Hand microphone display platform

catalogue

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matters need attention

Please observe the following precautions to prevent fire, personal injury and damage to interphone.

1 Do not use this machine while driving, it is too dangerous to do so.

2 This walkie-talkie is designed to use 13.8V DC power supply, and do not use 24V power supply for power supply.

Do not place the machine in a dusty, wet or splashed place, and do not place it on an unstable surface.

4 If the reception is interfered by the outside, keep the unit away from interfering equipment (such as TV set, generator, etc.).

5 Do not expose this unit to direct sunlight for a long time or place it near the heating device.

6 If the machine emits smoke or strange smell, the power should be cut off immediately. After confirming that the machine is safe, send it to the nearest maintenance service station for inspection.

7 Do not transmit with high power output for a long time, which may cause the intercom to overheat.

Unpacking and inspection device

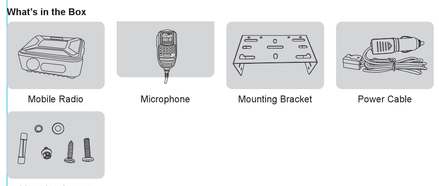
Welcome to the radio. Before use, I suggest you:

① Please check the packing box of this product for signs of damage;

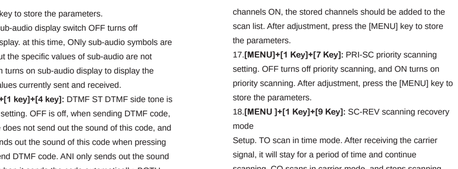
② Please carefully open the packing box and confirm whether there are items listed in the table below;

③ If you find that this product and its accessories are lost or damaged during handling, please contact the dealer immediately.

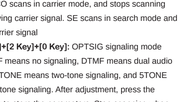
What's in the Box



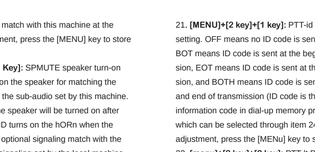
■ Overview of the Front Panel



Note: the PC port is above the power supply



1: PTT
2:MIC_GND
3:SP (Horn output)
4:MIC
5:DATA_A
6: VDD (+8V)
7: DATA_B
8: GND



11: power cord

12: Antenna interface

■ Same frequency and different frequency channel storage

Co-channel storage

1. press the required frequency with the keyboard, such as 145.000, press the [MENu] key to display the menu to item, press the [MENU] key to display: 001 flashes (select the number of channels), press the [MENU] key to display CH-001 once, and press the [EXIT] key to save and complete the exit.

2.Press the required frequency with the keyboard: for example, 146.000, press the [MENU] key to display 47 items in the menu, press the [MENU] key to display 002 flashing (select the number of channels), press the [MENU] key once to display CH-002, and press the [EXIT] key to save and complete the exit.

3. display channel in section a: in item 29 of the menu, press the "menu" key to display the dishes
Monotonic to item 29, showing CA-MDF FREQ

Press the [MENU] keyThe FREQ flashes and is selected with the knob. CH shows the channel, FREQ shows the frequency+channel number, and press the [MENu] key to confirm.

4. section b display channel: in item 30 of the menu, press the [MENu] key to display the dishes
Monotonic to 30 items, display CB-MDF FREQ

Press the [MENU] keyFREA flashes, use the knob to select. CH shows the channel, FREQ shows the frequency+channel number, and press the [MENU] key to confirm.

5.Exit the menu, press PTT, and use the [EXIT/AB] key to switch.

Inter-frequency channel storage (connection relay station operation)

1. press the required receiving frequency, such as 164.500, press the [MENU] key to display menu to 47 items, and display MEM-CH/001, then press the [MENU] key 001 to flash, then press the [MENU] key to display CH-001 once, and after receiving and storing, press the [EXIT] key.

2. Press the required transmission frequency such as 158.800 with the keyboard, press the [MENU] key to adjust the display menu to 47 items, display MEMCH-001, press the [MENU] key, CH-001 flashes, press the [MENu] key again, and the different frequency storage is completed, and press the [EXIT] key.

■ Different frequencies plus CTCSs/DCS channel storage (connected to relay station operation)

(Take receiving 465.525 sub-audio, 67.0 rounds and 455.525 sub-audio DO23N as an example)

1. press []MENU key to display the menu, adjust to 11 items to display R-CTCS/OFF, press [MENu] key to display OFF flashing, use knob to select and receive sub-audio data (67.0), and press [menu] key to confirm.

