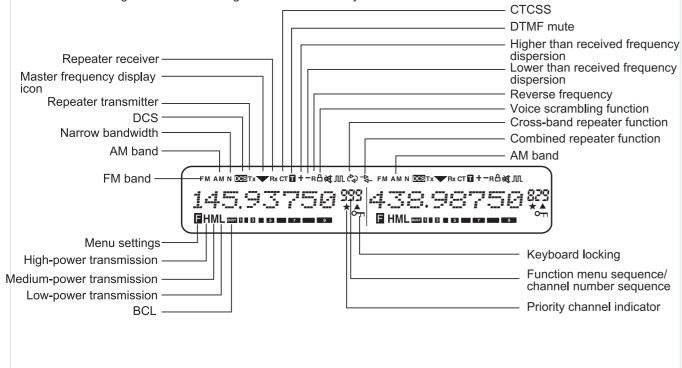
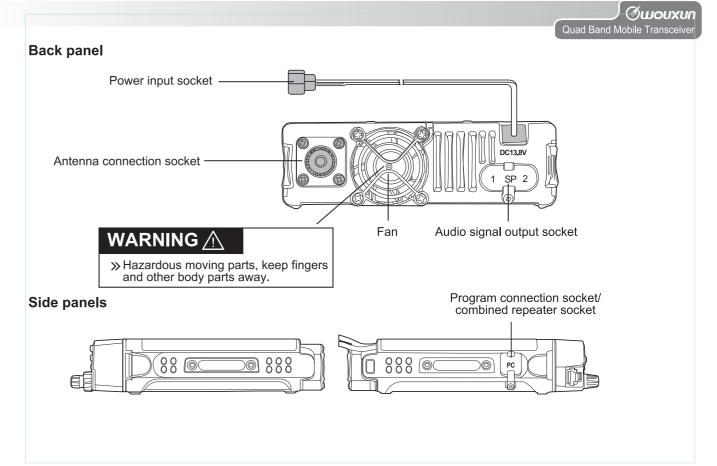
Getting started

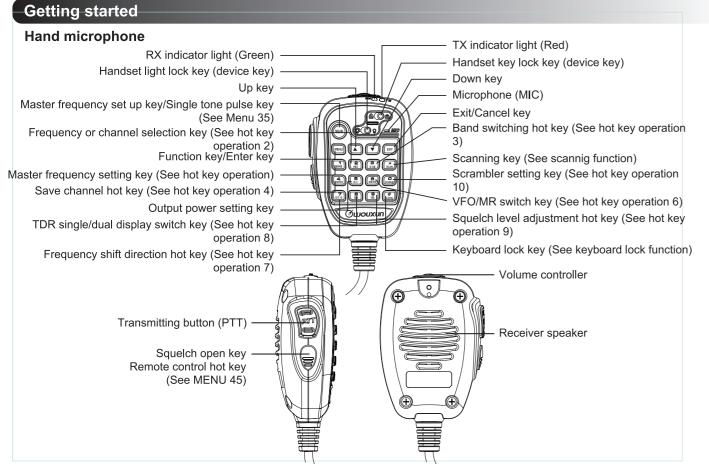
LCD

All kinds of performance parameters can be selected on the LCD screen. Sometimes, you may be unable to think of what they mean or how to change them. The following table will be extremely useful at such times.





15



Your first QSO



First QSO

Do you want to hurry up and use your transceiver? After reading these chapters and sections you will know how to broadcast your voice out into the sky. Following is a quick instruction manual. If you encounter any problems or need further explanation, please read the detailed explanation later in this manual.

- 1.Installing the transceiver. (See pre-usage installation)
- 2.Installing the antenna. (See pre-usage installation)
- 3. Connecting the power source, or vehicle power source. (See pre-usage installation)
- 4.Press (b) to turn on the transceiver, the transceiver will make a long douple beeping tone, the transceivers brand and model will be displayed and the transceiver will enter standby status.



