

Qixiang Electron Science & Technology Co., Ltd.

www.qxdz.cn

# Mny Tone<sup>®</sup>





## 3318UV

**DUAL BAND HANDHELD RADIO** 

**INSTRUCTION MANUAL** 

#### **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.
- 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:** 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 instruction manual, 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 o radio or television reception, which can be determined by turning the equipment off and on, the user encouraged to try to correct the interference by one or more of the following measure:

- · 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the 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.

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.

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#### UNPACKING



Please carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material.

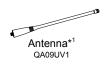
If any items are missing or have been damaged during shipment, please contact your dealer immediately.

## (( Supplied Accessories

Item	Number	Quantity
Antenna	QA09UV1	1
Li-ion Battery	QB-26L	1
Battery Charger	QBC-26L	1
AC Adaptor	QPS-01	1
Belt Clip	BC01	1
Hand Strap	GS01	1
Instruction Manual		1
Certificate		1

#### STANDARD ACCESSORIES

## (( Standard Accessories







Battery Charger QBC-26L









- \*1.Note: For frequency band of antenna, please refer to label indicated in the bottom of the antenna.
- \*2.Note:Car Charger should be workable with QBC-26L charger.

#### OPERATION MODE



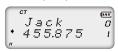
This transceiver is a high performance amateur transceiver with dual band, dual standby, dual display and other functions. Depending on your need, you can set the radio to operate as an Amateur Transceiver or Professional Transceiver. There are 3 levels of operation menu to set functions as you need. It is easy and convenient.

#### 1. Operation Mode:

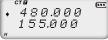
Please refer to "Display Mode" in Page 42.

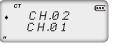
- 2. Amateur Transceiver Mode: Except setting as CH mode, others considered as Amateur transceiver mode. Under this mode, press key to switch between Channel mode and VFO.
  - A. Frequency + Channel mode: At this mode, When set display as "FREQ", it enters into Frequency+Channel mode, new setting of channel operation and shortcut operation can be temporarily used by user. Once the radio is turned off or switched to another channel, the temporary setting will be erased and back to initial settings.(As pic 1)
  - B. Channel+Name Tag Mode: When set display as "NAME", it enters into Channel+Name Tag Mode. At this mode, it will display corresponding channel name when the current channel is edited with name. Otherwise, it will display frequency + channel. Its operations are the same as frequency + channel mode. (As pic 2)
  - C.VFO Mode(Frequency mode): This mode shows only frequency on the display. Shortcut operation and Channel setting will be changed & stored as the latest value permanently. Once the radio is turned off or changed to new











(Pic 4)

#### OPERATION MODE

VFO frequency, the value is remained until next change.(As pic 3)

3. Under every mode, background operations can be changed and saved.



## ((•Charging Operation

The battery is not charged at the factory, please charge it before use. Charging the battery for the first time after purchase or extended storage (more than 2 months) may not bring the battery to its normal operating capacity. After fully repeating the charge/ discharge cycle for two or three times, the operating capacity will reach the best performance. The battery life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery.

## ((<sub>1</sub>Battery Charger Type

Please use our company's designated charger, other models may cause explosion and injure people. After installing the battery, if the radio red light twinkles and remind changing battery, please charge the battery.

## ((ՎNotice for Charging Battery

- ▲ Do not short circuit the charger. Never attempt to remove the battery case or modify it in any way.
- ▲ The ambient temperature should be between 5°C and 40°C when charging. Charging outside this range may not fully charge the battery.
- ▲ Always switch off the transceiver before charging the battery, otherwise it will interfere with correct charging.
- ▲ To avoid interfering the charging procedure, please do not cut off the power or take out the battery during charging.
- ▲ Do not recharge the battery if it is already fully charged. This may shorten the life of the battery or damage the battery.

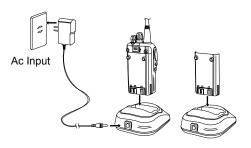
▲ Do not charge the battery or transceiver if it is damp. Dry it before charging to avoid danger.

#### WARNING:

When keys, coins, ornamental chains and other conductive metals make contact with the battery terminals, the battery may cause fire or physical harm. If the battery terminals short circuit, it will generate a lot of heat and possible fire, so please be careful when you handle or use the battery, please store battery and/or radio in an insulated container. Do not put it into a metal container.

## (( How to Charge

- Plug the AC adaptor into the AC outlet, then plug the cable of AC adaptor into the DC jack, the indicator lights orange for 1s and turns into GREEN---waits to charge.
- Slide the battery or transceiver with battery into the charger; make sure the battery terminals are in contact with the charging terminals. LED turns into twinkling RED---pre-charging begins.
- 3. Pre-charging for about 5 minutes, LED twinkles stop then charging begins.
- It takes about 4 hours to fully charge the battery, when LED turns into GREEN—full charged.





NOTE: When charging a powered—on transceiver equipped with battery, the LED will not turn green to show the full charge status. Only when the transceiver is off, can the LED indicate normally. When the transceiver is powered on, it will consume energy and the charger cannot indicate if the battery has been fully charged.

#### 5. Charging Process:

Status	LED
Standby (self-examine orange lights 1second when power on) Pre-charging (pre-charging stage) Charging (charge in constant currency) Full charged (charge in constant voltage)	□ Green light     □ Red light twinkles for about 5 minutes     □ RED light lightens for about 4 hours     □ Green light

#### 6. LED Indicator:

STATUS	self-examine when power on	(No battery)	Pre-charging	Charge normally	Full Charged	Trouble
LED	Orange (for 1 second)	Green	Red light twinkles for 5 minutes	Red	Green	Red twinkles for a long time

NOTE: Trouble means battery heating, battery short-circuit or charger short-circuit.