2. Use knob to select 12 menus T-DCS/OFF, then press [MENU] key to display OFF flashing, and use knob to select and transmit digital sub-audio data (DO23N), press the [MENU] key to confirm that [EXIT] is pressed.

3. Adjust the receiving frequency (press the required receiving frequency of 465.525 with the keyboard), press the [MENU] key to adjust to 47 menus, display MEM-CH/001, then press the [MENu] key 001 to flash, press the [MENu] key to confirm, display CH001, receive and store, and press [EXIT] to exit.

4. Press the required radio frequency point with the keyboard, press [MENU] to adjust to 47 items to display MEM-CH001, then press [MENU] to display CHO01 flashing, press [MENU] to confirm, and press [EXIT] to exit the transmission and storage.

■ Menu function setting operation

Menu function setting operation (which can be operated by keyboard)

0. **[MENU]+[0 Key]:** TDR turns on and off the dual-frequency standby setting. ON is on, which can realize the simultaneous standby waiting of the upper and lower group frequencies on the screen. OFF is off, only waiting for the frequency indicated by the arrow on the screen. After adjustment, press the [MENU] key to store the parameters.

1.**[MENU]+[1 Key]:** STEP sets the step value of frequency in frequency mode. It can be set as: 2.5khz, 5khz, 6.25khz, 10khz, 12.5khz and 25khz. After adjustment, press the [MENU] key to store the parameters.

2. **[MENU]+[2 key]**: setting the squelch level of SQL receiver, which is divided into 10 levels to set the squelch depth according to the use environment. 0 is mute on; 1-9 is mute depth increasing; after adjustment, press [F Key] to store parameters.

3. **[MENU]+[3 Key]:** TXP transmit power setting. HIGH is high power output and LOW is low power output. After adjustment, press the [MENU] key to store the parameters.

4.**[MENU]+[4 Key]**: SCR voice encryption scrambling setting. ONTo turn it on, call voice encryption can be realized. OFF is off. After adjustment, press the [MENU] key to store the parameters. (This function is optional)

5.**[MENU]+[5 Key]**: TOT emission time limit setting. Set the transmission time of each intercom. The value ranges from 15 to 600 seconds, with steps of 15. After adjustment, press the [MENU] key to store the parameters.

6.VOL: Volume 0, 1,2,3,,, 63 Adjust the output volume of the car platform. The higher the number, the higher the volume.

7.**[MENU]+[7 Key]**: WN width and narrow band setting. WIDE is wide band and NARR is narrow band. After adjustment, press the "MENU]" key to store the parameters.

8. **[MENU]+[8 key]:** automatic backlight time setting of ABR screen. OFF sets the screen to be always on, and the value of 1-50 seconds can adjust the backlight time of the screen. After adjustment, press the [MENu] key to store the parameters.

9.**[MENU]+[9 Key]:** BEEP tone switch. OFF is off and ON is on. After adjustment, press the [MENU] key to store the parameters.

10. **[MENU]+[1 Key]+[0 Key]:** R-DCS receives digital sub-audioSetup. OFF means off, DO23N-D754N is a forward standard digital sub-audio sequence, and DO23I-D754I is a reverse standard digital sub-audio sequence. After adjustment, press the [MENu] key to store the parameters.

11. **[MENU]+[1 Key]+[1 Key]:** R-CTCS receive analog sub-soundsFrequency setting. OFF means off, 67.0HZ-254.1HZ simulates the standard sequence of mute, and at the same time, you can directly type the standard or non-standard analog mute through the keyboard. After adjustment, press the [MENU] key to store the parameters.

12.**[MENU]+[1 Key]+[2 Key]:** T-DCS transmits digital sub-audio
Setup. OFF means off, DO23N-D754N is a forward standard digital sub-audio sequence, and DO23I-D754I is a reverse standard digital sub-audio sequence. After adjustment, press the [MENU] key to store the parameters.

13.**[MENU]+[1 Key]+[3 Key]:** T-CTCS transmit analog sub-sounds
Frequency setting. OFF means off, 67.0HZ-254.1HZ simulates the standard sequence of mute, and at the same time, you can directly type the standard or non-standard analog mute through the keyboard. After adjustment, press

the [MENU] key to store the parameters.

14.D-SUB: sub-audio display switch OFF turns off sub-audio display. at this time, ONly sub-audio symbols are displayed, but the specific values of sub-audio are not displayed. on turns on sub-audio display to display the sub-audio values currently sent and received.

