All of menu operation is to press "Menu" key to confirm, and press "Exit" key to quit. Use knob or up / down keys to select, long-press 2 sec. into quick select mode in the select interface of menu

Function Description

SCAN Mode Option 1

Press [] in standby mode, LCD displays as figure, press [] key, arrow points to OFF; press [] /] to select ON to start to scan or Off to close scan.

Press [] key to ensure, press [] key back into standby mode.

Squelch Level Setting (SQL-LE) ····· Option 2

Squelch Level Setting actually is to choose to open or close squelch under what level signal strength is strong or weak. Speaker has sound while squelch is on and the same with default setting. It causes that radio can not receive weak signal effectively to select too high squelch level; It exposes you to noise or other unrelated signals disturbing if selecting too low squelch level. There is 0~9 optional level. Among them, level 0 is always open squelch, the higher the squelch level, the harder to open the squelch.

Press [] | [] in standby mode, LCD displays as figure, press [] , arrow points to number 4, press [] to select squelch level, then press [] to ensure, press [] back to standby mode.

Transmit Power Selection Option 3

Press [] + [] in standby mode, LCD displays as figure, press [], arrow points "High" place, press [] to ensure, press [] back to standby.

Step Frequency Settings.....Option 4

Press [□]+[□] in standby mode, LCD displays as figure, press [□], arrow points "5K" place, press [□] to select required step frequency, press [□] to ensure, press [□] back to standby.

There are 7 step frequencies to select, 5K, 6.25K, 10K, 12.5K, 25K, 50K, 100K

Radio Working Mode(RxMode) · · · · · Option 5

Press [] +[] in standby mode, LCD displays as figure, press [], arrow points "DUAL" place, press [] to select single receive mode (only show 1 frequency), or dual receive mode (show 2 frequency), press [] to ensure, press [] back to standby.

CTCSS/CDCSS Set(C-CDC)·····Option 6

Press [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press # to select OFF, turn off transmitting and receiving anti-interference code, or select one of 67.0HZ/ D023N/ D023I, press [] to ensure, press [] back to standby. There are 50 sets Analog anti-interference

code (67.0Hz~254.1Hz),105 sets Digital tamper-proof code (D023N~D754N),105 sets Reverse Digital tamper-proof code (D023N~D754N)

Prompt Tone Settings (BEEP) ······Option 7

Press [] in standby mode, LCD displays as figure, press [], arrow points "ON" place, press [] to select OFF, turn off tone, or select ON, turn on tone, press [] to ensure, press [] back to standby.

Voice Control Settings(VOX)······Option 8

Press [] in standby mode, screen displays, press [], arrow points "OFF" place, press [] to select OFF to disable VOX or select level 1~9 to turn on VOX level, press [] to ensure, press [] back to standby.



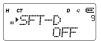
Beat Frequency Direction(SFT-D)······Option 9

It means following item:

- 1. It is positive difference that transmission frequency is higher than receive frequency (+)
- **2.** It is negative difference that transmission frequency is lower than receive frequency (-)
- 3. Turn off Beat Frequency direction (OFF)

Press [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select one of OFF / + / - mode, press [] to ensure, press [] back to standby.

It can not transmit if transmission frequency of Beat Frequency is above allowable range. Under this condition, please adjust receive frequency or frequency difference of Beat Frequency into allowable range.



Frequency Of Beat Frequency (OFSSET)······Option 10

Frequency of Beat Frequency means difference between transmitting frequency and receiving frequency. Rang of machine is 0~99.995MHz.

Press [+ [+] in standby mode, LCD displays as figure, press [], arrow points "00.000" place, press [] to select frequency of Beat Frequency, or input it by keyboard, press [] to ensure, press [] back to standby.