## ((• Charging Prompt

- 1. Self- examination: When charging, ORANGE light twinkles for 1 second and goes out. That means the charger has passed its self-examination and it can charge the battery normally. If the light remains orange or the red light twinkles, it means the charger can not pass its self-examination or charge the battery.
- 2. Trickle pre-charging: When the battery has been inserted into the charger and red light twinkles, which means the remnant voltage is low, the charger trickle charges the battery (pre-charging status), until the battery reaches a certain electric quantity, then the charger automatically turns to normal charging. If the red light stops twinkling, it means the remnant voltage meets a certain electric quantity, and the charger will charge the battery normally.

NOTE: The time for Trickle pre-charging should not exceed 30 min. If after 30 min, the red indicator is still twinkling, it means it is unable to charge battery. Please kindly check battery and charger.

## (( How to Store the Battery

- If the battery needs to be stored for a long period, the battery should be removed from the radio. It's state of charge should be 50-100% of full charge.
- 2. It should be kept in low temperature, dry environment
- 3. To keep away from hot places and direct sunlight.

#### WARNING

- **▲** Do not short circuit battery terminals.
- ▲ Never attempt to remove the casing from the battery pack.
- ▲ Never assemble the battery in dangerous surroundings, spark may cause explosion.
- ▲ Do not put the battery in hot environment or throw it into fire, it may also cause explosion.

#### INSTALLATION & CONNECTION



## (( Installing / Removing the Li-ion Battery

- Match the three grooves of the battery pack with the corresponding guides on the back of the transceiver and push.
- Press the battery pack and transceiver firmly together until the release latch on the top of the transceiver locks. After hearing a "click" sounds, the battery has been locked.
- 3. To remove the battery pack, slide up the release latch and remove the pack away from the transceiver.

## (((Installing / Removing the Antenna

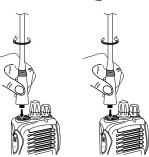
#### ■ Installing the Antenna:

Screw the antenna into the connector on the top of the transceiver by holding the antenna base and turning it clockwise until secure.

#### ■ Removing the Antenna:

Turn the antenna anticlockwise to remove it.





#### INSTALLATION & CONNECTION

## ( Installing / Removing the Belt Clip

#### ■ Installing the Belt Clip:

Place the belt clip over the corresponding holes on the back of the transceiver, and install supplied screws.

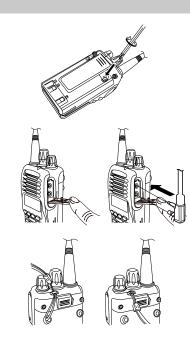
## (( Installing Optional Speaker / Microphone

Unveil the MIC-SP jack cover and then insert the Speaker/Microphone plug into MIC-SP jack.

Note: The transceiver is less water resistant while using the Speaker/Microphone.

## ((Installing the Hand Strap

Slide the loop of the hand strap through the eyelet on the upper rear of the transceiver, pull the entire hand strap through the loop to secure the hand strap in place.

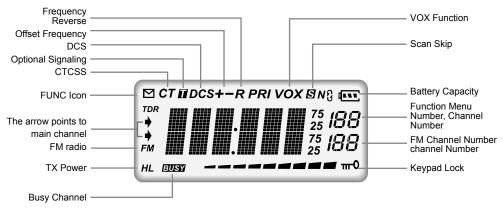


#### GETTING ACQUAINTED



## ( LCD Display

On LCD display screen, you will see various icons which stand for the selected functions and sometimes you may forget the meaning of them. Here you will find the following table extremely useful.



#### NOTE:

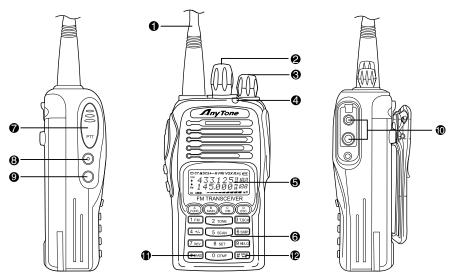
**■ Battery capacity indicator(full)** 

□ No power, replace battery pack or charge battery

**□** □ Battery capacity remnant

Real time display receiving signal strength/Power Indicator

## **OUTPUT** • GETTING ACQUAINTED



#### GETTING ACQUAINTED



- Antenna
- Selector Knob
- Power/Volume switch

Rotate it clockwise to turn on transceiver, rotate it anticlockwise until heard "click" to turn off the transceiver.

When transceiver is power on, rotate it clockwise to increase volume, anticlockwise to reduce volume.

- TX/RX indicator, RX is GREEN or BLUE, TX is RED
- LCD display
   Displays current frequency/channel and operations
- Keypad
   Enters desired frequency/channel or operations by keypad
- PTT key Press PTT key to talk, release this key to receive.
- PF1 key
- PF2 key
- Speaker/Microphone jack
- Single-band Switching
- Memory Bank Operation

#### ((Turn the Radio On & OFF



Under power-off state, turn [POWER]/ [VOLUME] clockwise to turn on the transceiver.



Under power-on state, turn [POWER]/ [VOLUME] anticlockwise to turn off the transceiver.

#### ((• Adjusting Volume



Under power-on state, turn [POWER] / [VOLUME] to adjust volume. Clockwise-up, anticlockwise -down.

