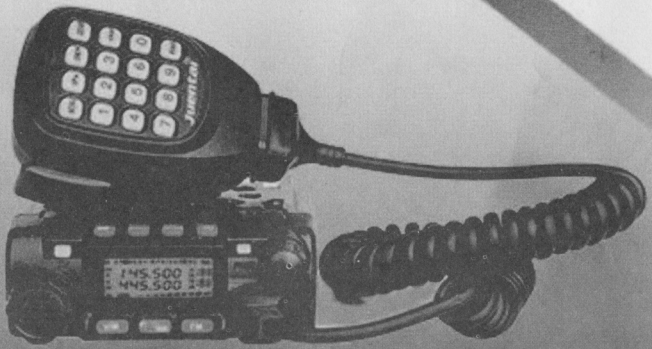
Juentai

DUAL BAND TRANSCEIVER OF THE CAR

USER'S MANUAL



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■ Precautions

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

1 Don't use the transceiver during driving.

2 The transceiver is designed to use 13.8V DC power supply, so don't use 24V power supply.

3 Don't put the transceiver in a dusty, humid or water splashing place or on an unsteady surface.

4 If any external interference is received, the transceiver should be far away from interference device (such as TV and power generator).

5 Don't expose the transceiver under direct sunlight or place it near a heating device for a long time.

6 If the transceiver emits smoke or odor, immediately power off, confirm the transceiver to be safe, and then transport it to the nearest maintenance service station for inspection.

7 Don't transmit at high-power output for a long time to avoid transceiver overheating.

■ Unpacking and device inspection

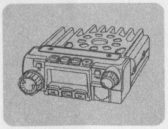
Welcome to use wireless transceiver. Prior to use, you should:

1 Check whether the packing box of this product has any damage sign;

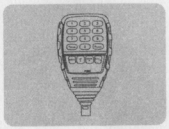
2 Please carefully open the packing box and check whether the listed articles are in the box;

3 If you find that this product and its accessories have any loss or damage during hauling, please immediately contact with the dealer.

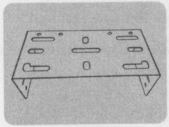
Standard accessories



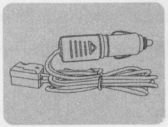
Body



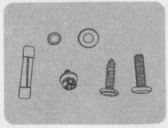
Microphone (with DTMF keyboard)



Movable mounting bracket

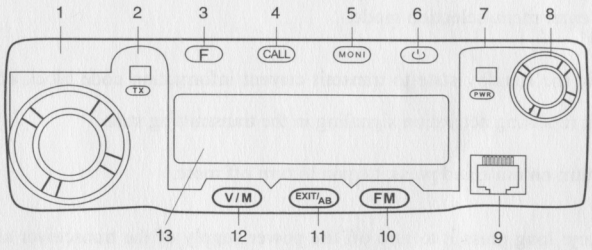


DC power supply cable



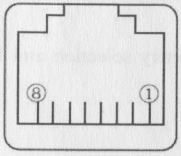
Screw, S-shaped gasket and fuse

Panel description



1 Schedule knob
2 Transmitting indicator lamp
3 Function key
4 Call key
5 Monitoring key
6 Power supply on-off key
7 Power supply indicator lamp
8 Volume knob
9 Microphone socket
10 Radio key
11 Exit AB channel switching and alarm function
12 Channel switching
13 Display screen

Note: PC port is above power supply.



1. Data input
2. Empty
3. MIC (microphone input)
4. MIC GND (microphone ground)
5. PTT
6. GND
7. +8V DC output
8. Empty

Description of panel keys

[F]: Press this key once to enter menu selection mode.

[CALL]: Press this key once in the standby state to transmit current information code block of the transceiver in the pointed signaling mode, and to transmit repeating activation signaling in the transmitting state.

[MONI]: Press this key once to turn on mute and press it again to turn off mute.

[⏻]: Power supply on-off key: long press it to turn off the power supply of the transceiver and press it again to turn on the power supply.

[V/M]: Channel mode and frequency mode switching.

[EXIT/AB]: Upper and lower frequency selection and function exit: long press it for over 2s to give an alarm and release PTT transmitting.

[FM]: Enter and exit FM radio.

■ Co-frequency and pilot-frequency channel storage

Co-frequency channel storage

1. Press the required frequency (e.g. 145.000) with the keyboard, press [F] key to display Page 36, press [F] key to display 001 flicker (select channel number), press [F] key again to display CH-001, and press [EXIT] to store and exit.
2. Press the required frequency (e.g. 146.000) with the keyboard, press [F] key to display Page 36, press [F] key to display 002 flicker (select channel number), press [F] key again to display CH-002, and press [EXIT] to store and exit.
3. A Band channel: press [F] key on Page 29 to display Page 29 and CA-MDF FREQ, press [F] key to display FREQ flicker, select with knob (CH displays channel and FREQ displays frequency + channel number), and press [F] key to confirm.
4. B Band channel: press [F] key on Page 30 to display Page 30 and CB-MDF FREQ, press [F] key to display FREQ flicker, select with knob (CH displays channel and FREQ displays frequency + channel number), and press [F] key to confirm.
5. Press PTT to exit menu and switch with [EXIT/AB] key.