Tamper-proof Code Frequency Scan (QT.S)······Option 11

Scan tamper-proof Code accompanying with working frequency, CTCSS: Analog anti-interference; DCSI: reverse digital tamper-proof code. It shows "CT" sign when scan CTCSS, shows "DCS" sign when scan DCS N, shows "search" when searching, then screen shows anti-interference code scanned.

Press [□]+[□]+[□] in standby mode, LCD displays as figure, Press [□], arrow points "CTCSS" place, and press [△/▼] to select one of CTCSS/DCS I/DCS N mode, press [□] to ensure, press [□] back to standby.

Receiving Anti-interference Code Set (R-CDC)······Option 12

Press [] | | [] | | | 2] in standby mode, LCD displays as figure, Press [] , arrow points "OFF" place, and press # to select to turn off receiving anti-interference code, or select one of 67.0HZ/D023N/D023I, press [] to ensure, press [] back to standby.

Launch Anti-interference Code Set (T-CDC)······Option 13

Press [] | Figure |

press # to select to turn off Launch anti-interference code, or select one of 67.0HZ/D023N/D023I, press [] to ensure, press [] back to standby.

Backlight Set(LED) ······Option 14

Press [] | [] | [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select to turn off backlight or turn on backlight, press [] to ensure, press [] back to standby.

Auto Backlight Set(AUTOLED) ······Option 15

Auto backlight set will turn off backlight if no action after 6 secs. OFF: turn off; KEY: turn on backlight when keyboard is operating; ALL: turn on backlight if there is any action, including in receiving signal.

Press [] + [] + [] in standby mode, LCD displays as figure, press [] , arrow points "KEY" place,

press [▲/▼] to select one of KEY/OFF/ALL, press [] to ensure, press [∰] back to standby.

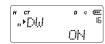


Radio Working State(DW) ······ Option 16

ON: It receives hide frequency signals when FM radio is working, is exit from FM mode and back to radio mode if receives signals, and is back to FM radio mode again if there is no action in 3 sec.

OFF: machine is only working in the frequency currently displayed.

Press [□]+[□]+[□]+[□] in standby mode, LCD displays as figure, press [□], arrow points "ON" place, press [□] to select one of ON / OFF, press [□] to ensure, press [□] back to standby.



Emission Limit(TOT)·····Option 17

Purpose of TOT is to limit continuous long time

transmit of radio. Radio will be forced to interrupt transmission when continuous launch time is more than predetermined time, and prompt tone sound.

Settable range of emission limit is 30~300 sec. It is divided into 10 level, 30 sec each level.

Press [] + [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select "OFF" to turn off TOT or TOT level you need, press [] to ensure, press [] back to standby.



Keyboard Auto-lock(AUTOLK)······Option 18

Press [1] + [2] + [2] in standby mode, LCD displays as figure, press [2], arrow points "OFF" place, press [1] to select OFF to turn off this function or turn on it, press [1] to ensure, press [1] back to standby.



Scan Method(SC-REV)·····Option 19

CO: carrier scan, stop scanning when get signal and continue scanning if exceed scan-pause time when signal is lost.

SE: searching scan, scan and save when get signal, quit scan mode.

TO: time scan, continue scanning if exceed scan-pause time whether signal is lost or not.

Press [] | [] | [] in standby mode, LCD displays as figure, press [] , arrow points "CO" place, press [] to select one of CO / SE / TO method, press [] to ensure, press [] back to standby.

Scan Add(SC ADD)·····Option 20

Press [] +] + [] in standby mode, LCD displays as figure, press [], arrow points "ON" place, press [] to select ON to add current channel into scan list, or select "OFF" to delete current channel from scan list, press [] to ensure, press [] back to standby.



Busy Channel Lock(BCL) · · · · · Option 21

OFF: turn off the function; WAVE: carrier lock, prohibit transmitting when receives signal; QT\ DQT: prohibit transmitting if anti-interference code is wrong, QT\ DQT menu item is only displayed when anti-interference code function is available.