15. **[MENU]+[1 key]+[4 key]:** DTMF ST DTMF side tone is onClose the setting. OFF is off, when sending DTMF code, this machine does not send out the sound of this code, and KEY only sends out the sound of this code when pressing the key to send DTMF code. ANI only sends out the sound of the code when it sends the code automatically. BOTH key code sending and automatic code sending are sent locally

16. **[MENU]+[1 Key]+[6 Key]**: SC-ADD scan and add settings
Set. When the storage channel is turned OFF, the stored channel is not added to the scan list. When storing channels ON, the stored channels should be added to the scan list. After adjustment, press the [MENU] key to store the parameters.

17.**[MENU]+[1 Key]+[7 Key]:** PRI-SC priority scanning setting. OFF turns off priority scanning, and ON turns on priority scanning. After adjustment, press the [MENU] key to store the parameters.

18.**[MENU]+[1 Key]+[9 Key]**: SC-REV scanning recovery mode
Setup. TO scan in time mode. After receiving the carrier signal, it will stay for a period of time and continue scanning. CO scans in carrier mode, and stops scanning when receiving carrier signal. SE scans in search mode and receives carrier signal

19.**[MENU]+[2 Key]+[0 Key]:** OPTSIG signaling mode setting. OFF means no signaling, DTMF means dual audio signaling, 2TONE means two-tone signaling, and 5TONE means five-tone signaling. After adjustment, press the [MENU] key to store the parameters. Stop scanning when the signal and signaling match with this machine at the same time. After adjustment, press the [MENU] key to store the parameters.

20.**[MENU]+[2 Key]+[1 Key]:** SPMUTE speaker turn-on mode setting. QT turns on the speaker for matching the received sub-audio with the sub-audio set by this machine. If no sub-audio is set, the speaker will be turned on after receiving the carrier. AND turns on the hORn when the received sub-audio and optional signaling match with the sub-audio and optional signaling set by the local machine, or turns on the horn when the received sub-audio and optional signaling match with the sub-audio and optional signaling set by the local machine, or turns on the horn after receiving the carrier if no sub-audio is set. After adjustment, press the [MENU] key to store the parameters.

21. **[MENU]+[2 key]+[1 key]:** PTT-id PTT-id transmission setting. OFF means no ID code is sent during transmission, BOT means ID code is sent at the beginning of transmission, EOT means ID code is sent at the end of transmission, and BOTH means ID code is sent at the beginning and end of transmission (ID code is the signaling information code in dial-up memory preset by PC software, which can be selected through item 24 of menu). After adjustment, press the [MENu] key to store the parameters.

22. **[menu]+[2 key]+[2 key]:** PTT-lt PTT-id transmission delay setting. 0-30 delay time before sending ID code (in seconds). After adjustment, press the [MENU] key to store the parameters.

23.**[MENU]+[2 Key]+[4 Key]:** S-INFO signaling information and automatic
Dial up memory. 1-15 groups of signaling encoding and decoding memories. You can only write with PC software. After adjustment, press the [MENU] key to store the parameters.

24.**[MENU]+[2 Key]+[5 Key]:** EMC-TP alarm mode setting Set. ALARM is the alarm tone sent by this machine, ANI is the alarm code and local identity code sent when alarming, and BOTH alarm tones and local identity codes are sent by this machine when alarming. After adjustment, press the [MENu] key to store the parameters.

25.**[MENU]+[2 Key]+[6 Key]**: EMC-CH alarm channel setting Set. 000-199 CHannel, the designated alarm channel when alarming, and ch is displayed as an effective channel in front of this channel. After adjustment, press the [MENU] key to store the parameters.

26.**[MENu]+[2Key]+[6key]** sIG-BP: signaling includes Effective tips. OFF turns off the optional signaling without reminding when it is valid.

27.**[MENU]+[2 Key]+[7Key]:** CHNAME channel name Series. In channel mode, edit the channel name of the current channel. After adjustment, press the [MENU] key to store the parameters.

28. **[menu]+[2 key]+[8 key]:** ca-mdfa channel display settingsSet. In CHannel mode, FREQ is displayed as frequency, ch is displayed as channel number, and NAME is displayed as channel name (specific name is set in writing frequency software). After adjustment, press the [MENU] key to store the parameters.