Press the key shown by the arrow



Display brand and model



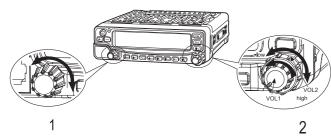
Enter standby status

Your first QSO

Adjusting the volume

Rotate the VOL1 and VOL 2 knobs clockwise in order to increase the volume, rotate the knobs counter-clockwise to decrease volume, the cooresponding volume level will be displayed on the LCD.

The volume control knobs have upper and lower control devices. The upper control devices is the channel and frequency RX volume control on the left side of the screen, the lower level control device is the channel and frequency RX volume control on the right side of the screen.



Turn the volume knob clockwise to increase the volume and the RX volume. The maximum volume is level 16. Turn the knob counter-clockwise to decrease the volume and the RX volume. Continue turning the knob counter-clockwise to shut off.

Selecting Frequency

(1) Frequency mode (VFO)

VFO Mode is the basic mode for changing the operating frequency, through rotating the TURNING (Tuning) control knobs you can change the operating frequency. Turn the knobs clockwise to increase the frequency and counter-clockwise to decrease. You can also enter the desired frequency using the keypad.

Changing the operating frequency using the keypad:

While in standby mode, press the (2) key to enter in the operating frequency selection. After the LCD screeen displays 8 whiffletrees, enter in the 6 figures in order which the frequency will automatically confirm according to the "frequency automated correction" verification. And will then display on the LCD screen.



Automatic frequency correction:

An operating frequency has a total of 8 digits, the method for verifying the last two digits after inputing 6 digits using the keyboard is as follows:

When the 5th and the 6th are entered in as "31" or "81" the final two digits will be "25".

When the 6th digit is entered in as "0" or "5" the last two digits will be "00".

If the 6th digit is not entered as shown above, it will be automatically corrected to 6.25K step match frequency.

Example frequency 1: 445.95500MHz standby mode:

Press 2 key	Display: (
Input [4]	Display: (4
Input [4]	Display: (4 4
Input [5]	Display: (4 4 5
Input [9]	Display: (4 4 5 . 9
Input [5]	Display: (4 4 5 . 9 5
Input [5]	Display: (4 4 5 . 9 5 0 0

Example frequency 2: 445.56875MHz: standby mode

Lital lipite illequency 2. 445.50075ivil iz . Stalluby lilioue					
Press 2 key	Display: (
Input [4]	Display: (4				
Input [4]	Display: (4 4				
Input [5]	Display: 4 4 5				
Input [5]	Display: (4 4 5 . 5				
Input [6]	Display: (4 4 5 . 5 6				
Input [8]	Display: (4 4 5 . 5 6 8 7 5)				

9

Your first QSO

(2) Channel mode (CH)

Rotate the (TUNING) control knobs in channel mode to change the operating channel in order to get to the selected operating frequency, or use the keypad to select the operating channel.

Changing the operating channel using the keypad:

In standby mode press the [2] key, at this the time hundredth place of the channel number will appear. After entering the desired hundredth digit, the tenth place digit will appear, after entering the 10th place digit, the single place digit will appear, then enter the desired single place digit of the channel.

Example: Selecting Channel CH-901

In standby mode, after pressing [2], enter "9", "0", "1" in sequence.

Example: Selecting Channel CH-088

In standby mode, after pressing [2], enter "0", "8", "8" in sequence

Example: Selecting Channel CH-008

In standby mode, after pressing [2], enter "0", "0", "8" in sequence

Selecting output power

While in standby mode, press the [5] key on the front panel or the [5] key on the encoded handheld microphone, to select the output power. Every time the output power is changed, the sequence will be $\uparrow^{H \to M \to L}$

The transceivers medium output power is M 2, for setup See "Menu 3" (MPOWSET)

Special Reminder \triangle

>> when selecting the output power only do so in relation to the master frequency, See the hotkey operation chart for how to change the master frequency.