Press [] | [] | [] | standby mode, LCD displays as figure, press [] arrow points "OFF" place, press [] to select one of OFF / WAVE mode, press [] to ensure, press [] back to standby.



Single Audio Code(TBST)·····Option 22

Press side middle key when transmitting, radio will transmit a set of pre-setting single audio code.

There are 4 optional frequencies, 1000Hz、1450Hz、1750Hz、2100Hz

Press [] in standby mode, LCD displays as figure, press [], arrow points "1000Hz" place, press [] to select frequency, press [] to ensure, press [] back to standby.



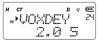
Narrow Band Set(N) ······ Option 23

Press [□□]+[□□]+[□□] in standby mode, LCD displays as figure, press [□/▼] to select NARROW 12.5K press [□□] to ensure, press [□□] back to standby.



VOX Delay(VOX DEY)·····Option 24

Settable Range of VOX delay is $0.3\sim5.0$ sec, long-press UP / DOWN key for 2 sec go into quick-select mode. Press [] +[] in standby mode, LCD displays as figure, press [], arrow points "2.0S" place, press [] to select delay time, press [] to ensure, press [] back to standby.



DTMF Set(PTT ID) · · · · · Option 25

ON: DTMF function is enable.

OFF: DTMF function is disabled.

If DTMF function is available, it sounds pre-setting DTMF voice in transmitting process after you finished DTMF working method set (BOT / EOT / BOTH).

Press [] + [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select one of OFF /BOTH/BOT/EOT method, press [] to ensure, press [] back to standby.



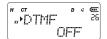
DTMF Working Method Set (DTMF)·····Option 26

BOT: transmit DTMF code when begin and end transmitting. OFF: turn off DTMF function.

BOTH: transmit DTMF code at the beginning and end of transmitting

EOT: transmit DTMF code at the end of transmitting

Press [] + [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select one of OFF /BOTH/BOT/EOT method, press [] to ensure, press [] back to standby.



Edit Transmitting Beginning Code Set (BOTCODE)·····Option 27

Press [] +[] in standby mode, LCD displays as figure, press [], arrow points "1234567" place, press [] or step control key to select character ("0~9","A~Z","-"), press [] to move left, press [] to move right, press [] to ensure after finished, press [] back to standby.



Edit Transmitting End Code Set (EOTCODE)·····Option 28

DTMF Side Tone Set(DTMFST)·····Option 29

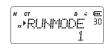
Press [] + [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select "ON" and select the machine sound DTMF voice or turn off DTMF voice when DTMF is transmitting, press [] to ensure, press [] back to standby.



Radio Anti-noise mode Set (RUNMODE)·····Option 30

User can select different squelch detection of mode to add anti-jamming capability of interphone according to using environment. There are 1, 2, 3 levels to select, higher level, more anti-jamming capability, longer squelch-function running time accordingly.

Press [□]+[□]+[□] in standby mode, LCD displays as figure, press [□], arrow points "1" place, press [□] to select one of 1/2/3 squelch levels, press [□] to ensure, press [□] back to standby.



Voice-Tail Elimination Set (TAILOFF)·····Option 31

Press [] | [] | [] in standby mode, LCD displays as figure, press [], arrow points "ON" place, press [] /] to select ON to turn on this function or select "OFF" to disable it, press [] to ensure, press [] back to standby.



RADIO Set ····· Option 32

Press [1]+[2] in standby mode, LCD displays as figure, press[1], arrow points "OFF" place, press[1] to select ON to turn on this function or select "OFF" to close it, press [1] to ensure, press [1] back to standby.



TIMER Set Option 33

Press [] | [] in standby mode, LCD displays as figure, press [], arrow points "OFF" place, press [] to select ON to turn on this function or select "OFF" to close it, press [] to ensure, press [] back to standby.



