

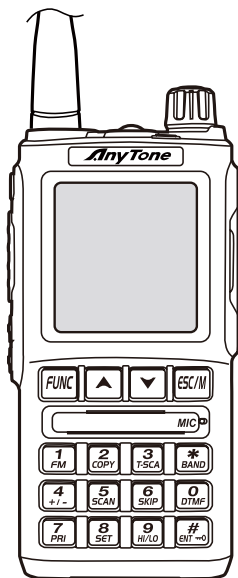


Qixiang Electron Science & Technology Co., Ltd.
www.anytone.net

AnyTone[®]

UVA1 Transceiver

Operating Manual



THANK YOU!

AnyTone transceiver will provide you with reliable, clear and efficient communication service.

This transceiver adopts a dedicated signal processing system, featuring a wealth of professional functions with excellent stability and reliability. It boasts a novel and fashionable appearance with streamlined and concise body lines, and is sturdy and durable. It supports multiple functions including FM radio, encryption, channel scanning, Chinese/English display and input, emergency alarm, vibration alert (optional), GNSS positioning(optional), weather channels, and CTCSS/DCS encode/decode. It is especially suitable for field operations and outdoor mountain climbing. It is a high-performance transceiver with versatile functions and comprehensive safety configurations, perfectly designed for radio enthusiasts and outdoor hikers.



» **When programming the transceiver, read the factory initial data first, then rewrite the frequency and signaling etc., otherwise errors may occur because of different frequency band etc.**

CAUTIONS

AnyTone transceivers are designed with advanced technology and the following tips will be helpful for the safe usage of this transceiver and maintaining warranty.

1. Keep the transceiver and accessories away from children.
2. Do not open or modify the transceiver in any way.
3. Use only factory approved battery and charger to avoid damage.
4. Use only factory approved antenna to prevent damage and ensure proper communication distance.
5. Avoid exposing the radio to sunshine for long periods or storing it in hot places. High temperatures will shorten the life of electronic devices and may cause fires.
6. Avoid storing the radio in dusty, dirty or damp areas. Remove battery during long storage periods.
7. Keep the radio dry. Do not wash radio with harsh chemicals or detergents.
8. Do not transmit without an antenna.
9. When using this transceiver, we recommend transmitting for 1 minute then receiving for 4 minutes. Continuously transmitting for a long time on high power may heat the back of the transceiver. Do not place the transceiver's hot back close to any plastics.
10. If any abnormal smell or smoke comes from the transceiver, turn off the power, remove the battery and contact your local dealer.



NOTE

» **All the above tips apply for your AnyTone transceivers' accessories. If any device can not operate normally, please contact with local AnyTone dealers. If you use any accessories made by other companies, AnyTone company does not guarantee the operability and safety of the transceiver.**

CONTENTS

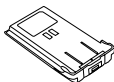
1.Product Inspection	1
1.1 Standard Accessory	1
1.2 Optional Accessory	1
2.Battery Charging.....	2
2.1 Charging Method	2
3.Radio Overview	4
3.1 Indicator light Status Description	5
3.2 Key Functions and Combination Functions	5
3.3 Programmable Key Functions	7
4.Basic Operations.....	8
4.1 Turn on/off the Transceiver.....	8
4.2 Volume Adjusting.....	8
4.3 VFO/Channel Switching.....	8
4.4 Switching between Primary and Secondary Channels	8
4.5 Set VFO frequency	8
4.6 Receive	9
4.7 Transmit	9
5.Settings.....	10
5.1 Zone Selection	10
5.2 Scan.....	10
5.3 Radio Setting	11
5.4 Channel Settings	19
5.5 Radio Information	24
5.6 GNSS.....	25
5.7 Weather Channel (Noaa)	25
6.Restore Factory Settings.....	26
7.Specification.....	27

1.PRODUCT INSPECTION

1.1 Standard Accessories



Antenna



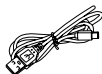
Li-ion Battery Pack
QB-59L(1800mAh)



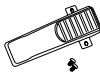
Charger
QBC-58L



AC Adaptor
(5V/2A)



TYPE C Cable



Belt Clip



Instruction Manual



NOTE

» Please carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, please contact with dealers immediately.