Commonly used basic operations



Transmitting

(1) In order to transmit signal first grab hold of the handheld microphone, and place about 5 CM away from your mouth, press the [PTT] key, and then speak normally into the microphone. When transmitting, The LCD backlight will change to your set color (For TX backlight color settings see instructions on P39), the LCD display screen will display a TX-LED indicator light. If you press the PTT key while transmitting outside of the coverage area you will hear an error sound.

(2) Release the [PTT] key, to end transmission.

Special Reminder \land

>> If the transmission time exceeds the "Menu 11 (Transmission time-out timer) set time, you will hear a warning indication tone, the transceiver will also stop transmitting and will limit further transmission. After releasing the [PTT] key, the tone will continue for 10 seconds after which the transmission limitation will be lifted. Note: if you press the [PTT] key anytime within the 10 seconds while the tone is sounding, you will hear a warning tone.

Commonly used basic operations

Squelch settings: Press the [9] key in standby mode, and the muting level will be displayed on the screen, Press the ▼ / ▲ to choose the desired level of muting, to confrim press the [MENU] key.

Single / dual display: Press the [8] key in standby mode to select single or dual display.

Switching modes: In standby mode, press the [6] key to select VFO frequency mode or MR channel mode. (For detailed operation see hot key 6)

Switching working bands: In standby mode, press the [3] key to select the working band, this transceiver with quad band available. (For detailed operation see P30)

Shortcut operation chart (See P29-34 for explanation)

Key name	Function Name	Entering hotkey or operation	Remark
MAIN / 1BAND	Master frequency settings	In standby mode, press (MAIN) / (188ND) to change master frequency	The LCD display screen will display a ▼ icon for the master frequency.
2мнz	Selecting channel or frequency	In standby mode, press 2MHZ to enter the Channel or frequency selection.	See operations P30 "Frequency or channel selection hotkey" instructions
∃ B/SW	Switching working band	In standby mode, press 38/SW to switch working band.	See operations P30 "Band switching" instructions
4ммсн	Saving channels	In standby mode, press 4MMcH to save a channel.	See operations P30-31 "Save channel hotkey" instructions
5 H/L	Output power level settings	In standby mode, press 5 _{H/L} to change the output power settings.	Press the desired output power to change level of settings, sequence is as H-M-L
6VFO/MR	Switching frequency mode and channel mode	In standby mode, press (SW9/MB) to change the display mode.	See P31 "Frequency / Channel switch hotkey"
7set-d	Frequency shift direction	In frequency standby mode, press 7str-0 Frequency shift direction settings. In channel standby mode, press 7str-0 for reverse frequency or to turn off reverse frequency.	See P32 "Frequency shift direction switch hotkey"
8TDR	Single and dual display settings	In standby mode, press to enter single display or turn off single display.	Only for secondary frequency set up.
a sdr	Squelching level settings	In standby mode, press 9 sq. to enter squelching level settings.	See P32 "Squelch level setting hotkey"
SCAN SCAN	Scanning function	In standby mode, press standby mode, press standby to enter the scanning function.	Transceiver panel/Hand microphone key function
SCRAM	Scrambler settings	In standby mode, press (SCRAM) to enter the scrambler settings.	Hand microphone key settings, see P29 "voice scrambler function key (optional)"
# LOCK	Keypad lock settings	In standby mode, press $\ensuremath{\text{\#LNCK}}$ to lock the keyboard or to turn off keyboard lock.	Transceiver panel / Hand microphone key function

Note: Frequency mode and channel mode are of identical operation (Besides independent indication mode).



Note: When Menu Available is not selected on programming software, some functions are available on menu in channel mode.

Available functional keys:

UP T: To select the prior channel as working channel

Down **☑**:To select the next channel as working channel

18ND):Press this key 18ND to change the master frequency.

Press this key 2MHZ to the selective channel calling.

5H/L :Press this key 5H/L to change the output power settings.

7_{SEL-0}: Press this key 7_{SEL-0} to set reverse frequency or to turn off reverse frequency.