When adjusting the volume, user can press the key of Squelch Off to monitor volume level.

#### NOTE:

Press the side key of Squelch Off to monitor the background noise. Turn [POWER] / [VOLUME] to adjust the volume. Turn  $[Selector\ Knob]$  to adjust squelch level for current channel.



#### ( Switch between Main band and Sub band

Under standby state, press (MAN) key to switch between Main band and Sub band. Arrow indicates the Main band.



#### ( Switch between Channel mode and VFO mode

Under standby state, press key to set main band as Channel mode or frequency mode (VFO).



### ((Channel Adjusting

With transceiver in Channel mode or FM radio channel mode, rotate channel switch to adjust channel. Rotate channel switch clockwise to increase channel number, anticlockwise to decrease channel number.

NOTE: In transceiver mode, arrow directs the main band channel.

Rotating channel switch will step through only saved channels. Unsaved channels will be skipped.

## ((√Frequency Adjusting

With transceiver in VFO mode or FM radio frequency mode, rotate channel switch to adjust frequency. Rotate channel switch clockwise to increase frequency, anticlockwise to decrease frequency. Frequency change depends on chosen frequency step.

NOTE: Channel step:2.5K, 5K, 6.25K, 10K, 12.5K, 20K, 25K in total 7 for optional.

## (( Frequency Input by Keypad

Under frequency mode or FM radio frequency mode, you can directly enter frequency through keypad.

1. When your transceiver is under Channel mode, press  $(\mathcal{L}_{M})$  key to switch into VFO.

NOTE: When the transceiver is under Channel mode, it shows current channel number on the right of main frequency.

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2. Enter the desired frequency by keypad.

NOTE: The frequency input of main channel or FM radio is relevant to the stepping and transceiver frequency range. If frequency setup is beyond range or not matching with step size, the input is unavailable. Under the FM radio mode, the frequency step size input by numeric keys is 100k.

## (((Channel Input by Keypad

Under channel mode of transceiver or FM radio, you can switch to desired channel by entering three numbers (000-199). If the entered channel is not a saved channel, the transceiver will emit beep to prompt wrong input and return to current channel. For example, entering 001 is channel 1, 030 is channel 30, 125 is channel 125.



## ((( Squelch Off Momentary / Squelch Off

Side key [PF2] can be setup for Squelch off Momentary or Squelch off function.



- Squelch off: Press [PF2] key, squelch circuit is not mute, back-ground noise can be heard. Press [PF2] key again, squelch circuit is mute.
- Squelch off Momentary: Press and hold [PF2] key, squelch circuit is not mute, back-ground noise can be heard. Release [PF2] key, squelch circuit is mute.

NOTE: The above functions are only available after [PF2] key setup.

When in channel mode, opening squelch will show the frequency of the channel.

## ((• Receiving

When your transceiver is called by other party, green or blue LED light will be on, LCD backlight will be on at the same time, and the arrow icon will flash, you can hear the calling.

NOTE: You may not receive the calling when your transceiver is set at high squelch level. If current channel is set with decode signal, only the same signaling call can be heard.

## (((Transmitting

According to [PF2] key setup, hold [PF2] key to monitor the channel to ensure it is not busy, press PTT key and talk to speaker.

Please keep the distance between mouth and speaker to be 2.5-5CM, speak in normal tone to get the best acoustic fidelity.

NOTE: When press and hold PTT key, transceiver is transmitting if the red LED light is on, release PTT key to receive calls.

## ((\stack\_Emergency Alarm

Under standby state, press and hold [PF1] key (when it is ALARM function) until LCD displays "ALARM", Emergency alarm function is started. This transceiver has 4 Alarm modes. Power off transceiver to exit Alarm.

## ((Side Key [PF1] function instruction

[PF1] key can be setup in Function Menu 45 for below functions:

- VOLT: Battery capacity inquiry: Under standby, press [PF1] key, LCD displays current battery capacity, press this key again to exit.
- CALL: Transmit the prestored DTMF/5TONE Encode signal in channel.
- 3. ALARM: Long pressing [PF1] key, LCD display "ALARM", transceiver will enable the preset alarm function.
- 4. SUBPTT: Press [PF1] key, transceiver will transmit on sub-band frequency.
- Transmit tone pulse frequency: Press and hold PTT key, then press [PF1] key to transmit selected tone pulse frequency.

NOTE: The tone pulse frequency can be set to 1750Hz, 1450Hz, 1000Hz or 2100Hz.

Please refer to function menu No.32 Tone plus frequency setup (Page 33).



## ( Side key [PF2] function instruction

- Squelch off: Press [PF2] key, squelch circuit is not mute, back-ground noise can be heard. Press [PF2] key again, squelch circuit is mute.
- Squelch off Momentary: Press and hold [PF2] key, squelch circuit is not mute, back-ground noise can be heard. Release [PF2] key, squelch circuit is mute.
- 3. Transmit DTMF/5TONE/2TONE signaling: Press and hold [PTT] key, then press [PF2] key to transmit selected DTMF/5TONE/2TONE signaling.
- 4. Press and hold [PF2] key to turn on transceiver, until transceiver emits "DU" beep, transceiver enter into general functions setup.

#### ( Edit channel

- 1. Under frequency mode (VFO), enter desired frequency and settings, press (AMC) key, the top left corner of LCD displays " ™ " icon, press (√M) key to switch into channel mode, channel number flashes.
- 2. Rotate channel switch to select desired editing channel number.
- 3. Press ♠ key, the top left corner of LCD displays " ™ " icon, press and hold ♠ key until transceiver emits "DUDU" beep, channel is stored successfully.