29. **[menu]+[2 key]+[9 key]:** CB-MDF b channel display settingsSet. In CHannel mode, FREQ is displayed as frequency, ch is displayed as channel number, and NAME is displayed as channel name (specific name is set in writing frequency software). After adjustment, press the [MENU] key to store the parameters.

30.**CC-MDF:**C- channel shows that area c is in channel mode,Channels are displayed in frequency. Area C is in channel mode
, the channel is displayed by channel number. C zone is in the letter
In channel mode, channels are displayed by channel name (the specific name is set in the writing frequency software)

31.**LANGUA:** menu language ENG menu is displayed in EnglishThe menu is displayed in Chinese.

32.**DMR_TX:** multi-guard transmission TRACK tracking received The frequency point of transmission. The FIXED main frequency is always transmitted at the main frequency.

33.**VOX:** voice control transmission is OFF, 1, 2, 3, ... 10 OFF voice control transmission is off, 1,2,3, ... 10 is voice controlStart the sensitivity level. The larger the value, the more generous the sound
Can start.

34.**VOX-T:** Voice control delay 0,1,2,3,... 20 OFF Launch off, 1, 2, 3, ... 10 is voice-activated and sensitive Degree level, the greater the value, the more generous the sound can be started.

35.AUTOLK: keyboard auto lock OFF turns off keyboard auto lock.ON turns on the keyboard automatic locking function.

36.ST-FC: Status character display above the character color of status bar Color settings.

37.MF-FC: Color of dominant characters Display color of dominant characters Setup.

38.SFA-FC:A- character color a channel display area character color Color settings.

39.SFB-FC:B- character color b channel display area character Color settings.

40.Sfc-fc: c-character color c channel display area character color Color settings.

41.SUB-FC: mute character color sub-audio display character color

42.FM-FC:BATT color battery/radio frequency display character Color.

43.SIG-FC: the display color of the status bar at the bottom of the signal bar character color.

44.MENUFC: menu character color menu character when setting menu Display color.

45.TX-FC: transmission-character color is displayed when the currently active channel is transmitted Show color.

46.RX-FC: receive-the currently active channel of character color is received Display color when carrier wave is used.

47.MEM-CH: channel storage 000,...,199 storage letter Channel, used to indicate the channel number to be stored, if Show CH- in front of the number, indicating that Channel parameters are originally stored in the channel.

48.DEL-CH: channel deletion 000,...,199 deletion designation Channel parameters of the channel, if there is no CH- table before This channel has no parameters, and the operation is invalid

49.SFT-D: frequency difference direction setting. OFF off, at frequency In mode, there is no frequency difference between transmitting frequency and receiving frequency. +plus In frequency mode, the transmitting frequency is equal to the receiving frequency plus
Frequency difference frequency. -frequency reduction in frequency mode, transmission frequency
Is equal to the receiving frequency MINUS the frequency difference frequency.

50.OFFSET: frequency difference frequency setting. 000.000 in frequency mode
Type, the difference between the transmitting and receiving frequency (whether to poor frequency
Poor direction control)

51.ANI: ID code setting XXXXX is used to observe the setting of this machine Identity code (this identity code can only be written by writing software)

52.ANI-L ID code length 3,4,5 Effective length of local ID code

53.REP-S: transit signaling settings. 1000, 1450, 1750, 2100, when transmitting, the single frequency emitted when the CALL key is pressed
Tone frequency, used to activate relay station.

54.TMR-MR:OFF, OFF 1, 2, 3, ...50
Main frequency return delay time during multi-frequency waiting

55.STE: Direct Frequency Tail Elimination OFF Close Close Call Tail EliminatiON function on turn on turn on the call ending elimination function

56.RP-STE: relay ending elimination, OFF, 1, 2, 3, ... 10 eliminates the tail sound generated when relaying

57.RPT-DL: relay tail delay, OFF, 1, 2, 3,
... 10 detect the tail sound of the relay to confirm that the relay is effective.