1.2 Optional Accessories



Earphone
EJX-0012



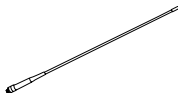
Car plug



Wrist strap



12cm antenna



38cm antenna

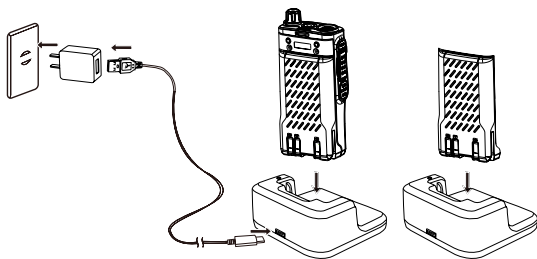
2. BATTERY CHARGING

2.1 Charging Method

The radio uses a USB-C cable for charging, the USB-C cable can be inserted into the USB-C port on radio for directly charging to the battery. Do not transmit with the radio while the charger/programming cable is plugged into the side of the radio. This may damage the unit.

The USB-C cable can also be inserted into the USB-C port on desktop charger. The standard 5V/2A USB-C adapter is used, it is common adapter on the market.

- Insert the charging dock plug into the AC power output socket.
- Insert the battery or transceiver into the charging dock, confirm that the battery is in good contact with the charging terminal, and the indicator light turns red. At this point, charging begins.
- Charging takes about 3 hours (with standard battery), and when the indicator light turns green, charging is complete. At this time, the battery or transceiver can be removed.



» When charging a power-on transceiver equipped with battery, the LED will not turn into green to show the full charge status. Only when turn off the transceiver, the LED can indicate normally. Because when the transceiver is power on, it would consumes energy, the charger cannot detect when battery has been fully charged, the charger will charge battery in voltage consumption and fail to indicate correctly.

2. BATTERY CHARGING

d. Explanation of the display status of the charging seat indicator light:

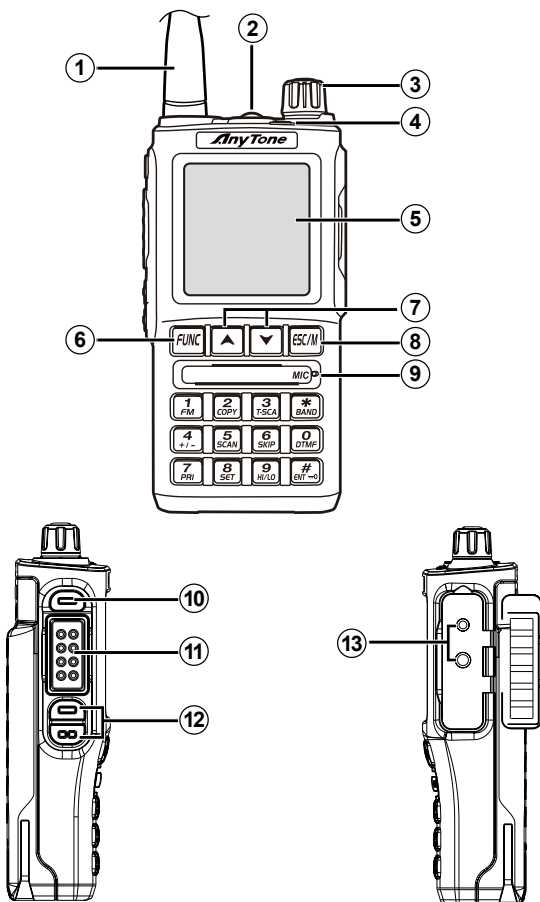
STATUS	LED
Waiting (without battery)	No lights on
precharge	Red light flashing
Normal charging	Red
Battery fully charged	Green



NOTE

- » Please do not short-circuit the battery terminals.
- » Please do not attempt to remove the battery casing.
- » Please do not install batteries in hazardous environments as sparks may cause explosions.
- » Please do not place the battery in a high-temperature environment or throw it into a fire to avoid causing an explosion..

3.RADIO OVERVIEW



3.RADIO OVERVIEW

① Antenna

② Flashlight

③ POWER/VOLUME Switch

Turn clockwise to turn on the radio; turn counterclockwise until you hear a click to turn it off. After turning the radio on, turn clockwise to increase the volume, counterclockwise to decrease it.

④ Indicator Light

⑤ LCD Display

Displays the current frequency/channel and various function operations and status information.

⑥ Function Keys

⑦ Up/Down Keys

Changes the channel number/VFO frequency and switches options in the menu.

⑧ Return Key

Changes the channel/VFO frequency in standby mode. Press this key in the menu mode to return to the previous menu level.

⑨ Microphone

⑩ Programmable [PF3] Key

Programmable shortcuts.

