Thanks for selecting the QP-250 two way radio, This unit have a very attractive design: SMALL AND LIGHT, IT HAS A POWERFUL SPEAKER WITH A DIAMETER OF 40MM TO ENSURE SHARP AND CLEAR SOUND WHEN YOU ARE TALKING.

The design follows the IP54 standard with a high level of protection against water damage and dust. The radio should keep working properly even in adverse conditions.

We are very confident that you will find the QP-250 radio a reliable unit, able to efficiently satisfy your communication needs.

Please read this User manual for detailed information on how to operate the product correctly.

#### ATTENTION

This device complies with parts 15 of 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.

# Table of contents

#### List for radio and accessories Radio and accessories \*01 Photo for radio and accessories \*02 Brief introduction of Radios Panel structure description \*03-04 The contents for LCD \*05 Standard Features \*06-08 QUANTUN model list \*09 Assembly radio \*10-11 Notice for the use of headphones \*12 Charging information Battery life NOTES \*13 Charging operation \*14 \*15-16

Radio's operation

Function setting

\*17

# List for radio and accessories

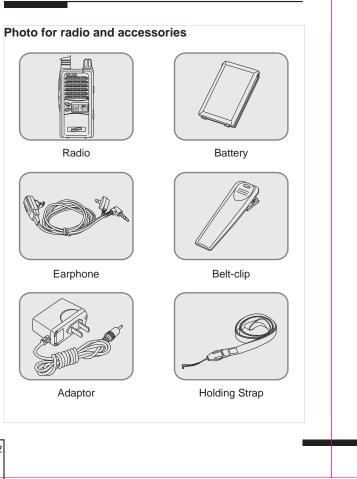
After you read the information of the QP-250 radio, please open the box, and then confirm that all radio parts are included ,and in good shape. Otherwise contact your reseller.

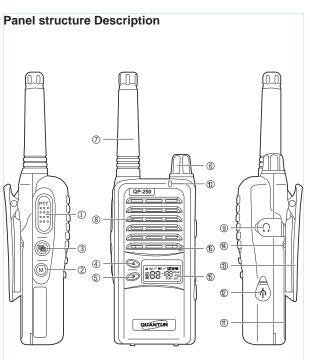
### Radio and accessories

Parts	Quantity
Radio	1
Battery	1
Belt-clip	1
Adaptor	1
Earphone	1
Holding Strap	1
User manual	1

# List for radio and accessories

# **Brief introduction of Radios**





# **Brief introduction of Radios**

- 1. PTT SWITCH: Push and hold to transmit, Release to receive
- 2. MONITOR BUTTON: Push to turn on/off monitor
- 3. MENU KEY: menu button for parameters setting
- 4. UP KEY: Plus key for parameters setting
- 5. DOWN KEY: Minus key for parameters setting
- 6. POWER ON/OFF VOLUME CONTROL KNOB:
  - Turns power ON and adjusts the audio level
- 7. ANTENNA
- 8. SPEAKER: Internal radio Speaker
- 9. EARPHONE JACK: connect external speaker and microphone
- 10. TX/RX LED: Red means Transmit, Green means Receiver or Squelch opened
- 11. BATTERY
- 12. CHARGER JACK: connect external power adaptor
- 13. BELT-CLIP
- 14. BATTERY MOUNT
- 15. LCD
- 16. MIC: Internal radio MIC

# **Brief introduction of Radios**

#### The contents for LCD



lcon	Name	Icon Name		
	KEYPAD LOCK	SCAN	SCAN FUNCTION	
۶L۶	VIBRATION	VOX	VOX FUNCTION	
~	ALERT	à	TX OR RX	
<b>(</b> )	AUDIO OPENED			
~	CTCSS	DTMF	Not available	
	01000	SCR	Not available	
п	DCS			
	BATTERY DISPLAY	88-188	CHANNEL AND CTCSS/DCS	

# **Brief introduction of Radios**

#### Standard Features

1. RF power: 2w

2. 32 Channels, Programmable 25 /12.5 KHz Channel Spacing

#### 3. 9 - Levels Squelch selectable

Helps to increase or decrease receiver sensitivity.