## ( Delete channel

Under standby state, press Akey, the top left corner of LCD displays " ™ " icon, press W key to switch into channel mode, channel number flashes.

- 2. Rotate channel switch to select desired deleting channel number.
- 3. Press (key, the top left corner of LCD displays " "icon, press and hold (key until transceiver emits "DUDU" beep and clear up frequency information of current channel, deletion is successful.

NOTE: This process can be applied for deleting FM radio channels.



## ( Turn On/ Off FM Radio

Under standby state, press (A) key, the top left corner of LCD displays " \( \sqrt{1} \) " icon, then press 1 FM key, LCD displays "FM ON" and current FM radio frequency, FM radio function is on. When FM radio is on, press (B) key, LCD displays "FM OFF", FM radio is mute



When FM radio is on, press (A) key, the top left corner of LCD displays " icon, press 1 FM key to turn off FM radio and return to transceiver state. Re-start transceiver also can exit FM radio function.

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## ( Add/Cancel Optional signal decode function

Under standby state, press (♠) key, the top left corner of LCD displays " M" icon, press (▶) key.

- 1. LCD display "DTMF" and "I" icon, DTMF signal add in current channel.
- 2. Repeat above operation, LCD display "5TONE" and "☐" icon, 5TONE signal add in current channel
- 3. Repeat above operation, LCD display "2TONE" and "7" icon, 2TONE signal add in current channel
- signal in current channel.



NOTE: When this function is on, user must setup 07th menu to be TONE option, then DTMF/5TONE/2TONE/MSK can be used.

## (((CTCSS/DCS Scan

Press Akey, the top left corner of LCD displays " " icon, press 3 test key to enter into CTCSS/DCS scan. Under this state, rotate channel switch to change scan direction. When scan the matching CTCSS/DCS signaling, it will stay 5 seconds and then go on scanning. Press any other keys except A test. \*\* EAND\*\*, \*\* EAND\*\*



NOTE: This function is invalid when transceiver works in professional mode or the arrow directed channel no setting CTCSS/DCS signaling.

In current channel, if signaling set as CTCSS, it will scan CTCSS, if sets as DCS, it will scan DCS.



## (( Offset Frequency Direction Setup

Under standby state, press A+/- key, the top left corner of LCD displays " M" icon, press 4+/- key to choose offset frequency direction. There are 3 options, Positive offset, Minus offset, shut off offset.

- 1. (+) Positive offset: Indicates TX frequency is higher than RX frequency. When enable reverse function, the RX frequency is higher than TX frequency.
- 2. (-) Minus offset: Indicates TX frequency is lower than RX frequency. When enable reverse function, the RX frequency is lower than TX frequency.
- 3. None: Indicates shut offset off.

Under frequency mode (VFO) or channel mode, press (A) key then press (A) key to choose positive offset direction(+), minus offset direction (-), shut offset off one by one (Please refer to offset frequency setup).

NOTE: This function is unavailable in professional transceiver mode.

### (( Frequency/Channel Scan

Under corresponding mode, press  $\stackrel{\triangle}{\mathbb{C}_{U\!NC}}$  key, the top left corner of LCD displays "  $\stackrel{\square}{\square}$  " icon, then press  $\stackrel{\square}{\mathbb{C}_{SCAN}}$  key to start frequency scan or channel scan.

- 1. Frequency Scan Under VFO mode, frequency scan is available. This function is used for monitoring signal of various communication frequency by transceiver 'step' setup, press numeric key or press key to exit.
- Channel Scan Under channel mode, this function is used for monitoring signal of each channel

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in this mode. Press numeric key or (P) key to exit.

#### NOTE:

- ▼ Frequency scan is of all bands scan, it scans upwards as your STEPPING setting.
- ▼ In channel scan, the skipped channel is not in the line of scanning. Scan upwards as per channel no. (please refer to channel scan skip).
- ▼ Frequency/channel scan can change scan direction by rotating channel switch, when find a matching carrier wave and signaling, the transceiver will stay 5 seconds then go on scanning. (Please refer to scan setup) If turn off radio in scan mode, when re-power on, radio will resume scanning automatically.

## (( Channel Scan Skip

Under channel mode, press (A) key, the top left corner of LCD displays " M" icon, then press (5 skip) key to set current arrow directed channel as Channel scan skip. Repeat above operation to cancel channel scan skip.

- 1. LCD displayed "S" means the current channel will not be scanned.
- 2. "5" icon disappeared means the current channel will be scanned.

#### (( Frequency Reverse

Under standby state, press  $\nearrow$  key, the top left corner of LCD displays "  $\boxtimes$  " icon, then press  $\nearrow$  key to set arrow directed channel as frequency reverse, repeat above operation to turn off frequency reverse.

 When LCD displays "R" icon, it means current arrow directed channel open the frequency reverse function, the TX frequency and RX frequency is interchanged,

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if CTCSS/DCS signaling is set, it will also interchange.

2. When "R" icon disappears, it means reverse function is close.

#### TX Power selection

Under standby state, press (A) key, the top left corner of LCD displays " \( \sqrt{\text{!}} \) " icon, then press  $\mathbf{g}_{H/LO}$  key to choose High/Low power for current arrow directed channel.

- 1. When LCD displays "L" icon, it means low power is chosen.
- 2. When LCD displays "H" icon, it means high power is chosen.