⑪ [PTT] Key: Press and hold this key while speaking into the microphone to make a call; release this key to receive a call.

⑫ [PF1] Key/[PF2] Key:

Programmable keys that can be programmed to perform various shortcuts.

⑬ External microphone/speaker jack, frequency reading and writing interface.

3.1 Indicator Light Status Description

1. Red indicator light flashing: low battery
2. Red indicator light constantly on: transceiver transmission
3. The green indicator light is flashing: scan
4. Green indicator light constantly on: received matching carrier wave
5. The green indicator light is constantly on: a matching digital signal has been received.

3.RADIO OVERVIEW

3.2 Key Functions and Combination Functions

	single key	FUNC->
FUNC	Activate the combination key	--
▲	Increase channel/frequency	--
▼	Reduce channel/frequency	--
ESC/M	Switch VFO/channel mode	--
1	Enter 1	Turn on/off the radio
2	Enter 2	Enable search function
3	Enter 3	Enable sub audio scanning
4	Enter 4	Turn on/off differential frequency
5	Enter 5	Enable scanning
6	Enter 6	Current channel settings skip scanning
7	Enter 7	Set PRIMAY channel
8	Enter 8	enter menu
9	Enter 9	Switching transmission power
0	Enter 0	View DTMF List
*	Switching between primary and secondary channels	Switch between dual channel/single channel
#	Switching input methods on the keyboard	Long press to lock

3.RADIO OVERVIEW

3.3 Programmable Key Functions

Scan	In standby mode, set the key as [Scan] to start scanning.
Monitor	In standby mode, set the key as [Monitor] to enable monitor.
Flashlight	In standby mode, set the key as [Flashlight] to turn on the flashlight.
FM radio	In standby mode, set the key as [FM] to turn on the FM radio.
Emergency	In standby mode, set the key as [Emergency] to trigger emergency alert.
GNSS	In standby mode, set the key as [Positioning] to activate the GNSS system.
Search	In standby mode, set the key as [Search] to start searching.
Alone Work	In standby mode, set the key as [Alone Work] to activate the lone worker function.
1750HZ	In standby mode, set the key as [1750Hz] to transmit 1750Hz tone.
APRS Transmit	In standby mode, set the key as [APRS Transmit] to send APRS signals.
Call	In standby mode, set the key as [Call] to make a call.
Zone	In standby mode, set the key as [Zone], then input the zone number to switch to the corresponding zone.
Battery Indicator	In standby mode, set the key as [Voltage] to view current battery level and voltage.
Power Level	In standby mode, set the key as [Power] to switch transmission power.
VOX	In standby mode, set the key as [VOX] to turn VOX function on or off.

4. BASIC OPERATIONS

4.1 Turn on/off the Transceiver

Power On:

When the transceiver is powered off, rotate the Power/Volume knob clockwise. A click sound indicates the transceiver is powered on; the brand logo will appear on the display, and a prompt tone will sound after 7 seconds.

Power Off:

When the transceiver is powered on, rotate the Power/Volume knob counterclockwise until a click sound is heard and the screen display disappears. The transceiver will be powered off completely.

4.2 Volume Adjusting

When the transceiver is turned on, rotate the power/volume switch to adjust the volume level, and the screen will indicate the current volume level through a progress bar. Rotate clockwise to increase the volume; Rotate counterclockwise to decrease the volume.

 » *In simulation mode, you can press the [PF2] key (programmed as 'monitor') to listen for background sound while rotating adjust the volume with the power/volume switch. When the transceiver is in communication mode, the required volume can be adjusted more accurately.*

NOTE

4.3 VFO/Channel Switching

In standby mode, press the button  to switch between VFO and channel.

4.4 Switching between Primary and Secondary Channels

In standby mode, press the button  to switch between the primary and secondary channels.

4.5 Set VFO frequency

Set the VFO frequency of the transceiver through the keyboard:

Set the transceiver frequency through the numeric keypad: When the transceiver is in VFO mode, the frequency of the main channel can be entered through the numeric keys. To enter 150.1125.30MHz, simply enter [1] [5] [0] [1] [1] [2] [5] [3] [0] or just enter [1] [5] [0] [1] [1] [2] [5] [3] [#], and any number of [0] can end with [#].

4.BASIC OPERATIONS

4.6 Receive

When the current channel receives an incoming call, the signal strength indicator » will be displayed below the channel frequency on the screen.

If the incoming signal is encrypted and your transceiver is not set with the corresponding decryption parameters, no audio will be received.