Pilot-frequency channel storage (repeater connection operation)

1. Press the required receiving frequency (e.g. 164.500) with the keyboard, press [F] key to Page 36 and MEM-CH/001, press [F] key again to display 001 flicker, press [F] key again to display CH-001 to complete receiving storage, and then press [EXIT] key.
2. Press the required transmitting frequency (e.g. 158.800) with the keyboard, press [F] key to Page 36 and MEMCH-001, press [F] key again to display CH-001 flicker, press [F] key again to complete pilot-frequency storage, and then press [EXIT] key.

■ Pilot-frequency with CTCSS/DCS channel storage (repeater connection operation)

(Take receiving 465.525 subaudio frequency 67.0 and transmitting 455.525 subaudio frequency D023N as an example)

1. Press [F] key to page 11 R-CTCS/OFF, press [F] key to display OFF flicker, select with knob to receive subaudio frequency data (67.0), and press [F] key to confirm.
2. Select with knob to page 12 T-DCS/OFF, press [F] key to display OFF flicker, select with knob to transmit digital subaudio frequency data (D023N), press [F] key to confirm, and then press [EXIT].
3. Adjust the receiving frequency (press the required receiving frequency 465.525 with the keyboard), press [F] key to display Page 36 and MEM-CH/001, press [F] key to display 001 flicker, press [F] key to confirm and display CH001 to complete receiving storage, and then press [EXIT].
4. Press the required transmitting frequency point with the keyboard, press [F] key to display Page 36 and MEM-CH001, press [F] key again to display CH001 flicker, press [F] key to confirm, and press [EXIT] to exit transmitting storage.

■Setting operation of menu functions

Setting operation of menu functions (speaker microphone keyboard operation)

1. **[F Key] + [0 Key]: TDR:** dual frequency waiting on/off setting. ON is opening and upper and lower screen frequency standby waiting can be realized. OFF is closing and only screen arrow indicated frequency standby waiting can be realized. After adjustment, press [F Key] to store parameters.
2. **[F Key] + [1 Key]: STEP:** frequency step value setting in the frequency mode, such as 5KHZ, 6.25KHZ, 10KHZ, 12.5KHZ and 25KHZ. After adjustment, press [F Key] to store parameters.
3. **[F Key] + [2 Key]: SQL:** receiver mute grade setting. Set the mute depth in 10 grades according to the operating condition. 0 is mute opening, and 1-9 is mute depth increasing. After adjustment, press [F Key] to store parameters.
4. **[F Key] + [3 Key]: TXP:** transmitting power setting. HIGH is high-power output and LOW is low-power output. After adjustment, press [F Key] to store parameters.
5. **[F Key]+4 Key]: SCR:** voice encryption scramble setting. ON is opening and communication voice encryption can be realized. OFF is closing. After adjustment, press [F

Key] to store parameters. (This function is optional)

6. **[F Key] + [5 Key]: TOT:** transmitting time limit setting. Set transmitting time of each intercommunication ranging from 15s to 600s and stepping by 15. After adjustment, press [F Key] to store parameters.

7. **[F Key] + [6 Key]: TOA:** transmitting end warning setting. OFF is to close transmitting end warning for 1-10s, and the transmitting indicator lamp will flicker to warn before the transmitting time limit comes to an end. After adjustment, press [F Key] to store parameters.

8. **[F Key] + [7 Key]: WN:** wideband/narrowband setting. WIDE is wideband and NARR is narrowband. After adjustment, press [F Key] to store parameters.

9. **[F Key] + [8 Key]: ABR:** automatic screen backlight time setting. OFF is to close normally on screen setting, and the screen backlight time can be adjusted to be 1-50s. After adjustment, press [F Key] to store parameters.

10. **[F Key] + [9 Key]:** BEEP: prompt tone on/off. OFF is closing and ON is opening. After adjustment, press [F Key] to store parameters.

11. **F Key] + [1 Key] + [0 Key]:** R-DCS: receiving digital subaudio frequency setting. OFF is closing, D023N-D754N is forward standard digital subaudio frequency sequence, and D023I-D754I is reverse standard digital subaudio frequency sequence. After adjustment, press [F Key] to store parameters.

12. **[F Key] + [1 Key] + [1 Key]: R-CTCS:** receiving analog subaudio frequency setting. OFF is closing, 67.0HZ-254.1HZ is standard sequence of analog subaudio frequency, and standard or non-standard analog subaudio frequency can be directly keyed by the keyboard. After adjustment, press [F Key] to store parameters.

13. **[F Key] + [1 Key] + [2 Key]: T-DCS:** transmitting digital subaudio frequency setting. OFF is closing, D023N-D754N is forward standard digital subaudio frequency sequence, and D023I-D754I is reverse standard digital subaudio frequency sequence. After adjustment, press [F Key] to store parameters.

