EXCERA

EP5800

Digital Portable Radio

Quick Reference Guide

This manual helps you quickly get basic operations of our digital portable radio.
Before using this product, please read this manual carefully.

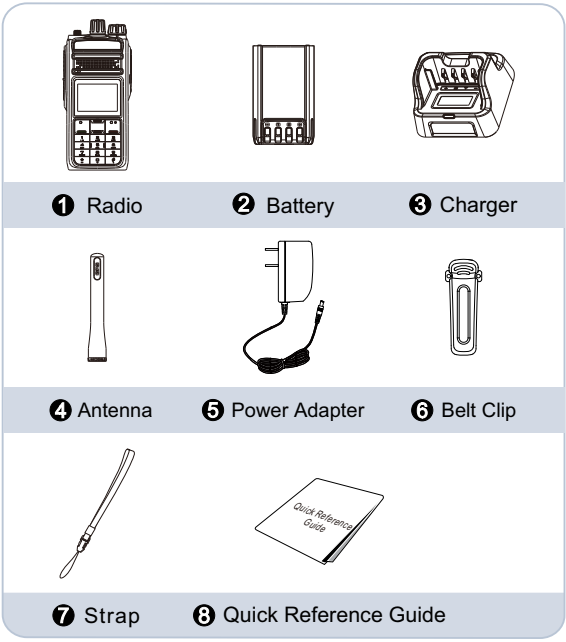
Alert Icon

Caution:
Indicates situations that could cause human injury or damage to your products.

Note:
Indicates tips that can help you make better use of your products.

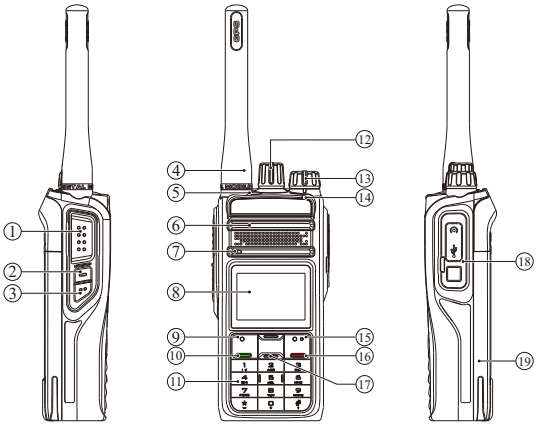
Package Contents

Please unpack carefully and check if all items listed below are received. If any item is missing or damaged, please contact your dealer.



Getting Started

■ Radio Controls



No.	Part Name	No.	Part Name
①	PTT Key	⑫	Channel/ Group Selector Knob
②	Side Key 1 (SK1)		
③	Side Key 2 (SK2)	⑬	Radio On-Off/ Volume Control Knob
④	Antenna		
⑤	Emergency Top Key (TK)	⑭	LED Indicator
⑥	Speaker	⑮	Setting Key/Back Key
⑦	Microphone	⑯	FK2/End/Home Key
⑧	LCD Display	⑰	Up/Down Key
⑨	Menu/OK Key	⑱	Accessory Jack
⑩	FK1/Answer/Call Key	⑲	Battery
⑪	Numeric Keypad		

Radio Status Indication

■ LCD Icon

Icon	Meaning
	Received Signal Strength Indicator (RSSI)
	New Message /Full Inbox
	Scanning
	Scan Paused (Conventional)
H	High Power
L	Low Power
	Battery Power
	Roam
	GPS Enabled
	GPS Located
	GLONASS Located
	BDS Located
	Missed Call
	Man Down
BT	Bluetooth Disabled
PTT	Wireless PTT
	Bluetooth Earpiece
	Wireless PTT and Bluetooth Earpiece
E	Emergency Alarm
	Encrypt
	Squelch
V	VOX

Note: The LCD icons of different radio models are different. Due to the technological development, the icons are subject to change without notice in advance.

■ LED Indicator

LED Indicator	Radio Status
LED flashes green slowly.	None
LED flashes green rapidly.	Upgrading or powering on
LED glows green.	Receiving
LED flashes red slowly.	Low battery
LED flashes red rapidly.	None
LED glows red.	Transmitting
LED flashes orange slowly.	Scanning
LED flashes orange rapidly.	None

Basic Operations

■ Turning the Radio On/Off

Rotate the **Radio On-Off/Volume Control** knob clockwise or counterclockwise until a click is heard to turn the radio on/off.

■ Locking / Unlocking Keypad

When the keypad is not in use, you can lock the keypad to prevent accidental keypad operation.
You can use any of the following methods to lock or unlock the keypad.

- Via Key Combination
  Locking/Unlocking Keypad by pressing OK key and key.
- Via Programmable Button
  Set Keypad Lock key via programmable button. Press the shortcut key to lock and unlock keypad.
- Via Menu Operation
  Procedure:
  1. In the home screen, go to “Settings -> Radio Settings -> Keypad Lock” to select the desired remaining time when the keypad will be locked.
  2. If you select a desired time, the keypad will be locked automatically if no operation is made within the preset time period.

■ Adjusting the Volume

After turning the radio on, rotate the **Radio On-Off/Volume Control** knob clockwise to increase the call volume, or counterclockwise to decrease it.

■ Adjusting Power Level

With this option, you may adjust power levels quickly. We recommend you to adopt low power for battery saving. However, if you cannot communicate with radios located at a distant place with low power, please select high power.
You may press the programmed **Adjust Power Level** key to adjust power levels.