4.7 Transmit

Press and hold the [PTT] key to speak into the MIC.

Keep a distance of about 3.5–5.3 cm between the microphone and your mouth, and speak in a normal tone, so that the receiving radio can get the best audio quality.

5.SETTINGS

5.1 Zone Selection

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select 'Zone', press the key **[FUNC]** to enter the 'Zone' menu.
- (3) Press the key **[▲]/[▼]** to select the desired area, and press the key **[FUNC]** to switch to the selected area

 » There is no zone option in VFO mode.

NOTE

5.2 Scan

5.2.1 frequency range

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to move the "Scan" and press the key **[FUNC]** to enter the "Scan" menu.
- (3) Press the key **[▲]/[▼]** to select "Frequency Range" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the scan range and press the key **[FUNC]** to confirm.

5.2.2 Channel Range

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to move the "Scan" and press the key **[FUNC]** to enter the "Scan" menu.
- (3) Press the key **[▲]/[▼]** to select "Channel Range" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the channel range to scan and press the key **[FUNC]** to confirm.

5.2.3 Scan Mode

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to move the "Scan" and press the key **[FUNC]** to enter the "Scan" menu.

5.SETTINGS

- (3) Press the key / to select "Scan mode" and press the key to enter.
- (4) Press the key / to select the scan mode and press the key to confirm.

5.2.4 Scan SubCode

- (1) In standby mode, press the key , after the " " icon appears on the screen, press the key to enter the main menu.
- (2) Press the key / to move the "Scan" and press the key to enter the "Scan" menu.
- (3) Press the key / to select "Scan SubCode" and press the key to enter.
- (4) Press the key / to select the CTCSS/DCS and press the key to confirm.

5.2.5 Scan Memory

- (1) In standby mode, press the key , after the " " icon appears on the screen, press the key to enter the main menu.
- (2) Press the key / to move the "Scan" and press the key to enter the "Scan" menu.
- (3) Press the key / to select the "Channel Range" and press the key to enter.
- (4) Press the key / to select the memory type and press the key to confirm.

5.3 Radio Setting

5.3.1 Squelch

- (1) In standby mode, press the key , after the " " icon appears on the screen, press the key to enter the main menu.
- (2) Press the key / to select the "Radio Set" and press the key to enter the setting menu.
- (3) Press the key / to select the "Squelch" and press the key to enter.
- (4) Press the key / to select the designed squelch level and press the key to confirm.

5.SETTINGS

5.3.2 Power Save

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Power Save" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed level of power save and press the key **[FUNC]** to confirm.

5.3.3 VOX Level

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "VOX level" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed VOX level and press the key **[FUNC]** to confirm.

5.3.4 VOX Delay

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "VOX Delay" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed VOX delay and press the key **[FUNC]** to confirm.

5.3.5 TOT Time

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "TOT Time" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed TOT time and press the key **[FUNC]** to confirm.

5.SETTINGS

5.3.6 TOA Time

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "TOA Time" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed TOA time and press the key **[FUNC]** to confirm.

5.3.7 VOICE Type

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Voice Type" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed Prompt tone language and press the key **[FUNC]** to confirm.

5.3.8 Language

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Language" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed language and press the key **[FUNC]** to confirm.

5.3.9 Beep Sound

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Beep Sound" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed on/off beep sound and press the key **[FUNC]** to confirm.

5.SETTINGS

5.3.10 Roger Beep

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Roger Beep" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed roger beep and press the key **[FUNC]** to confirm.

5.3.11 Standby Time (Backlight)

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Backlight Time" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed backlight time and press the key **[FUNC]** to confirm.

5.3.12 Brightness

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.
- (3) Press the key **[▲]/[▼]** to select the "Brightness" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the designed brightness and press the key **[FUNC]** to confirm.

5.3.13 Boot Display

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Radio Set" and press the key **[FUNC]** to enter the setting menu.

5.SETTINGS

- (3) Press the key $\uparrow/\downarrow$ to select the "Boot Display" and press the key FUNC to enter.
- (4) Press the key $\uparrow/\downarrow$ to select the designed boot display mode and press the key FUNC to confirm.

5.3.14 Boot Message

- (1) In standby mode, press the key FUNC , after the "F" icon appears on the screen, press the key B_{SET} to enter the main menu.
- (2) Press the key $\uparrow/\downarrow$ to select the "Radio Set" and press the key FUNC to enter the setting menu.
- (3) Press the key $\uparrow/\downarrow$ to select the "Boot MSG" and press the key FUNC to enter.
- (4) Enter the desired text on the keyboard and press the key FUNC to confirm, press the key ESC/M to recall.