#### 4. Voice Operated Transmit (VOX)

Enjoy the convenience of hands-free operation when used with the corresponding optional accessory.

#### 5. CTCSS/CDCSS

Set up workgroups/users with unique CDCSS/CTCSS codes to prevent groups or users of interference with each others.

#### 6. Monitor

Allows you to monitor channels for activity

#### 7. Normal Scan & Memory Scan

The radio will scan all channels when using normal scan and memory channels when using memory scan.

#### 8. Low Battery Alert

Audible tone and visual display tell you when the battery is running down

# **Brief introduction of Radios**

#### 9. Time-out Timer (TOT)

The feature allows for more efficient use of channels by limiting the amount of time of each transmission

#### 10. Battery Save

The radio will enable battery save feature in standby mode. Pressing any key or receiving a signal will restore the radio to normal operation.

#### 11. Busy Channel Locked

A channel already in use is not available to other users

#### 12. Wired Clone

Easily copy the features of one radio to another

#### 13. Squelch Tail Elimination

The function will minimize the annoying audio outputs that occur at the receiver on completion of a transmission.

#### 14. LCD backlight and with

Backlight for Nighttime Operation

#### 15. PC Programmable

You are able to customize the features of each radio for each user

# **Brief introduction of Radios**

# **Brief introduction of Radios**

#### 16. Wall-adaptor charge

Main board with charging control. Can be charged from wall adaptor directly

#### 17. Superior Audio

A powerful speaker with a diameter of 40mm ensures clear, crisp and strong audio, even in noisy environments.

#### 18. Vibration

This feature can be selected to use on noisy and other special environments

## QUANTUN model list

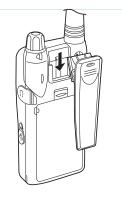
Model	Frequency range (MHZ)	RF power	Battery	Adaptor
QP-250(V)	146-174MHZ	2W	QP-250-1500	TC-02
QP-250(PMR)	446-447MHZ	2W	QP-250-1500	TC-02
QP-250(U)	450-470MHZ	2W	QP-250-1500	TC-02

## Assembly radio

# Assembly radio

### Belt clip installation

Hold the radio in one hand, and push the belt-clip down in the allocated slot.



#### Belt clip removal

Raise the Snap with the finger, and push the clip up to separate from radio.



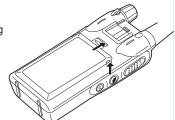
#### **Battery installation**

Place the battery parallel to the back of the radio and slide in it,then press till it is locked in place.



### Battery removal

Push down with the finger the battery latch,separate the battery from the radio using both hands

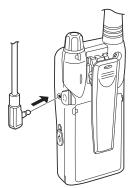


# Notice for the use of headphones

# **Charging information**

When using the headphones, Begin with adjusting the volume to your comfort level.

Remove the rubber cover exposing the Accessory connector and insert the plug in straight line into the radio with the cable up parallel to the antenna as shown on picture to ensure proper connection.when removing the accessory,do not pull by the cable,since this could put an additional stress on the device, shortening it's life span.



#### Battery life NOTES

When you use a battery for the first time,or one that has been in storage for a long period,make sure it is properly charged before placing it in service.

If you notice that, while transmitting , the Battery Icon starts flashing, that is an indication that the battery is running out of energy and requires to be replaced or recharged

#### Attention:

- Please use the indicated batteries and chargers, the use of other units can damage the device or even generate an explosion
- Do not allow metal objects to contact the battery terminals, or dispose the battery in fire, Do not try to open the battery, It is not a repairable item
- The battery should be charged in an ambient temp between 5\* to 40\*, outside the range, the battery will not be fully charged.
- When in charging mode, do not use the radio.

If the radio battery is not fully charged , do not remove the adaptor plug.

- The battery ,after fully charged ,Should last about 8 hours of average use ,after that is should be recharged.
- if the radio or the battery is wet, please do not connect them to the charger, to avoid additional damage.