■ Selecting a Zone

A zone is a group of channels exhibiting the same property. The radio supports 32 zones and each zone contains 128 channels at most.
You can select a zone through any of the following methods.

- Selecting a Zone through Menu
  Procedure:
  1. In the home screen, press the **Menu** key to enter the main menu.
  2. Go to “Settings -> Zone”.
  3. Use the **Up**/**Down** key to go to a desired zone.
  4. Press **OK** key to select the zone.
- Selecting a Zone via Programmable Button
  You may quickly toggle to your desired zone by pressing the programmed **Zone Up** or **Zone Down** key.

■ Selecting a Channel

After turning the radio on, rotate the Channel Selector knob to select a needed channel. You can also switch to the designated channel by pressing the Preset Channel key.
If the Channel Notify function is active, you will hear the corresponding channel number when switching to any channel.

■ Switching the Channel Mode

This radio can operate in either digital or analog conventional mode.
Each channel can be programmed as either analog or digital channel via the CPS. If the current zone includes a mixture of analog and digital channels, you may quickly switch between digital and analog through the **Channel Selector** knob.

■ Call

To ensure that your speech is clear, keep the microphone 2.5cm to 5cm from your mouth.

Private Call

A private call is a call from an individual radio to another individual radio.
You can make a private call through any of the following methods.

- Making a Call through Contact or Call Log
  Procedure:
  1. In the home screen, press the **Menu** key to enter the main menu.
  2. Go to “Contact -> Private Call”, or go to “Call Log” and access the Missed/Incoming/Outgoing Call list.
  3. Use the **Up**/**Down** key to select a private call contact you want to call.
  4. Press the **PTT** key to make the private call.
- Making a Call via Manual Dial
  Procedure:
  1. In the home screen, press the **Menu** key to enter the main menu.
  2. Go to “Contact -> Manual Dial”.
  3. Input a private call number using the numeric keypad.
  4. Press the **PTT** key to make the call.

Group Call

A group call refers to a call from an individual radio to a group of radios.
You can make a group call through any of the following methods.

- Making a Call through Contact Menu

  Procedure:

  1. In the home screen, press the **Menu** key to enter the main menu.
  2. Go to “Contact -> Group Call”, or go to “Call Log” and access the Missed/Incoming/Outgoing Call list.
  3. Use the **Up**/**Down** Key to select a group call contact you want to call.
  4. Press the **PTT** key to make the call.

- Making a Call via Manual Dial

  Procedure:

  1. In the home screen, press the **Menu** key to enter the main menu.
  2. Go to “Contact -> Manual Dial”.
  3. Press the key to switch to the group call dial screen.
  4. Input a group call number using the numeric keypad.
  5. Press the **PTT** key to make the call.

All Call

An all call is a call from an individual radio to every radio on the channel.

Note: The All Call ID is fixed.

You can make an all call through Contact Menu.

Procedure:

1. In the home screen, press the **Menu** key to enter the main menu.
2. Go to “Contact -> Group Call”, or go to “Call Log” and access the Missed/Incoming/Outgoing Call list.
3. Use the **Up**/**Down** Key to select the all call contact.
4. Press the **PTT** key to make the call.

Emergency Call

Emergency call is used to summon help in emergency situations. To enable this feature on a channel, you should associate this channel with an emergency system using the CPS.

■ Transmitting or Receiving a Call on Analog Channel

To transmit a call on an analog channel, press the **PTT** key and speak into the microphone.
To receive a call on an analog channel, release the **PTT** key.

■ Transmit Time-Out

The purpose of Transmit Time-Out is to prevent any user from occupying a channel for an extended period. If the preset time expires, the radio will automatically terminate the transmission and sound alert tones that will disappear when the **PTT** key is released.
You may set the time via the CPS.

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➢ Major Technical Specification

RF Specification			
Support Frequency Range:	136MHz~174MHz		
Permitted frequency range: *1	136MHz~174MHz		
Rated Output Power:	☒ High Power: 5W	☒Low Power: 1W	
Modulation Type:	Analog:	FM	
	Digital :	4FSK	
Supported Digital Protocol: *2	DMR		
Channel Separation:	Analog:	☒ 12.5kHz	
	Digital :	☐ 6.25kHz	☒ 12.5kHz
Emission Designator: *3	Analog:	11K0F3E	
	Digital:	7K60FXW, 7K60FXD	
Support data rate:	9.6kbps		
Antenna Type:	External		

Bluetooth	
Version:	Supported BT4.0+BLE
Modulation:	GFSK
Operation frequency:	2402MHz~2480MHz
Channel number:	40
Channel separation:	2MHz
Antenna type:	Integral
Antenna gain:	0 dBi

Bluetooth	
Version:	Supported BT4.0+EDR
Modulation:	GFSK, π/4DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	Integral
Antenna gain:	0 dBi

➢ FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and 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 circuit different from that to which the receiver is connected.
  -Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any 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.

Warning!

This portable radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only,” meaning it must be used only during the course of employment by individuals aware of the hazards and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

Output power listed is rated conducted. This device must be restricted to work-related operations only in an Occupational/Controlled RF exposure environment and must operate with a duty factor not exceeding 50%. This transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between user and the device or its antenna shall be at least 2.5 cm. All qualified end-users of this device must have the knowledge to control their exposure conditions and/or duration to comply with occupational/controlled Exposure limit and requirements. The highest reported SAR values for Face-held and body-worn are 1.93W/Kg and 1.69W/Kg.

This device contains Bluetooth, BLE and Two Way Radio transmitters.