5.3.15 Display Direction

- (1) In standby mode, press the key FUNC , after the "F" icon appears on the screen, press the key B_{SET} to enter the main menu.
- (2) Press the key $\uparrow/\downarrow$ to select the "Radio Set" and press the key FUNC to enter the setting menu.
- (3) Press the key $\uparrow/\downarrow$ to select the "DIR" and press the key FUNC to enter.
- (4) Press the key $\uparrow/\downarrow$ to select the forward/reverse and press the key FUNC to confirm.

5.3.16 Main Channel Standby Mode (MDF-A)

- (1) In standby mode, press the key FUNC , after the "F" icon appears on the screen, press the key B_{SET} to enter the main menu.
- (2) Press the key $\uparrow/\downarrow$ to select the "Radio Set" and press the key FUNC to enter the setting menu.
- (3) Press the key $\uparrow/\downarrow$ to select the "MDF-A" and press the key FUNC to enter.
- (4) Frequency/channel name/channel number are optional, press the key $\uparrow/\downarrow$ to select the desired mode and press the key FUNC to confirm.

5.3.17 Side Channel Standby Mode (MDF-B)

- (1) In standby mode, press the key FUNC , after the "F" icon appears on the screen, press the key B_{SET} to enter the main menu.
- (2) Press the key $\uparrow/\downarrow$ to select the "Radio Set" and press the key FUNC to enter the setting menu.

5.SETTINGS

- (3) Press the key  /  to select the "MDF-B" and press the key  to enter.
- (4) Frequency/channel name/channel number are optional, press the key  /  to select the desired mode and press the key  to confirm.

5.3.18 Dual Watch

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.
- (3) Press the key  /  to select the "Dual Watch" and press the key  to enter.
- (4) OFF/Double Wait/Single Wait, press the key  /  to select the desired mode and press the key  to confirm.

5.3.19 Auto Lock

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.
- (3) Press the key  /  to select the "Auto Lock" and press the key  to enter.
- (4) Press the key  /  to select on/off and press the key  to confirm.

5.3.20 Alarm Mode

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.
- (3) Press the key  /  to select the "Alarm Mode" and press the key  to enter.
- (4) Press the key  /  to select the desired alarm mode and press the key  to confirm.

5.3.21 Encoding Method (Side Tone)

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.

5.SETTINGS

- (3) Press the key  /  to select the "Side Tone" and press the key  to enter.
- (4) DTMF/2TONE/5TONE/BIIS is optional, press the key  /  to select the desired method and press  to enter.
- (5) Press the key  /  to select on/off and press the key  to confirm.

5.3.22 PTT-ID

- (1) In standby mode, press the key  , after the "  " icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.
- (3) Press the key  /  to select the "PTT-ID" and press the key  to enter.
- (4) BOT/EOT/BOTH/OFF is optional, press the key  /  to select the desired method and press the key  to confirm.

5.3.23 PTT Delay

- (1) In standby mode, press the key  , after the "  " icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.
- (3) Press the key  /  to select the "PTT Delay" and press the key  to enter.
- (4) Press the key  /  to select the desired delay time and press the key  to confirm.

5.3.24 Alarm Frequency

- (1) In standby mode, press the key  , after the "  " icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.
- (3) Press the key  /  to select the "Alarm Frequency" and press the key  to enter.
- (4) Press the key  /  to select the desired Alarm Frequency and press the key  to confirm.

5.3.25 CTC TAIL

- (1) In standby mode, press the key  , after the "  " icon appears on the screen, press the key  to enter the main menu.

5.SETTINGS

(2) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "Radio Set" and press the key $\boxed{FUNC}$ to enter the setting menu.

(3) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "Tail" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the desired tail and press the key $\boxed{FUNC}$ to confirm.

5.3.26~31 Programming Button Settings

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{\frac{B}{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "Radio Set" and press the key $\boxed{FUNC}$ to enter the setting menu.

(3) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the options 26~31, press the key to set the function and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the desired function and press the key $\boxed{FUNC}$ to confirm.

5.3.32 FM Radio

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{\frac{B}{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "Radio Set" and press the key $\boxed{FUNC}$ to enter the setting menu.

(3) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "FM Radio" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select radio on/off and press the key $\boxed{FUNC}$ to confirm.