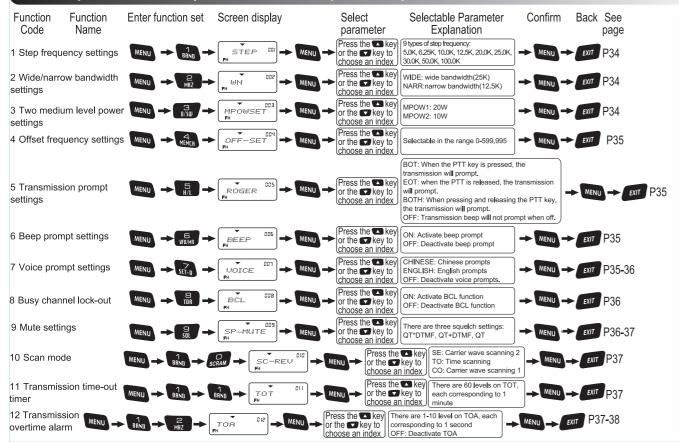
Bm :Press this key Bm to enter single display or turn off the single display.

(9 sul : Press this key (9 sul to enter squelching level settings.

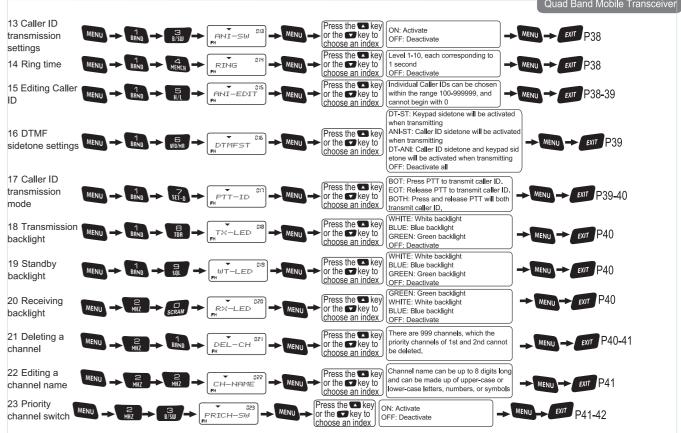
 $\stackrel{*}{s_{cAN}}$: Press this key $\stackrel{*}{s_{cAN}}$ to enter the scanning.

#IDEX :Press this key #IDEX to lock the keypad or turn off the keypad lock.

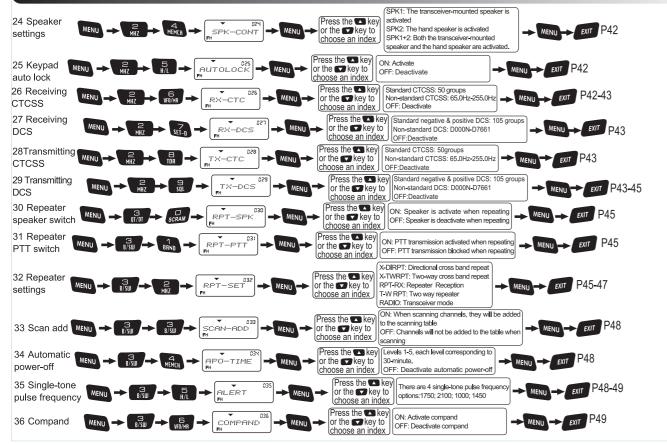
Menu operation sheet (See P34-56 for explanation)