# **Charging information**

#### Charging operation

- 1. Plug the DC head of the adaptor into the DC jack of the radio.
- Plug the adaptor on the AC power outlet to keep normal charging.
- 3. When the radio is power on, Battery icon on the LCD begins flashing, until the battery icon change to normal display (stop flashing), It means fully charged, unplug the DC head to use radio.
- When the radio is power off, the LED charges to red; when the LED charges to green, It means fully charged.

#### 1. Open the radio

The radio will self-inspect for 1 second first, including full-screen display, backlight lamps lit, and then issue a prompt start-up (three pitch).

- After the self-inspection, LCD will show the last state before Power off.
- 4. When Receiving, The LED will change to green, and " " will be Receive state. When Vibration is opened and the signal is received, the radio's speaker will be audible, and the radio will be 2 seconds vibration, one second stop, the cycle will be repeated until the monitor key is pressed;

If the CTCSS or DCS for Receiver and the Transmitter are not the same, Receiver will not hear anything except for green light.

5. When Battery voltage is less than 3.2 V, LCD will show "OFF", the radio will stop transmit and Should be promptly charged. When charging, the " """ " starts flashing, the radio can receive, but cannot transmit.

## Radio's operation

# **Function setting**

6. The keypad has two modes of operation

#### a. CH MODE

when the radio is turned ON, press MENU button shortly, the radio will be the CHANNEL MODE, press [ • ] or [ •] button to select the desired channel.

#### b. Function MODE

when the radio is turned on, press MENU button with 2 seconds, the backlight will also be on, and the radio will be on Function MODE .You can now set up the required options with [ ] and [ ] button.

#### Select Function Options Confirm Enter 58-0F \* OO and OF \*BEEP d ↓ - (1-105) d∏ - (1-105) \*DCS 40-35 CE-05 \* **[ -**(1-50) \*CTCSS Press Press Ed-dEpcs \*DCS/CTCSS Conversion UP MENU Ed-EE ctcss MENU То or Sauech 50-00 \* 1-9 level Lever DOWN confirm 6C-0F \* $\Pi\Pi$ and $\PiF$ \*Busv \*VOX U0-0F \* 1-16 level \*Vibration SH-CO \* CO and OF

### Keypad locked function

Press "MENU+MONI", LCD will show " 🝙 ", you can use PTT and MONI button only, Press "MENU+MONI" again, the keypad will be unlocked.

#### Scan function

Press "MENU+DOWN", LCD will show " **SCAN** ", the radio will begin to scan, When stop in the channel Scan, Press "UP+DOWN" button and will scan in a row. Press "MENU+DOWN" again, the scan function will be off.

# **Safety and General Information**

# SAFETYTRAINING INFORMATION



Your **QUANTUN** 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.

This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". In addition, your **QUANTUN** radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields- RF and Microwave.
- The following accessories are authorized for use with this product. Use of accessories other than those (listed in the instruction) specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.



To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

CAUTION

- DO NOT operate the radio without a proper antenna attached, as this may damaged the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.
- DO NOT transmits for more than 50% of total radio use time ("50%duty cycle"). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the "TX indicator" lights red. You can cause the radio to transmit by pressing the "PTT" switch.

ALWAYS keep the antenna at least 2.5 cm (1 inch) away from the body when transmitting and only use the QUANTUN belt-clip which is listed in instructions when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.

# **Electromagnetic Interference/Compatibility**

During transmissions, your **QUANTUN** radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

# **Occupational/Controlled Use**

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

# **OPERATING NOTES**

- When transmitting with a portable radio, hold the radio in a vertical position with its microphone 5 to 10 cm (2 to 4 inches) away from your mouth. Keep the antenna at least 2.5 cm (1 inch) from your head and body.
- If you wear a portable two-way radio on your body, ensure that the antenna is at least
   2.5 centimeters (1 inch) from your body when transmitting.

FCC CAUTION:

Changes or modifications to this device, not expressly approved by **QUANTUN**, could void your authority to operate this transceiver under FCC regulations.