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#### ( Talk Around function

Under standby state, press (A) key, the top left corner of LCD displays " \( \sqrt{\text{"}} \)" icon, then press \*BAND, the arrow directed channel will enable talk around, repeat the above operation to close talk around.

- 1. TX=RX: Enable talk around, current channel transmit at RX frequency, if CTCSS/ DCS signaling is set, it will interchange decoding CTCSS/DCS as encoding.
- 2. OFF: Close talk around.

(122) TALKAR TX = RX

TALKAR 0FF

## ( DTMF code Transmit and Enquiry

- 1. Press (FUNC) key, the top left corner of LCD displays " \(\simeg \)" icon, then press (\(\overline{O}\) DTMF kev. LCD displays DTMF data and group number (total 16groups) of current group. © 1
- 2. Rotate channel switch to choose desired group and DTMF data, press PTT key to transmit selected DTMF signaling. If current group not edit DTMF data, LCD

EMPTY

displays "EMPTY".

- 3. When current group displays "EMPTY", press (Link) key, the top left corner of LCD displays " ☐ " icon, press and hold ODTMF key until transceiver emits "DU" beep, transceiver enters into DTMF edit state, LCD displays "\_\_\_\_\_\_", now you can enter desired DTMF data by keypad.
- 4. When finished editing, press side key [PF2] to save DTMF signaling.



## ((∙Keypad lock

In order to prevent wrong operation, user can make use of keypad lock function.

When keypad lock is turned on, only channel selector is available for changing channels, all other keys are locked. Keypad lock operation can be done through radio itself.

Under standby state, press Akey, the top left corner of LCD displays "\subseteq" icon, then press and hold \( \overline{#}\) key until transceiver emits "DU" beep, LCD displays "\( \overline{"}\) icon, keypad is locked. Repeat above operation, "\( \overline{"}\) icon disappears, key lock function is cancelled





## (( Single-band Switching

To reduce interference from the sub-band when only the main-band is needed. You can use the single-band switching function to turn off the sub-band quickly.

Continuous pressing of ★BAND will cycle LCD display to show Main + Sub-Band / Sub-Band Only / Main-Band Only.

## (( CTCSS/DCS encode and decode

- 1. Press (A) key then press [PF2] to enter into setup.
- Press [PF2] key to choose CTCSS, DCS or OFF, when choose DCS, press ¥BAND key to select positive or negative code.
- 3. Rotate Channel selector to choose desired CTCSS/DCS encode and decode.
- 4. Press (P) key or (# BANK) key to confirm and exit.

#### FUNCTION MENU SETUP

Menu 1-16 of this transceiver are channel operations. Channel operations temporarily changed the functions of current channel. When power off or channel has been changed, the relevant setup will be erased. Only under VFO mode, the channel operations will be saved until next change.

Menu 17-47 are background operations(menu 37-46 are memory bank setup, please refer to page 45-46), it is valid for all channels, the relevant setup will be saved until next change.

The operating methods are as follows:

- Press A key, the top left corner of LCD displays " ☐ " icon, then press ser key to enter function menu.
- 2. Press  $\binom{B}{MAIN} / \binom{C}{V/M}$  key to choose desired function.
- 3. Rotate channel switch to choose desired setting.
- 4. Press (P) key or #BANK key to confirm and exit.

Note: When setup CTCSS/DCS encode and decode, press  $\boxed{1_{FM}}$  key to choose CTCSS,DCS or off, when choose DCS, press  $\boxed{**_{EM}}$  key to switch positive and negative code. When edit the name, press  $\boxed{1_{FM}}$  key to shift the cursor down, press  $\boxed{4_{FM}}$  key to shift the cursor up.

## • FUNCTION MENU SETUP



Menu No.	LCD Display	Function	Options	Description
	T-CDC		OFF	No CTCSS/DCS Encode
1		CTCSS/DCS Encode	62.5HZ-254.1Hz+Self defined	51 groups fixed CTCSS encode+1 group selfdefined encode
			000N-777I	1024 groups DCS Encode
	R-CDC		OFF	No CTCSS/DCS Decode
2		CTCSS/DCS Decode	62.5HZ-254.1Hz+Self defined	51 groups fixed CTCSS decode+1 group selfdefined decode
			000N-777I	1024 groups DCS decode
	RT-CDC	CTCSS/DCS Encode/Decode Synchronous	OFF	No CTCSS/DCS encode/decode
3			62.5HZ-254.1Hz+Self defined	51 groups fixed CTCSS encode/decode + 1 group self-defined CTCSS encode/decode
			000N-777I	1024 group DCS encode/decode
4	5T-ENC	5TONE Encode list	CALL00-31	32 groups 5TONE encode list
5	2T-ENC	2TONE Encode list	CALL00-31	32 groups 2TONE encode list
6	TONDEC	Optional signaling setup	DTMF/5TONE/2TONE	Current optional signal is DTMF/5TONE/2TONE
7	2T-DEC	2TONE Decode list	DEC 00-31	32 groups 2TONE decode list

		Squelch mode setup	SQ	When current channel received matching RF signals, transceiver can hear the talking from the other party.
			CTCSS/DCS	When current channel received matching RF signals and matching CTCSS/DCS signaling, transceiver can hear the talking from the other party.
8	SIGNAL		TONE	When current channel received matching RF signals and matching optional signaling, transceiver can hear the talking from the other party.
			СТ&ТО	When current channel received matching RF signals + matching optional signaling + matching CTCSS/DCS signaling, transceiver can hear the talking from the other party.
			СТ/ТО	When current channel received matching RF signals, or matching optional signaling, or matching CTCSS/DCS signaling, transceiver can hear the talking from the other party.
9	STEP	Frequency step size setup	2.5K-50K	9 options in total
11	REV	Frequency Reverse	ON	Turn on Frequency reverse function, TX and RX frequency of current channel will be interchanged.
			OFF	Close Frequency reverse function



