scan list.
- Select **Add Channel** to add a new channel to the list.
- Select **Del Channel** to remove a channel from the list.

10.4 Roaming

Roaming allows the radio in a multi-site connect IP network to automatically select the best available site based on signal strength, ensuring continuous communication across sites.

To turn on or off roaming, press the preprogrammed **Roaming** key.

10.5 Squelch Level

Squelch Level allows you to adjust the squelch level of the radio. The squelch level refers to the squelch threshold required for the speaker of the radio to be turned on. The higher squelch level requires a stronger signal.

To adjust the squelch level, press the preprogrammed **Adjust Squelch Level** key.

10.6 Encrypt

Encrypt provides end-to-end encryption for voice and data to prevent eavesdropping.

To turn on or off encrypt, press the preprogrammed **Encrypt** key.

NOTE

- The Encrypt feature requires a license.
 - The Encrypt feature is turned on for the specific channel. When you switch to this channel, the radio automatically turns on encryption.
-

10.7 Scrambler

Scrambler allows the radio to invert the frequency spectrum of transmitted audio signals. Only the receiving radio with the same Scrambler settings can restore the audio signals. This prevents eavesdropping and ensures communication privacy.

NOTE

This feature requires a license.

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

- On the home screen, go to **Menu > Settings > Radio**, select **Scrambler**, and then press .
- Press the preprogrammed **Scrambler** key.

10.8 Talk Around

Talk Around allows you to continue communication in direct mode when the repeater malfunctions or your radio is out of the coverage of the repeater.

If the channel is configured with Talk Around, to turn on or off Talk Around, press the preprogrammed **Talk Around** key.

10.9 Man Down

Man Down allows the radio to automatically enter the emergency mode when the radio is inclined by an angle greater than the preset angle for a preset time.

You can place the radio upright to exit the emergency mode.

To turn on this feature, go to **Menu > Settings > Man Down**.

10.10 Emergency Service

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

In emergency mode, the radio transmits at high power level by default. According to the emergency type preset by your dealer, the radio gives different indications as follows:

Emergency Type	Description
Siren Only	The radio emits siren and displays  , but does not transmit any emergency signal to the control center.
Regular	The radio gives visible or audible indications.

In addition, you can request your dealer to set one of the following emergency modes:

Emergency Mode	Description	Note
Call Only	It allows you to initiate an emergency call by pressing the Primary PTT key.	

Emergency Mode	Description	Note
Alarm	It allows you to send an emergency code, but cannot initiate an emergency call.	If the emergency type is Siren Only, you do not need to set the emergency mode.

10.10.1 Initiate an Emergency Service

Press the preprogrammed **Emergency On** key to initiate an emergency service to the preset contact.

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

10.10.2 Receive an Emergency Call

You can answer an emergency call without any operation.

10.10.3 End an Emergency Service

- Calling party
 - Press the preprogrammed **Emergency Off** key.
 - Turn off the radio.
- Called party
 - Switch the channel.
 - Turn off the radio.

10.11 Radio Disable and Enable



NOTE

The Radio Disable and Enable features are preprogrammed by your dealer.

- Radio Disable

You can send the Radio Disable command to a private contact to disable its radio. The disabled radio is incapable of any function except being monitored remotely.
- Radio Enable

To restore the disabled radio to normal use, you can send the Radio Enable command to a private contact or send the radio to your dealer for reprogramming.

11. Troubleshooting

Phenomena	Analysis	Solution
The radio cannot be turned on.	The battery may be installed improperly.	Reattach the battery.
	The battery power may have 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 keys do not work.	The keys may fail to function temporarily.	Restart the radio.
	The keys may be damaged.	Contact your dealer or technicians of the Company for maintenance.
The LED indicator is abnormal.	The indication may be abnormal.	Restart the radio.
	The LED indicators may be damaged.	Contact your dealer or technicians of the Company for maintenance.
The LCD display does not work.	The LCD display may fail to function temporarily.	Restart the radio.
	The LCD display may be damaged.	Contact your dealer or technicians of the Company for maintenance.
During receiving, the voice is weak, discontinuous, or totally inactive.	The signal may be weak.	Make sure that the radio is within the signal coverage.
	The volume may be low.	Increase the volume.
	The speaker may be blocked or damaged.	Clean the surface of the speaker.
The battery fails to be charged.	The power adapter plug may be inserted into the socket improperly.	Reinsert the power adapter to the socket.
	The USB Type-C cable may be poorly connected.	Reconnect the USB Type-C cable.

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

12. Radio Care

12.1 Radio



CAUTION

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

To guarantee optimum performance and long service life of the radio, follow the tips below:

- Do not disassemble 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, please 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, please 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 dryer, 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.

12.2 Battery

To guarantee optimum performance and long service life of the battery, follow the tips below:

- Use the approved charger to charge the battery.
- Keep the radio turned off during charging.
- Do not use the radio during charging.
- Charge the battery under the temperature from 0°C to 40°C.
- When the low battery alert occurs, replace or charge the battery in time.
- When the battery is fully charged, disconnect the charger in time.
- Do not drop the battery by force.
- Do not make the battery wet.
- To avoid short circuit, do not use the conductive substance such as iron wire to touch the anode and cathode of the battery.

12.3 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.

12.4 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. You can sterilize the radio by the following tips:

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

12.5 Storing

CAUTION

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

When storing the radio and battery, follow the tips below:

- Keep the radio and battery in the well-ventilated place with the temperature from -5°C to $+25^{\circ}\text{C}$ and the humidity between 45%–75%.
- Keep the radio and battery away from the acidic and corrosive substances.
- Keep the radio and battery away from the fire or other heat sources.
- Do not store the radio and battery in direct sunlight.
- Recharge the battery once every three months, and maintain the battery once every six months.

13. Optional Accessories

CAUTION

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

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



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