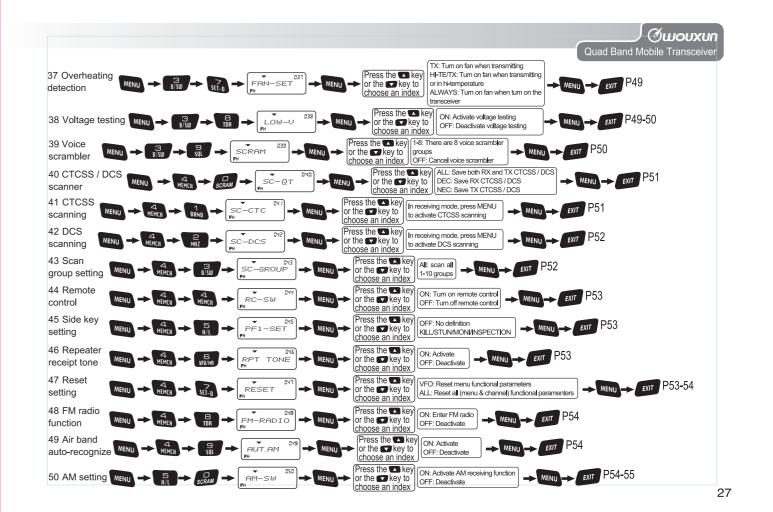






Menu operation sheet (See P34-56 for explanation)





Function description

- I. The vehicle transceiver has multiple functions:
- (1) Work mode of transceiver
- (2) Directional cross-band repeater or two way cross-band repeater work mode
- (3) Repeater receiver and two way repeater operating mode.

Note: Can be set through Menu 32 (See P45-47 instructions).

(1) The vehicle transceiver control panel LCD Is divided into two display settings, A and B, displaying the two vehicle transceiver operating frequencies.

The master frequency will be indicated by "▼". This icon is very important. All operating instructions are all concerning the master frequency indicated by this icon If the frequency does not have the "▼" icon, it will be called a secondary frequency. The master and secondary frequency will be separated by a vertical bar on the display device.

- (2) While the vehicle transceiver is in transceiver mode, only A area (left) can be set to the FM receiver (76-108MHz) function.
- (3) The vehicle transceiver's two operating areas parameters can be set. Before changing the parameter settings, first set the desired channel to the master frequency.

(Master frequency settings see P29 "Master frequency settings")

(4) When the vehicle transceiver is operating in cross-band repeater mode, or repeater receiver / two way repeater mode, some Transceiver functions will be prohibited.

Hotkey function guide



II. Hotkey function guide.

The settings menu is divided into quick start and operating menu settings, and aside from their shared operating settings, all of the functional operations of work areas A and B are oriented at the master frequency.

Special Reminder 🗥

The vehicle transceiver operating frequency parameters can be seperatly set. (Example:STEP step frequency, W/N Wide/narrow bandwidth frequency, VFO/MR display mode, OFF-SET frequency, BCL busy channel lockout, SP-MUTE mode operations). As well as system parameters (Example: RX-LED receiver backlight color function etc.) are AB's two operational channels. When setting the main frequency it will change the system parameters.

■ Rapid search function

When using the device or setting any functional parameters you can search the data above or below it by pressing the \(\textstyle \) or \(\textstyle \) keys.

(I) Quick operation

(0) Voice scrambler function key (Optional)

When the machine is standby, press the key to enter voice scrambling settings, then press the / key or a number from 1-8 to choose a voice scrambling group, and press the key to confirm, exit settings and return to standby. Voice scrambling has a total of 1 – 8 groups, OFF Shuts down the voice scrambling function. If the vehicle transceiver does not come with this option, pressing this key will be of no effect!

NOTE: This scrambler function is not workable when the equipment is working in the cross-band repeating mode or repeater/ transmitter mode.

(1) Master frequency settings hotkey

When the transceiver is standby, press the key on the handset or transceiver to switch between master frequency and secondary

Hotkey function guide

frequency.

Special Reminder \triangle

>> When the A or B Areas or the display screen display an "▼" icon, this indicates that that area is the master frequency, and the other area is secondary frequency, this icon is very important, all of the functional operations are oriented at the master frequency.

(2) Frequency or channel selection hotkey

- When the transceiver is standby (frequency mode), press the key to enter frequency settings, and 8 whiffletrees will appear, just input 6 digits frequency, the last 2 digits will be automatically recognized. This recognition according to the following standards:
- (1) When the 6th digit is 0 or 5, then the 7th and 8th digits will be 0.
- (2) When the 6th digit is not 0 or 5, the 7th and 8th digits will be 25, 50 or 75 according to the 5th digit's 6.25k step frequency. During inoutting the 6 digits frequency, if press any other keys except 0-9, it will exit the frequency setting.