58.DTMF-G: DTMF gain 0, 1,2,3, ... 60
Set DTMF gain, the larger the value, the other party receives this machine
The stronger the DTMF signal sent out,

59.Reset: the vfo menu is initialized, and ALL restores the factory settings
Menu and channel initialization

Manual channel storage and delete operation channel storage:

1. Enter the frequency to be used directly with the keyboard in frequency mode. For example, the frequency of 435.125MHZ can be directly input into 4, 3, 5, 1, 2 and 5. 2. Set the receiving sub-audio frequency to be used (menu items 10 and 11) and the transmitting sub-audio frequency to be used (menu items 12 and 13). For example, when receiving sub-audio at 67.0HZ and transmitting sub-audio at 67.0HZ, you can press [MENU] +[1] +[MENU] +[DOWN] to select 67.0HZ+[MENU] +[EXIT/AB] to exit from saving and receiving sub-audio. To transmit sub-audio, press [F] +[1] +[3] +[MENU] +[DOWN], select 67.0HZ+[MENU] +[EXIT/AB] to exit saving. (If you don't need sub-audio, you can all select OFF)

3. Select menu item 47 for channel storage, and press [MENU] +[4] +[7] +[MENU] +[UP] (DOWN) to select channel number +[MENU] to store channels in turn.

Channel deletion:

Select menu item 37 to delete the channel. Press [MENU] +[4] +[8] +[MENU] +[UP] (DOWN) to select the channel number to be deleted +[MENU] to delete the channel.

Store radio channel

You can store radio programs and corresponding program names through PC frequency writing software. (click on FM channel of frequency writing software to edit). The microphone handle of this machine can send DTMF codes in real time in the transmitting state. In FM mode, press the [*] key on the microphone keyboard to search radio channels in sequence.

Switch keyboard lock

Press the key [#] of the microphone keyboard for more than 2 seconds during standby time to turn on or off the keyboard lock function.

Send transit signaling

Select the transfer signaling frequency to be sent (this machine provides four transfer signaling frequencies). Press [MENU] +[4] +[2] +[MENU]+[up] (down) to select relay signaling frequency +F to save. Press the [PTT] key and then press the [CALL] key to send the preset relay signaling.

Setting of PTTID

The PTT-ID sent by this machine is the ID code prestored by the writing software. You can write by PC frequency writing software (click PTT-ID option box of optional parameter options of frequency writing software to edit.)

1. select item 20 in the menu to select the signaling to be used. Press [MENU] +[2] +[0] +[MENU] +[UP] (DOWN) to select the signaling to be used +[MENU] to save.

2. select item 23, S-INFO signaling code 1,-",15 in the menu, and send out this group of information codes when necessary (the information codes can only be written by writing frequency software)

3. Select item 22 in the menu to set PTT transmission delay. Press [MENU] +[2] +[2] +[MENU] +[UP] (DOWN) to select delay time +[MENU] to save.

4. Press PTT to send the set ID code.

Optional signaling settings DTMF signaling settings

This machine has DTMF coding and decoding function. You can write the signaling information code through PC and frequency software (click the signaling editing DTMF option of frequency software to set it).

DTMF signaling

After the receiver sets DTMF signaling, when receiving DTMF signal and preset body
When the codes are consistent, the receiver will be able to execute the ringing caption and display the information code. In the effective time, you can talk back and forth (the identity code can be written by PC frequency software)
To preset).

Patrol function

When the received DTMF signal is consistent with the preset patrol code, the receiver will send it from
Identity code, which can be displayed on the main control screen. This function can choose whether it is controlled by the master ID, and not by the receiving signaling. (the patrol code may
To be preset by PC writing frequency software).

Monitoring function

When the received DTMF signal is consistent with the preset monitoring code, the receiver will start to transmit the sound that can monitor the surrounding environment in real time. This function can choose whether it is controlled by the master ID, and not by the receiving signaling. (the monitoring code can be preset by PC writing software).

Telehalo function

When the received DTMF signal is consistent with the preset tele-halo code, the receiver will limit the transmitting function to work only in the receiving state, and the display will prompt. The normal function cannot be restored until the corresponding boot code is received. This function can choose whether it is controlled by the master ID, and not by the receiving signaling. (Telehalo code can be preset by PC writing frequency software).

Remote death function

When the received DTMF signal is consistent with the preset remote code, the receiver will restrict the use of all functions, and the display will prompt. The normal function cannot be restored until the corresponding boot code is received. This function can choose whether it is controlled by the master ID, and not by the receiving signaling. (the remote code can be preset by PC writing frequency software).

Boot function

When the received DTMF signal is consistent with the preset boot code, the receiver will cancel the function of returning to normal from remote death and halo. This function can choose whether it is controlled by the master ID, and not by the receiving signaling. (the power-on code can be preset by PC writing software).

Alarm function

When the received DTMF signal is consistent with the preset alarm code, the receiver will give an alarm, and the alarm mode and alarm channel can be edited through the optional parameter options of PC frequency writing software. This function is not controlled by master control ID and receiving signaling. (the alarm code can be preset by PC writing software).