12	TALKAR	Talk Around	TX=RX	Turn on Talk Around function, current channel will transmit at RX frequency, if CTCSS/DCS signaling is set, it will interchange decoding CTCSS/DCS as encoding.		
			OFF	Close Talk Around function.		
13	OFFSET	Offset Frequency setup	0-70MHz	RX:UHF, TX:VHF or RX:VHF, TX:UHF		
14	NAME	Editing Channel name	a-Z, 0-9 In channel name display mode, will display the edited channel name.			
		LOCK Busy Channel Lockout	BUSY	Carrier wave lock, transmitting is prohibited when received matching carrier wave.		
15	RPLOCK		REPEAT	Signaling lock, transmitting is prohibited when received matching carrier but with mismatching CTCSS/DCS		
			OFF	Close BCLO function		
16	TX	TX OFF	ON/OFF	TX function is enabled/disabled in current channel.		
17	BAND	VFO band limit	ON/OFF	Turn on/off band limit function		
			FREQ	Display sub band frequency or channel		
18	DSPSUB	Sub band display setup	VOLT	Display current battery voltage		
			OFF	Sub band display is disabled		
19	BEEP	Keypad Voice prompt setup	ON/OFF Turn on/off keypad voice prompt function			

			,			
20	тот	Time-Out-Timer	OFF	Turn off time-out timer		
20	101	Time-Out-Time	1-27MIN	Total 27 levels for optional, each level step 1minute		
		Voice Operated	OFF	Turn off VOX function		
21	VOX	Transmission (VOX) Setup	110	Total 10 VOX levels for optional		
22	VDELAY	VOX Delay Setup	0.5S-3S	Total 27 levels for optional, each interval is 0.1S		
23	ADO	Automatic Power	OFF	Disable the Automatic power off function		
23	APO	Off Setup	30MIN-2HOUR	30minutes ~ 2hours: Total 3 levels for optional		
24	DTMF	DTMF Transmitting Time	50MS-500MS	Total 5 kinds of DTMF transmitting time for optional.		
25	SQL	Squelch level Setup	00-09	10 levels of squelch in total for optional, "00" is minimum setup value (normally open)		
		Scan Dwell Time Setup	5ST-15ST	When scanning matched signal, transceiver will stop scanning for 5-15seconds then resume.		
26	SCAN		2SP	When scanning matched signal, transceiver will stop scanning, 2seconds after signal disappeared, then resume.		
0.7	CDEED	0	QUICK	Fast Scan		
27	SPEED	Scan speed setup	NORMAL	Normal Scan		
		Function Icon Stay Time	FUNCT	When finished function setting or enter into function menu, icon disappeared		
28	FTIME		1SEC-3SEC	When finished function setting or enter into function menu, icon stay 1-3seconds then disappeared		
			ALWAYS	Function icon is always display, only when pressing function key again, the icon will disappear		



29	LIGHT	LCD Backlight	ON/OFF	Always on/off		
29	LIGHT	LCD Backlight	AUTO	Backlight will automatic closed after a period.		
30	COLOR	LCD Backlight Color	BLUE/ORG/PUR Blue/Orange/Purple			
31	ID	Self ID inquiry	001/12345	LCD displays radio self ID, DTMF ID is 3 digits. 5TONE ID is 5 digits.		
32	TBST	Tone Pulse Frequency Selection	1750Hz/2100Hz /1450Hz/ 1000Hz	Tone plus frequency is 1750Hz/2100HZ/1450Hz/1000Hz		
			OFF	Turn off battery save function		
33	SAVE	Battery Save Setup	1:2-1:8	Battery save time is 1:2-1:8		
			AUTO	Battery save ratio is adjusting automatically		
34	RADIO	FM radio	ON/OFF Allow/Prohibit using FM radio			
35	BAK	Group Selection	0-9	Display current working group		
36	DALK	ALK Group linking	OFF	Turn off group linking, menu 37-46 is hide.		
30	BALK		ON	Turn on group linking, menu 37-46 display.		
37	BLK 1	Link Group 1	OFF/ON	Add or remove the group 1 in group linking		
38	BLK 2	Link Group 2	OFF/ON	Add or remove the group 2 in group linking		
39	BLK 3	Link Group 3	OFF/ON	Add or remove the group 3 in group linking		
40	BLK 4	Link Group 4	OFF/ON	Add or remove the group 4 in group linking		
41	BLK 5	Link Group 5	OFF/ON	Add or remove the group 5 in group linking		
42	BLK 6	Link Group 6	OFF/ON	Add or remove the group 6 in group linking		

43	BLK 7	Link Group 7	OFF/ON Add or remove the group 7 in group linking				
44	BLK 8	Link Group 8	OFF/ON Add or remove the group 8 in group linking				
45	BLK 9	Link Group 9	OFF/ON Add or remove the group 9 in group linking				
46	BLK 0	Link Group 0	OFF/ON Add or remove the group 0 in group linking				
	PF1	Self define PF1 key function	VOLT	Displays current battery capacity.			
			CALL	Call function.			
47			ALARM	Emergency alarm function			
			SUBPTT	Sub band PTT			
			OFF	No function.			