5.3.33 Auto Power Off

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{\frac{B}{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "Radio Set" and press the key $\boxed{FUNC}$ to enter the setting menu.

(3) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the "APO" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}/\boxed{\blacktriangledown}$ to select the desired auto power off standby time setting and press the key $\boxed{FUNC}$ to confirm.

5.3.34 Password Setting

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{\frac{B}{SET}}$ to enter the main menu.

5.SETTINGS

(2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.

(3) Press the key  /  to select the "Password" and press the key  to enter.

(4) Enter the password by the keyboard and press the key  to confirm and press the key  to recall.

5.3.35 Reset

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Radio Set" and press the key  to enter the setting menu.

(3) Press the key  /  to select the "Reset" and press the key  to enter.

(4) Press the key  /  to select VFO/ALL and press the key  to confirm.

 » After setting the power-on password, you need to enter the password to enter the system when power on.

NOTE

5.4 Channel Settings

5.4.1 Channel Name

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

(3) Press the key  /  to select the "Channel Name" and press the key  to enter.

(4) Enter the desired text by the keyboard and press the key  to confirm and press the key  to recall.

5.4.2 Receiving Frequency

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

(3) Press the key  /  to select the "RX Frequency" and press the key  to enter.

5.SETTINGS

(4) Enter the desired RX frequency by the keyboard and press the key **[FUNC]** to confirm and press the key **[ESC/M]** to recall.

5.4.3 Transmit Frequency

(1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.

(2) Press the key **[▲]** / **[▼]** to select the "Channel Set" and press the key **[FUNC]** to enter.

(3) Press the key **[▲]** / **[▼]** to select the "TX Frequency" and press the key **[FUNC]** to enter.

(4) Enter the desired TX frequency by the keyboard and press the key **[FUNC]** to confirm and press the key **[ESC/M]** to recall.

5.4.4 Transmit Power

(1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.

(2) Press the key **[▲]** / **[▼]** to select the "Channel Set" and press the key **[FUNC]** to enter.

(3) Press the key **[▲]** / **[▼]** to select the "Transmit Power" and press the key **[FUNC]** to enter.

(4) Press the key **[▲]** / **[▼]** to select the Low/Middle/High and press the key **[FUNC]** to confirm.

5.4.5 Bandwidth

(1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.

(2) Press the key **[▲]** / **[▼]** to select the "Channel Set" and press the key **[FUNC]** to enter.

(3) Press the key **[▲]** / **[▼]** to select the "Bandwidth" and press the key **[FUNC]** to enter.

(4) Press the key **[▲]** / **[▼]** to select the Narrow/Wide and press the key **[FUNC]** to confirm.

5.4.6 Receive analog Sub Audio (RX CTCSS)

(1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[SET]** to enter the main menu.

(2) Press the key **[▲]** / **[▼]** to select the "Channel Set" and press the key **[FUNC]** to enter.

5.SETTINGS

- (3) Press the key  /  to select the "RX CTCSS" and press the key  to enter.
- (4) Press the key  /  to select the desired RX CTCSS and press the key  to confirm.

5.4.7 Receive Digital Sub Audio (RX DCS)

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Channel Set" and press the key  to enter.
- (3) Press the key  /  to select the "RX DCS" and press the key  to enter.
- (4) Press the key  /  to select the desired RX DCS and press the key  to confirm.

5.4.8 Transmit Analog Sub Audio (TX CTCSS)

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Channel Set" and press the key  to enter.
- (3) Press the key  /  to select the "TX CTCSS" and press the key  to enter.
- (4) Press the key  /  to select the desired TX CTCSS and press the key  to confirm.

5.4.9 Transmit Digital Sub Audio (TX DCS)

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Channel Set" and press the key  to enter.
- (3) Press the key  /  to select the "TX DCS" and press the key  to enter.
- (4) Press the key  /  to select the desired TX DCS and press the key  to confirm.

5.4.10 Signaling

- (1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.
- (2) Press the key  /  to select the "Channel Set" and press the key  to enter.

5.SETTINGS

(3) Press the key  /  to select the "Signaling" and press the key  to enter.

(4) Press the key  /  to select the desired signaling and press the key  to confirm.

5.4.11 Coded Combination (SP-Mute)

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

(3) Press the key  /  to select the "SP-Mute" and press the key  to enter.

(4) Press the key  /  to select the desired signaling combination and press the key  to confirm.

NOTE: This option is only available when channel coding is enabled.