(3) Band switching hotkey

This transceiver with multiple band available, which with flexible operation.

In standby mode, press to switch the working band.

Area A (left) with 6 bands selectable: 430MHz → 29MHz → 50MHz → 320MHz → 700MHz → 144MHz → 430MHz →

Area B (right) with 2 bands selectable: 144MHz → 430MHz → 144MHz →

This transceiver can be programmed to work as V-V or U-U.

KG-UV950P can receive strong signal from the image frequency, and/or when it is in the twin reception, some frequencies at A area and B area may affect the sensitivity more or less.

If you receive some unknown signals which may be caused by the interference from the image frwequency, please use the following formulas to confirm whether it is from the image frequency or not.

(Frequency at A area ± 45.05MHz)Xn1-((Frequency at B area*47.25MHz)Xn2=the middle frequency at A area OR the middle frequency



at B area

(28MHz at A area ± 45.05MHz)Xn=the frequency at B area (n should be positive integer)

Special Reminder 🗥

- >> Air band 108.000MHz-135.995MHz can only be activate on area A.
- >> When you get a poor receiving signal on 700MHz band, please use the following formula to check whether the value can be divided exactly.

y=(Fx-45.05M)/(Step*2)

NOTE:

Fx is the current frequency while Step is 5K or 6.25K. If y can be divided exactly by one of these two steps, then the transceiver receives normally. If y is a number with the decimal points, then there is receiving error and the equipment is with poor reception.

(4) Save channel hotkey

When in Channel/Memory (MR) mode, it will copy this channel's information to the specified channel except the Channel Name and Channel Scanning Add setting.

When in Frequency (VFO) mode, you can set the different offset frequency (see MENU 4) and frequency shift direction (see MENU 7) as well as other parameters, and then save it to the specified channel, this way you can set the same band but different RX/TX frequencies channel or different bands and different RX/TX frequencies channel.

Example: Save 'RX frequency: 450.025MHz, RX CTCSS: 67.0Hz, TX frequency: 460.025MHz' to Channel 10.

- 1. In Frequency mode, input 450.025 frequency, press La / La enter the Receiving CTCSS setting, press La / La select 67.0, and then press La select 67.0, and the select 67.0, and th
- 2. Press (Line of the Offset frequency as 10.000MHz, then press (Line of the Frequency shift direction as '+'.

Hotkey function guide

3. Press 4 to enter Save channel function, the screen shows (), and now enter () to select Channel 10, then press () to confirm the setting and return to standby mode.

Special Reminder 🗥

>> The default channel 1 and 2 can only save the UHF or VHF frequency, other band frequencies cannot be saved here.

(5) Output power settings switch key

H/L function key, is an output power swith hotkey

When the transceiver is standby, the key will quickly switch power; every time the key is pressed, the power will shift in the following direction:

High power (H)

Medium power (M)

Low power (L)

Medium output power has two levels. Please view the "Medium output level" of MENU 3 for the detailed instructions.

(6) Frequency / Channel switch hotkey

The vehicle transceiver operating channel can be set as VFO Frequency mode and MR channel mode, Amongst those MR channel mode has three different display types.

A. Channel number mode B. Frequency+Channel number display mode C. Channel name display mode. The VFO Frequency mode and MR channel mode sometimes are setup with passcode limitations; they need a correct password in order to be able to switch between the two. However the MR channel mode does not need a passcode to switch between the 3 different channel display modes. VFO/MR(Frequency / Channel switch) switching is shown below:

VFO — MR (Channel number display) — MR (Frequency+Channel number display) — MR (Channel name)

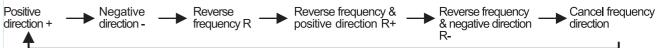
When the setup is setup with a switch passcode, press the key, The LCD will display: ----



At this time enter a 6 digit passcode, if the passcode is correct the mode will switch successfully, If the passcode is incorrect the mode switch will be ineffective, a double tone will follow and you will exit the program. The only way to set up the passcode is through our companies supplied software. If 6 0's are entered this will turn off the password function.