#### SENIOR FUNCTION OPERATIONS

### (( Display Mode Setup

There are three kinds of display modes for optional.

- 1. Press [PF2] key to turn on radio, hold [PF2] key until transceiver emits beep.
- 2. Press (A) / (V) key to choose No.01 function item, it shows "DSP" on LCD.
- 3. Rotate channel switch to choose desired setup.
  - FREQ: Frequency+Channel mode, transceiver displays current channel name + frequency, press which into VFO mode.
  - CH: Channel mode, 1~24 items of function menu will hide automatically, user can only operate some functions. It is unable to switch into VFO by pressing (♣) key. This model can be used for Amateur mode.
  - **NAME:** Channel+Name Tag mode, transceiver displays current channel number +channel name, press  $\sqrt[r]{m}$  key to switch into VFO mode.
- 4. Press (P) key or # Key key to confirm and exit.

### 

## ((Resume Factory Default

You can make all the settings of transceiver return to the factory default settings when transceiver can not work normally because of wrong operation or error setup.

- 1. Press [PF2] key to turn on radio, hold [PF2] key until transceiver emits beep.
- 2. Press (B) / (C) key to choose No.02 function item, it shows "RESTOR" on LCD.
- 3. Rotate channel switch to choose desired setup.

### SENIOR FUNCTION OPERATIONS



OFF: No operations.

**FACT:** Resume all items to factory default, including channel and background settings.

**INIT:** Resume background settings to factory default, channel operations are keeping.

- 4. Press (P) key to exit current selection.
- 5. Press # BANK key to confirm current selection.



#### MEMORY BANK



10 memory banks 0-9 are available for 3318UV, bank 0 includes all edited channels. Bank 1-9 can be assigned maximum 32channels, a channel can be assigned to more groups.

#### Assign channel to memory bank:

- 1. In Memory channel mode, choose a memory channel, press # key, bank number show in the channel number position as "-X" twinkling.
- Turn Channel selector to choose desired memory bank, press # wey, the
  memory channel will be assigned to the bank.
- If the bank already has 32 channels, the new assigned channel will replace the last channel in bank



BBK - -

## (( Memory Bank Switch

In Channel mode, press # key twice to enter memory bank mode, press key then press ser key to enter into function menu.

- 1. Press (B) / (J) key to choose menu 35(A)/18(D/E), LCD show "BAK--".
- 2. Turn Channel switch to choose bank 0--9, press # WK key confirm
- 3. Rotate the channel switch clockwise to enter into desired memory bank.

Note: When the bank linking is on, if no channel in the selected bank, radio will enter into the next linking bank. When the bank linking is off, if no channel in the selected bank, current channel will be assigned to this bank.

### ( Memory Bank Exit

When transceiver in memory bank mode, press # wey twice to exit and return to channel mode.

#### MEMORY BANK

# ( Bank linking

- 1. In channel mode, press # key twice to enter into memory bank mode, press A key then press ser key to enter into function menu.
- 2. Press (B) / (S) key to choose menu 36, LCD show "BALK".

ON: Turn on Bank linking.

The following menus allow adding or deleting banks.

Version A	Version A LCD display		Option	
Menu37	BLK1	Link Group 1	OFF/ON	
Menu38	BLK2	Link Group 2	OFF/ON	
Menu39	Menu39 BLK3		OFF/ON	
Menu40	BLK4	Link Group 4	OFF/ON	
Menu41	BLK5	Link Group 5	OFF/ON	
Menu42	BLK6	Link Group 6	OFF/ON	
Menu43	BLK7	Link Group 7	OFF/ON	
Menu44	BLK8	Link Group 8	OFF/ON	
Menu45	BLK9	Link Group 9	OFF/ON	
Menu46	BLK0	Link Group 10	OFF/ON	

BALK 96 ON

BLK 1 = 7 ON

OFF: Turn off Bank linking, hide menu 37-46.

When bank linking is on, one or more banks can be added into scan list. In memory bank mode, enable the scanning function, transceiver will scan the channels in current bank. During scanning, long pressing key 0-9 will add or delete the corresponding memory bank.

### • TECHNICAL SPECIFICATION

	General						
		TX RX					
Frequency Range	3318UV	VHF:144~148MHz UHF:420~450MHz	VHF:136~174MHz UHF:400~512MHz				
Channel Capacity		200 channels	200 channels				
Channel Spacing		12.5KHz					
Phase-locked Step		0.1KHz					
Operation Voltage		7.4V DC ±20%					
Battery Life		More than 12 Hours(1500mAh), by 5-5-90 working cycle					
Frequency Stability		±2.5ppm					
Operation Temperature		-20℃~ +55℃					
Size		117.5x60x35.5mm (with battery)					
Weight		235g (with battery)					

### • TECHNICAL SPECIFICATION



Receiving Part						
Sensitivity (12dB SINAD)	≤0.35µV					
Adjacent Channel Selecitvity	≥60dB					
Intermodulation	≥60dB					
Spurious Rejection	≥70dB					
Hum & Noise	≥40dB					
Audio Distortion	≤5%					
Audio Power Output	1000mW/10%					

Transimitting Part						
Power Output	VHF:5W/1W UHF:4W/1W					
Modulation	11КФF3E					
Adjacent Channel Power	≥60dB					
Hum & Noise	≥40dB					
Spurious Emission	≤-36dB					
Audio Distortion	≤5%					