Signaling is controlled by master ID, which means that besides signaling code, master ID must be consistent to perform this function.
Coding format not controlled by master control ID: signaling code+# (separator code)+information code
Coding format controlled by master control ID: signaling code+# (separation code)+master control ID code+# (separation code)+information code

CALL key to send DTMF settings

1. select DTMF signaling. Press [MENu] +[1] +[9] +[MENu] +[UP] (DOWN) to select DTMF signaling+[menu] to save. 2. Select signaling information code. Press [MENu] +[2] +[4] +[MENu] +[UP] (DoWN) to select decoded signaling information code group (1-15)+[menu] to save. (DTMF coding can be set by PC frequency writing software)

3. Press [CALL] in standby mode to send out the selected

DTMF information code group.

CALL key sends 2 tones and 2 tones signaling settings

1. press the [MENU] key (menu function key) to select item 14 OPTSIG and then press the [MENu] key to select 2TONE to start 2TONE signaling.

2. Press the [MENU] key to select the 24th item S-INFO, and then press the [menu] key to select the pre-programmed signaling group numbers 1-16. (use of 2TONE can be set by PC writing software)

3. When the received 2TONE signal is consistent with the preset 2TONE code, the corresponding function will be executed.

4. Press the [CALL] key in standby mode to send the selected 2TONE information code group.

5TONE signaling setup

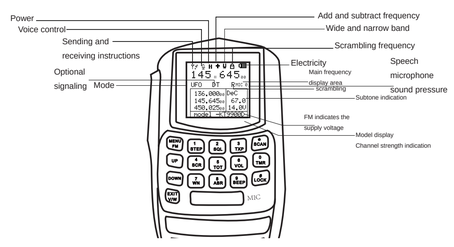
This machine has 5-tone codec function. You can write the signaling information code through PC frequency writing software (click the signaling editing 5TONE option of the frequency writing software to set it). After the receiver sets 5TONE signaling, when the received 5TONE signal is consistent with the preset identity code (the identity code must be 5 digits), the receiver will be able to perform the ringing caption and display the information code. You can talk back and forth within the effective time (the identity code can be preset by PC frequency writing software), and the [CALL] key sends 5TONE

1. press the [MENU] key (menu function key) to select the 20th OPTSIG and then press the [F] key to select 5TONE to start 5TONE signaling.

2. Press the [menu] key to select the 24th item S-INFO, and then press the [F] key to select the pre-programmed signaling group numbers 1-16. [5TONE information code can be set by PC writing frequency software. Each group can send 3 groups of 5TONE codes at a time, and you can choose not to fill them out as needed.

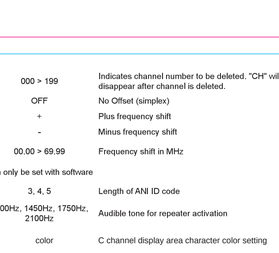
3. Press the [CALL] key in standby mode to send the selected 5TONE information code group.

■ Hand microphone description



Hand microphone description (optional2)

① Short press MOMI and long press power on
② Short press CALL and long press ALARM
③ "MENU" function key
④ "UP": frequency step upward
⑤ "DOWN": frequency step down
⑥ 6EXIT/VM ",exit AB channel switching, alarm function
⑦ - ★/SCAN": frequency reversal function, scan, number - ★ -
⑧ "#/LOCK": keyboard lock function, number "#"
⑨ 0 ":the number 0
⑩ 1 ":the number 1
⑪ 2 ":the number 2
⑫ 3 ":the number 3
⑬ 4 ":the number 4
⑭ 5 ":the number 5
⑮ 6 ":the number 6
⑯ 7 ":the number 7
◯ 8":the number 8
◯ 9":the number 9



When monitoring is turned on, the up and down keys can adjust the volume, and press for a long time to quickly adjust the volume.