Power Save Set(POWERSV)····· Option 34

Press [] + [] in standby mode, LCD displays as figure, press [], arrow points "AUTO" place, press [] to select one of AUTO smart save / simple ordinary save / OFF mode, press [] to ensure, press [] back to standby.



Edit & Save Channel Name (CHNAME) ····· Option 35

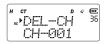
User can edit name of saved channel. This function is unavailable in frequency mode.

Press [] | F] in standby mode, LCD displays as figure, press [], arrow points down-move place, press [] or step control key to select character ("0~9", "A~Z","-"), press [] to move left, press [] to move right, press [] to ensure after finished, press [] back to standby.



Delete Saved Channel Set (DEL-CH)·····Option 36

Channel list only displays already existing channel. And this function is unavailable in frequency mode.



Save Channel Set(MEM-CH)·····Option 37

Save current frequency into selected channel. User can input channel number by keyboard. In frequency mode, it only saves transmitting frequency if exists the same frequency with one you selected, receiving frequency does not change. In non-frequency mode, transmitting and receiving frequency will be saved into selected channel.

Press [] +[] in standby mode, LCD displays as figure, press [], arrow points "CH-001" place, press [] to select the channel you want to save, press [] to ensure, press [] back to standby.



MR Mode Data Initialization



Turn off the radio, press [] key and then turn on the radio, upper line on the screen shows "RESET?", lower line shows "MR". Press key, to make a choice by pressing []] we likely again to confirm until the lower line on the screen shows "ALL", then the lower line will display "WAIT", now it begins to clear all settings and channel memories, default settings from factory. The radio will enter factory MR mode automatically after all settings are cleared up.

Reverse Frequency Function

MR mode/VFO mode, long press [] key for 2 seconds a symbol "R" will appear on the top of the screen, which means reverse function is on. Long press [] again for 2 seconds, "R" will disappear, which means the function is shut down. Tx and Rx frequency as well as CTCSS/CDCSS will exchange when reverse frequency function is on.

Major and Minor Frequency Switch Over

MR mode/ VFO mode, press [] key will enable major and minor frequency switch over. A triangle symbol [] and [] will appear on top of the screen, which represents current major frequency.

VFO mode/ MR Mode Switch Over

Press [] key will switch between VFO mode, MR+VFO mode, and Channel Name mode. MR+VFO mode and Channel Name mode can be accessible only if at least there is one channel has been saved.

In VFO mode, necessary frequency can be entered by keyboard, it will alert if there is error. Press[] key to delete the previous figure.

In MR mode, use the keyboard to input pre-set operation frequency.

In Channel Name mode, if there is no such option as setting channel name then the screen will display "CH-N". N stands for the current channel.

Radio Function Operations

Turn On/Off Radio Function: Short press "side middle key", the radio function will be turned on. Press again to turn off the function. (set the programmable key by using programming software).

Radio Channel: Input radio frequency directly, or adjust frequency by rotate selector.

Radio Mode: Press [a] key, switch over radio VFO mode and radio saved channels.

Manually Save Channels in Radio Function: Radio VFO mode, set radio frequency, press [] the screen will show "SAVE?" and enter save current frequency mode. The channel which is to be saved will be flashing. Press [] [] key or use step control key to choose the channel to be saved. Press [] key to confirm. Input channel number by using the keyboard in MR mode.

Delete Channel Manually in Radio Function: Radio is in MR mode, press[]key will display "DEL?" to enter delete current frequency mode. The channel which is to be saved will be flashing. Press[][] [] key or use step control key to choose the channel to be deleted. Press [] key to confirm.

Search Channel Automatically in Radio Function: Radio is in radio mode, press[]+[]key, upper line on the screen will show "SCAN-FM?" lower line will show the scanned frequency and saving channel.

Radio Step Frequency Setting: Radio in radio mode, and press []+[] key, upper line on the screen will show "STEP?" lower line will show step frequency. Press [] key to enter setting mode, press [] [] key to choose step frequency "50K/100K".