5.4.12 Scan Add

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

(3) Press the key  /  to select the "Scan Add" and press the key  to enter.

(4) Press the key  /  to select ON/OFF and press the key  to confirm.

5.4.13 Scan Priority

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

(3) Press the key  /  to select the "Scan Priority" and press the key  to enter.

(4) Press the key  /  to select ON/OFF and press the key  to confirm.

5.4.14 Busy Lockout

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

5.SETTINGS

(3) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Busy Lockout" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select Off/Repeater/Busy and press the key $\boxed{FUNC}$ to confirm.

5.4.15 Skip Frequency

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{B_{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Channel Set" and press the key $\boxed{FUNC}$ to enter.

(3) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Skip Freq" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select ON/Off and press the key $\boxed{FUNC}$ to confirm.

5.4.16 Scrambler

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{B_{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Channel Set" and press the key $\boxed{FUNC}$ to enter.

(3) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Scrambler" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the desired frequency and press the key $\boxed{FUNC}$ to confirm.

5.4.17 Comparator

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{B_{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Channel Set" and press the key $\boxed{FUNC}$ to enter.

(3) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Compand" and press the key $\boxed{FUNC}$ to enter.

(4) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select ON/OFF and press the key $\boxed{FUNC}$ to confirm.

5.4.18 Channel Memory

(1) In standby mode, press the key $\boxed{FUNC}$, after the "F" icon appears on the screen, press the key $\boxed{B_{SET}}$ to enter the main menu.

(2) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "Channel Set" and press the key $\boxed{FUNC}$ to enter.

(3) Press the key $\boxed{\blacktriangle}$ / $\boxed{\blacktriangledown}$ to select the "CH Memory" and press the key $\boxed{FUNC}$ to

5.SETTINGS

enter.

(4) Press the  /  key to select the area you want to set and press  to enter the channel number.

(5) Press the key  /  to select desired setting channel and press the key  to confirm.

5.4.19 Channel Delete

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Channel Set" and press the key  to enter.

(3) Press the key  /  to select the "CH Delete" and press the key  to enter.

(4) Press the key  /  to select desired deleting channel and press the key  to confirm.

5.5 Radio Information

5.5.1 Version

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Radio Info" and press the key  to enter.

(3) Press the key  /  to select the "Versions" and press the key  to enter.

(4) After entering the version, you can view the local software and hardware versions.

5.5.2 My Radio

(1) In standby mode, press the key , after the "F" icon appears on the screen, press the key  to enter the main menu.

(2) Press the key  /  to select the "Radio Info" and press the key  to enter.

(3) Press the key  /  to select the "My Radio" and press the key  to enter.

(4) Press the key  /  to select in "View local signaling number/local name" and press the  to enter.

5.6 GNSS(Optional)

5.6.1 GNSS Switch

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[B SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "GNSS" and press the key **[FUNC]** to enter GNSS menu.
- (3) Press the key **[▲]/[▼]** to select the "GNSS On/Off" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select on/off and press the key **[FUNC]** to confirm.

5.6.2 GPS Information

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[B SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "GNSS" and press the key **[FUNC]** to enter GNSS menu.
- (3) Press the key **[▲]/[▼]** to select the "GPS Info" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to view local position/APRS and press the key **[FUNC]** to confirm.

5.6.3 Time Zone

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[B SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "GNSS" and press the key **[FUNC]** to enter GNSS menu.
- (3) Press the key **[▲]/[▼]** to select the "Time Zone" and press the key **[FUNC]** to enter.
- (4) Press the key **[▲]/[▼]** to select the desired time zone and press the key **[FUNC]** to confirm.

5.7 Weather Channel (Noaa)

- (1) In standby mode, press the key **[FUNC]**, after the "F" icon appears on the screen, press the key **[B SET]** to enter the main menu.
- (2) Press the key **[▲]/[▼]** to select the "Noaa" and press the key **[FUNC]** to enter weather menu.
- (3) Press the key **[▲]/[▼]** to select the desired weather channel and press the key **[FUNC]** to confirm.

6.RESTORE FACTORY SETTINGS

This function can restore the transceiver to factory default status when it malfunctions or cannot be used normally due to misoperation.

Power on the radio while pressing and holding [PTT] + [PF1] keys. The screen will show resetting, indicating the factory reset is completed successfully.