■ Menu definitions

0	TMR	Multifrequency waiting	ON	Turn off multi-frequency waiting and start multi-frequency waiting
			OFF	
1	STEP	Frequency Step Size Setup	2.5 to 25kHz	2.5, 5, 6.25, 10, 15, 25 kHz
2	SQL	Squelch Level	00 > 09	10 squelch levels, 00 = minimum / normally open
3	TXP	Transmit Power	High	Full Power
			Low	Reduced Power
4	SCR	Voice Scrambler	ON	Activate Scrambler Function
			OFF	Deactivate Scrambler Function
5	TOT	Time Out Timer	15 > 600 secs	15 second steps
			OFF	Turn off Time out Timer
6	TOA	Time out timer pre-alert	OFF	Disable this function
			1,2,...10	Radio will alert by LED flashing before transmitting end
7	WN	Bandwidth	Wideband	25.0 kHz
			Narrowband	12.5 kHz
8	ABR	LCD Backlight Timer	1 > 50 secs	Backlight duration = 1 > 50
			OFF	Backlight remains ON

9	BEEP	Keypad Voice Prompt	ON/OFF	Turn ON/OFF keypad voice prompt
0	R-DCS	Receive - Digital Coded Squelch	D023N > D754I	Squelch opens when proper DCS code is detected
			OFF	No DCS code required
1	T-DCS	Transmit digital mute	OFF	No mute
			D023N,...,D754I	Standard sequence of digital mute
				No mute
2	D-SUB	Subtone display switch	OFF	Turn off sub-audio
			OFF	Turn on sub-audio
			ON	
3	CC-MDF	C- channel display	FREQ	In the channel mode of zone c, Channels are displayed in frequency
			CH	In the channel mode of zone c, Channel numbers are displayed in frequency
			NAME	
4	DTMFST	DTMF Side Tone	OFF	No tones are heard through the speaker when transmitted
			KEY	Only manually keyed DTMF codes are heard
			ANI	Only automatically keyed DTMF codes are heard
			BOTH	All DTMF codes are heard
5	BCL	Busy Channel Lockout	ON	Prevents transmit if active signal on the channel
			OFF	No lockout

16	SC-ADD	Add Scan Channel	ON	Add channel to scan list
			OFF	Remove channel from scan list
17	LANGUA	Menu language	ENG	The menu is displayed in English
			Chinese	The menu is displayed in Chinese
18	DMR_TX	Multi-guard emission	TRACK	Always track the received frequency point transmission with the main frequency transmission
			FIXED	
19	SC-REV	Scan Resume Method	CO	(Carrier Operation) Scan stops when signal detected. Scan resumes when signal disappears
			SE	(Search Operation) Scan stops when signal detected. Scanning will not resume.
20	OPTSIG	Optional Signaling	OFF	No optional signaling
			DTMF	DTMF signaling selected
			2TONE	2TONE signaling selected
			5TONE	5TONE signaling selected

			QT	Squelch opens for CTCSS/ DCS tones only.
21	SPMUTE	Speaker Mute Settings	AND	Squelch opens when CTCSS/DCS tone is recognized along with the optional signaling.
			OR	Squelch opens when either the CTCSS/DCS tone OR the optional signaling is recognized.
			OFF	Do not send
22	PTT-ID	PTT ID - When to send	BOT	Send at Beginning of Transmission
			EOT	Send at the End of Transmission
			BOTH	Send at both Beginning and End
23	PTT-LT	PTT ID - Transmit Delay	0 > 30	Set Delay Time
24				
25	EMC-TP	Alarm Mode	ANI	Send Alarm code and ID code
			BOTH	Both of the above
26	EMC-CH	Alarm Channel	000 > 199	Specified Alarm Channel
27	VOX	Acoustic emission	OFF, 1, 2, 3, ··· 10	The larger the value, the louder the sound. OFF voice control transmission is off, 1,2,3, ... 10 is the sensitivity level of voice control starting.
28	CHNAME	Channel Name	Channel Name Edit	In Channel Mode, edit the Current Name
			FREQ	
29	CA-MDF	A Channel Display Mode	CH	In Channel Mode, display the selected format in display A
			NAME	

			FREQ	
30	CB-MDF	B Channel Display Mode	CH	In Channel Mode, display the selected format in display B
			NAME	Voice control starts transmitting from voice
31	VOX-T	Voice control delay	0, 1, 2, 3, ··· 20	The signal disappears to stop transmitting
				Delay time
32	ST-FC	Status bar character color	colour	Color setting of upper status character display
33	MF-FC	Color of dominant character	colour	Color setting of main frequency character display
34	SFA-FC	A- character color	colour	Color setting of characters in channel a display area
35	SFB-FC	B- character color	colour	Color setting of characters in b channel display area
36	MEMCH	Memory Channel	000 > 199	Indicates channel number to be stored. "CH" will appear after channel is stored.