### • TROUBLE SHOOTING GUIDE

Problem	Corrective Action			
No power	A.The battery may be exhausting. Recharge or replace the battery. B.The battery may not be installed correctly. Remove the battery and install it again. C.The power switch is broken; send it to local dealers to repair. D.Battery touch is broken; send it to local dealers to repair.			
Battery power dies shortly after charging.	The battery life is finished. Replace the battery pack with a new one.			
Transceiver cannot scan	The channels are not in scan list. (Professionals set it.)			
All band noisy	Turn on squelch. Non-professionals are advised not rammed to adjust this function.			
No sound after using earphone. for a while	Earphone jack is broken. Please contact with local dealers to repair.			
Communication distance becomes short, and Low sensitivity	A.Check whether the antenna is in good conduction and the antenna base do not come adrift.      B.Antenna connector is broken or not or with sundries. Whether it has set in low power output. (Please contact with local dealers to repair.)			
Cannot talk or hear other members in your group	A.Different frequency or channel, please change it. B.Different CTCSS/DCS/DTMF, please reset it. C.Out of communication range.			

### • TROUBLE SHOOTING GUIDE



Can not power on or frequent power off	Check weather the battery touch is out of sharp or broken.
The receiving sound gets low or intermittent	Check weather the MIC is stoppage. Otherwise, please contact with local dealers to repair it.
Receiving intermittent with in big noise	A.Out of communication range or obstruct by tall buildings or in big noise.     B.450 filter is broken, Please contact with local dealers to repair.
Loudspeaker become lower or with "ka ka" sound after using a certain time	Check whether the loudspeaker is broken, Iron powder or sundries is in the loudspeaker. Please contact with local dealers to repair.
Receive voice from the other party but can not transmit	Check [PTT] key.
Receiving indicator with green light but no sound	A.Low volume, please clockwise to turn on. B.Loudspeaker is broken, please contact with local dealers to repair. C.Earphone jack is broken, please contact with local dealers to repair. D.Volume switch is broken.

### **O ATTACHED CHART**

# (( CTCSS Frequency Chart

1	62.5	12	94.8	23	136.5	34	177.3	45	218.1
2	67.0	13	97.4	24	141.3	35	179.9	46	225.7
3	69.3	14	100.0	25	146.2	36	183.5	47	229.1
4	71.9	15	103.5	26	151.4	37	186.2	48	233.6
5	74.4	16	107.2	27	156.7	38	189.9	49	241.8
6	77.0	17	110.9	28	159.8	39	192.8	50	250.3
7	79.7	18	114.8	29	162.2	40	196.6	51	254.1
8	82.5	19	118.8	30	165.5	41	199.5	52	user-defined
9	85.4	20	123.0	31	167.9	42	203.5		
10	88.5	21	127.3	32	171.3	43	206.5		
11	91.5	22	131.8	33	173.8	44	210.7		

### • ATTACHED CHART



### ((1024 groups DCS frequency chart

000	001	002	003	004	005	006	007
010	011	012	013	014	015	016	017
020	021	022	023	024	025	026	027
030	031	032	033	034	035	036	037
040	041	042	043	044	045	046	047
050	051	052	053	054	055	056	057
060	061	062	063	064	065	066	067
070	071	072	073	074	075	076	077
100	101	102	103	104	105	106	107
110	111	112	113	114	115	116	117
120	121	122	123	124	125	126	127
130	131	132	133	134	135	136	137
140	141	142	143	144	145	146	147
150	151	152	153	154	155	156	157
160	161	162	163	164	165	166	167
170	171	172	173	174	175	176	177
200	201	202	203	204	205	206	207
210	211	212	213	214	215	216	217
220	221	222	223	224	225	226	227
230	231	232	233	234	235	236	237
240	241	242	243	244	245	246	247

### **OATTACHED CHART**

250	251	252	253	254	255	256	257
260	261	262	263	264	265	266	267
270	271	272	273	274	275	276	277
300	301	302	303	304	305	306	307
310	311	312	313	314	315	316	317
320	321	322	323	324	325	326	327
330	331	332	333	334	335	336	337
340	341	342	343	344	345	346	347
350	351	352	353	354	355	356	357
360	361	362	363	364	365	366	367
370	371	372	373	374	375	376	377
400	401	402	403	404	405	406	407
410	411	412	413	414	415	416	417
420	421	422	423	424	425	426	427
430	431	432	433	434	435	436	437
440	441	442	443	444	445	446	447
450	451	452	453	454	455	456	457
460	461	462	463	464	465	466	467
470	471	472	473	474	475	476	477
500	501	502	503	504	505	506	507
510	511	512	513	514	515	516	517
520	521	522	523	524	525	526	527
530	531	532	533	534	535	536	537

### ATTACHED CHART



540	541	542	543	544	545	546	547
550	551	552	553	554	555	556	557
560	561	562	563	564	565	566	567
570	571	572	573	574	575	576	577
600	601	602	603	604	605	606	607
610	611	612	613	614	615	616	617
620	621	622	623	624	625	626	627
630	631	632	633	634	635	636	637
640	641	642	643	644	645	646	647
650	651	652	653	654	655	656	657
660	661	662	663	664	665	666	667
670	671	672	673	674	675	676	677
700	701	702	703	704	705	706	707
710	711	712	713	714	715	716	717
720	721	722	723	724	725	726	727
730	731	732	733	734	735	736	737
740	741	742	743	744	745	746	747
750	751	752	753	754	755	756	757
760	761	762	763	764	765	766	767
770	771	772	773	774	775	776	777

NOTE: N stands for positive code. I stands for inverted code. 1024 groups of DCS in total.