7.SPECIFICATION

General		
Frequency Range	Europe: HAM 144-146MHz(V),430-440MHz(U) or PMR446 United State: HAM 144-148MHz(V), 420-450MHz(U) or GMRS	
Channel Capacity	640 channels	
Channel Spacing	25KHz (Wide Band) , 12.5KHz (Narrow Band)	
Phase-locked Step	5KHz, 6.25KHz	
Operating Voltage	7.4V DC ±20% (1800mAh)	
Frequency Stability	±1.5ppm	
Operating Temperature	-20℃~ +55℃	
Size	123x58x33mm (with 1800mAh battery)	
Weight	220g (with 1800mAh battery)	
Receiving Part		
	Wide band	Narrow band
Sensitivity(12dB SINAD)	≤0.25μV	≤0.35μV
Adjacent Channel Selectivity	≥65dB	≥60dB
Spurious Emission	≤-57dB	≤-57dB
Spurious Rejection	≥70dB	≥70dB
Blocking	84db	
Hum & Noise	≥45dB	≥40dB
Audio Distortion	≤5%	
Audio Power Output	1000mW/16Ω	
Transmitting Part		
	Wide band	Narrow band
Power Output	HAM 5/2.5/0.5W	
Modulation	±5.0KHz@25KHz	±2.5KHz@12.5KHz
Adjacent Channel Power	≥70dB	≥60dB
Hum & Noise	≥40dB	≥36dB
Spurious Emission	≤-36dB	≤-36dB
4FSK Digital Modulation	12.5KHz (data) 7K60FXD 12.5KHz (data+voice) 7K60FXE	
Audio Distortion	≤5%	

European Users should note that operation of this unit in Transmit mode requires the operator to have a valid Amateur Radio Licence from their respective Countries Amateur Radio Licensing Authority for the Frequencies and Transmitter Power levels that this Radio transmits on. Failure to comply may be unlawful and liable for prosecution. *At this subject, refer to the "EU" specification guide 2014/53/EU.*

Disposal of your Electronic and Electric Equipment

Products with the symbol (crossed-out wheeled bin) cannot be disposed as household waste. Electronic and Electric Equipment should be recycled at a facility capable of handling these items and their waste by products.

In EU countries, please contact your local equipment supplier representative or service center for information about the waste collection system in your country.



IMPORTANT NOTICE TO THE ENDUSERS:

The European version of these devices is intended for amateur radio use only. It operates on the following bands:

VHF = 144-146 MHz

UHF = 430-440 MHz

The operator must have the appropriate licence. Any manipulation of the aforementioned frequency bands is prohibited.

WICHTIGER HINWEIS FÜR DEN ENDBENUTZER:

Die europäische Version dieser Geräte ist nur für den Einsatz im Amateurfunk vorgesehen. Es arbeitet auf den folgenden Bändern:

UKW = 144-146 MHz

UHF = 430-440 MHz

Der Betreiber muss über die entsprechende Lizenz verfügen. Jegliche Manipulation der vorgenannten Frequenzbänder ist untersagt.

AVIS IMPORTANT AUX UTILISATEURS FINAUX:

La version européenne de ces appareils est destinée uniquement à une utilisation dans le domaine radioamateur. Il fonctionne sur les bandes suivantes:

VHF = 144-146 MHz

UHF = 430-440 MHz

L'opérateur doit avoir la licence appropriée. Toutes les manipulations de les bandes de fréquences précitées sont interdite.

AVVISO IMPORTANTE PER L'UTENZA FINALE:

La versione europea di questi apparati è destinata esclusivamente all'uso radioamatoriale. Esso opera sulle seguenti bande:

VHF = 144-146 MHz

UHF = 430-440 MHz

L'operatore deve possedere la licenza appropriata. Qualsiasi manipolazione delle suddette bande di frequenza è interdetta.

AVISO IMPORTANTE A LOS USUARIOS FINALES:

La versión europea de estosequiposestádisñada para uso exclusivo de radioaficionados. Opera en lassiguientesbandas:

VHF = 144-146 MHz

UHF = 430-440 MHz

El operador debe estar provisto de la licenciacorrespondiente. Quedaprohibidacualq uiermanipulación de las citadas bandas de frecuencia.



AT	BE	BG	CY	CZ	DE
DK	ES	EE	FI	FR	UK
EL	HR	HU	IE	IT	LT
LU	LV	MT	NL	PL	PT
RO	SK	SI	SE	CH	IS
LI	NO	-	-	-	-

Qixiang Electron Science & Technology Co., Ltd.

**Add: Qixiang Building, Tangxi Industrial Zone,
Luojiang District, Quanzhou 362011, Fujian, China**