37	DELCH	Delete Channel	000 > 199	Indicates channel number to be deleted. "CH" will disappear after channel is deleted.
			OFF	No Offset (simplex)
38	SFT-D	Frequency Shift Direction	+	Plus frequency shift
			-	Minus frequency shift
39	OFFSET	Frequency Shift Offset Amount	00.00 > 69.99	Frequency shift in MHz
40	ANI	ANI ID Code	Can only be set with software	
41	ANI-L	ANI Length	3, 4, 5	Length of ANI ID code
42	REP-S	Repeater Activation Tone	1000Hz, 1450Hz, 1750Hz, 2100Hz	Audible tone for repeater activation
43	SFC-FC	C- character color	color	C channel display area character color setting
44	SUB-FC	Color of dumb characters	color	Sub-audio display character color

45	STE	Squelch Tail Elimination, Requires both radios have function ON.	OFF	Function OFF
			ON	Eliminates squelch tail at end of transmission.
46	RP-STE	Repeater Squelch Tail Elimination, Requires a repeater using this function.	OFF	Function OFF
			1 > 10	Delay Time
47	RPT-DL	Repeater squelch tail delay	OFF	Function OFF
			1 > 10	Delay Time
48	RESET	Initialize to Factory Defaults	VFO	Menu Initialization
			ALL	Menu and Channel Initialization
49	FM-FC	BATT color	colour	Battery/radio frequency display Character color
50	SIG-FC	Signal bar character color	colour	Display color of bottom status bar
51	MENUFC	Menu character color	colour	Display color of menu characters when setting menu
52	TX-FC	Emission-character color	colour	Color displayed when currently active channel is transmitted
53	RX-FC	Receive-Character Color	colour	Carrier received by current active channel
53	MEM-CH	Channel storage	000, ···, 199	Display color when It means that the channel parameter originally exists in this channel. If the word CH- is displayed in front of the number, it is used to indicate that it should be stored when storing the channel The channel number of,

	DEL-CH	Channel deletion	000, ···, 199	If there is no CH-, it means the channel No parameters, invalid operation, delete the channel parameters of the specified channel, When launching, it will be launched when the CALL key is pressed Out of the single frequency tone frequency, used for excitation Live relay station
	REP-S	Transit signaling	1000	
	TMR-MR	Main frequency return delay	OFF, 1, 2, 3, ···50	Main frequency return delay time during multi-frequency waiting
	RPT-DL	Relay tail delay	OFF, 1, 2, 3, ···50	Detect the tail sound of the relay to confirm this time Turn effective
	DTMF-G	Dual tone multifrequency gain	OFF, 1, 2, 3, ···60	Set DTMF gain, the larger the value, the other party The stronger the DTMF signal received from this machine,
	SIG-BP	Signaling valid prompt	OFF	Don't remind when optional signaling is valid
			ON	Remind when optional signaling is valid

The key technical indexes
Overall specifications

frequency range	VHF: 144-148 MHz UHF: 430-440 MHz
Number of channels	200 channels
channel spacing	25KHz 20KHz 12.5KHz
Phase-locked stepping	5KHz、6.25KHz、10KHz、12.5KHz、15KHz、25KHz、
operating voltage	13.8V DC ± 15%
Mute mode	CTCSS / DCS / 5Tone / 2Tone / DTMF
frequency stabilization	± 2.5ppm
Operating temperature of degree	-20~+60℃
measure	98（W）×35（H）×118（D）mm
weight	408g

Receiving part (ETSI EN 300 086 standard test)

	Bandwidth	narrow band
Sensitivity (12dB SINAD)	≤0.25μV	≤0.35μV
Adjacent channel selectivity	≥70dB	≥60dB
intermodulation	≥65dB	≥60dB
False signal response	≥70dB	≥70dB
audio response	+1~-3dB (0.3~3KHz)	+1~-3dB (0.3~2.55KHz)
SNR	≥45dB	≥40dB
Audio distortion	≤5%	
Audio output power	≥2W ± 10%	

Transmitting part (ETSI EN 300 086 standard test)

	Bandwidth	narrow band
output rating	25W/20W(VHF/UHF)	
modulation system	16KΦF3E	11KΦF3E
Adjacent channel power	≥70dB	≥60B
SNR	≥40dB	≥36dB
Parasitic and harmonic	≥60dB	≥60dB
audio response	+1~-3dB (0.3~3KHz)	+1~-3dB (0.3~2.55KHz)
Audio distortion	≤5%	

Note: All specifications are subject to change without prior notice or liability.

FCC Statement

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 instructions, 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 to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.