(7) Frequency shift direction switch hotkey

• In Frequency mode, press the key to rapidly switch direction as shown below:



When rapidly switching frequencies, the frequency direction will be skipped automatically if the frequency direction results in frequency error.

- In channel mode, press the rewards will only set "reverse frequency R" or "turn off reverse frequency R" function.
- (8) Single or dual display switch hotkey

When in standby, press the skey, and you can switch between single and dual display.

(9) Squelch level settings hotkey

The SQL function rapidly switches between squelching settings.

When in standby, press the skey and the muting level in the area will be displayed on the screen, then press / vor directly press 0-9 to choose the desired squelch level, press to confirm, then press x to exit settings.

(10) Scanning Key

In standby mode, press the handheld microphone key or the panel key, to start scanning. Frequency mode will start scanning by "step frequency" in intervals, channel mode will start scanning in the current channel, press the keys while scanning to change the scanning direction (higher or lower), press any key to stop scanning. Please see menu 10 SC-REV Scan settings for details of scan types.

Simultaneous Scanning on AB Areas

1. AB areas can scan at the same time. The A master frequency area activate scanning, press (will) to change to B area, then press Scan key to

Hotkey function guide

activte the scanning on B area. This is the AB area simultaneous scanning.

2. During the scanning on the Secondary frequency area, press PTT on the Master frequency area to transmit, the Secondary area will stop scanning temporarily, after end transmitting (release PTT), the scanning on Secondary area will resume.

Special Reminder 🔨

During the scanning on the Secondary frequency area, some settings on the Master frequency area will be prohibited: saving channel (MEMCH), scanning mode (SC-REV). deleting channel (DEL-CH), channle name editing (CH-NAME) and repeater setting (RPT-SET).

(11) # Keypad lock key.

When the transceiver is standby, press the standby, press the keyboard of the master frequency area. When the keyboard is locked, both the keypad on the handset and the keypad on the front panel are locked, except key can change to the Secondary frequency area.

(12) Up key

- In frequency mode, press the key to set a new frequency: "current frequency" + "step frequency".
- In channel mode, press the key to call out the lower channel as the working channel.

(13) Down key

• In frequency mode, press the key to set a new frequency: "current frequency" - "step frequency".

Menu operations



• In channel mode, press the key to call out the higher channel as the working channel.

(14) Confirmation key

key is a confirmation key, as well as a key to enter Menu function setup hotkey.

Menu Operations

Step frequency settings (STEP) - Menu 1

When the transceiver is standby, press the MENU + LAND keys and the screen will display:

Pres the key to access the menu, and after pressing the key to select the required step frequency type, press the key to confirm, and the key to return to standby.

This transceiver has 9 types of step frequency: 5KHz, 6.25K, 10KHz, 12.5KHz, 20KHz, 25KHz, 30KHz, 50KHz, 100KHz.

Wide/Narrow bandwidth settings (W/N) - Menu 2

When the transceiver is standby, press the keys and the screen will display:

Press the MENU key, then Press the A / keys to choose the desired wide/narrow bandwidth set up and press the MENU key to confirm.

Press the key to return to standby mode.

This transceiver's bandwidth settings are divided into: wide bandwidth (25KHz) and narrow bandwidth (12.5K).

Two medium level power settings (MPOW-SET) - Menu 3

When the transceiver is standby, press the keys and the screen will display:

Press the key, then press the 🔼 / 🔽 to choose the required output level, and press the key to confirm. Press the key to return to standby mode.

This transceiver has to medium level power set ups separated as MPOW1:20W; MPOW2:10W.

Special Reminder 🛆

Medium output power settings is a system setting, after changing these settings, the vehicle transceivers two operating frequencies medium output power settings will simultaneously be set.