14. **[F Key] + [1 Key] + [3 Key]: T-CTCS:** transmitting analog subaudio frequency setting. OFF is closing, 67.0HZ-254.1HZ is standard sequence of analog subaudio frequency, and standard or non-standard analog subaudio frequency can be directly keyed by the keyboard. After adjustment, press [F Key] to store parameters.

15. **[F Key] + [1 Key] + [4 Key]:** DTMFST: DTMF sidetone on/off setting. OFF is closing, and the transceiver

does not make a sound of the code during DTMF code transmitting. KEY is that the transceiver makes a sound of the code only when DTMF code is transmitted by keying. ANI is that the transceiver makes a sound of the code only when the code is automatically transmitted. BOTH is that the transceiver makes a sound of the code when DTMF code is transmitted by keying and automatically transmitted. After adjustment, press [F Key] to store parameters.

16. **[F Key] + [1 Key] + [5 Key]: BCL:** busy transmitting forbidding setting. Transmitting is allowed when OFF channel is occupied, and transmitting is forbidden when ON channel is occupied. After adjustment, press [F Key] to store parameters.

17. **[F Key] + [1 Key] + [6 Key]:** SC-ADD: scanning addition setting. The stored channel is not added to the scanning list during OFF channel storage. The stored channel is added to the scanning list during ON channel storage. After adjustment, press [F Key] to store parameters.

18. **[F Key] + [1 Key] + [7 Key]: PRI-SC:** priority scanning setting. OFF is to close priority scanning and ON is to start priority scanning. After adjustment, press [F Key] to store parameters.

19. **[F Key] + [1 Key] + [8 Key]: PRI-CH:** priority scanning channel setting. 000-199 channels set priority scanning channels, and the channel with CH displayed in front is an effective channel. After adjustment, press [F Key] to store parameters.

20. **[F Key] + [1 Key] + [9 Key]: SC-REV:** scanning recovery mode setting. TO is time mode scanning, and scanning continues after staying for some time when a carrier signal is received. CO is carrier mode scanning, and scanning stops when a carrier signal is received. SE is search mode scanning, and scanning stops when a carrier signal is received and signaling is matched with the transceiver. After adjustment, press [F Key] to store parameters.

21. **[F Key] + [2 Key] + [0 Key]: OPTSIG:** signaling mode setting. OFF is no signaling use, DTMF is to select double audio frequency signaling, 2TONE is to select two-tone signaling, and 5TONE is to select five-tone signaling. After adjustment, press [F Key] to store parameters.

22. **F Key]+2 Key]+1 Key]: SPMUTE:** speaker opening mode setting. QT is to open the speaker when the received subaudio frequency is matched with the subaudio frequency of the transceiver. If no subaudio frequency is set, the speaker is opened after the carrier is received. AND is to

open the speaker when the received subaudio frequency and optional signaling are matched with the subaudio frequency and optional signaling of the transceiver. OR is to open the speaker when the received subaudio frequency or optional signaling is matched with the subaudio frequency or optional signaling of the transceiver. If no subaudio frequency is set, the speaker is opened after the carrier is received. After adjustment, press [F Key] to store parameters.

23. **[F Key] + [2 Key] + [2 Key]: PTT-ID:** PTT-ID transmitting setting. OFF is no ID code transmitting during transmitting, BOT is to transmit ID code at the beginning of transmitting, EOT is to transmit ID code at the end of transmitting, and BOTH is to transmit ID code at the beginning and the end of transmitting (ID code is signaling information code in the dialing storer preset by PC software and can be selected through Item 24). After adjustment, press [F Key] to store parameters.

24. **[F Key] + [2 Key] + [3 Key]: PTT-LT:** PTT-ID transmitting delay setting. 0-30 is delay time (s) prior to ID code transmitting. After adjustment, press [F Key] to store parameters.

25. **[F Key] + [2 Key] + [4 Key]: S-INFO:** signaling information and automatic dialing storer. 1-15 signaling coding and decoding storers can only write in with PC software. After adjustment, press [F Key] to store parameters.

26. **[F Key] + [2 Key] + [5 Key]: EMC-TP:** alarm mode setting. ALARM is to emit alarm tone during alarm, ANI is to transmit alarm code and transceiver ID code during alarm, and BOTH is to emit alarm tone and transmit alarm code and transceiver ID code during alarm. After adjustment, press [F Key] to store parameters.

27. **[F Key]+2 Key] + [6 Key]: EMC-CH:** alarm channel setting. 000-199 channels are pointed alarm channels during alarm, and the channel with CH displayed in front is an effective channel. After adjustment, press [F Key] to store parameters.

28. **[F Key] + [2 Key] + [7 Key]: RING-T:** ring time setting. OFF is no ring. When the matched signaling code is received within 1-10s, it is the time of the transceiver emitting calling tone, and the speaker is opened when the time is reached. After adjustment, press [F Key] to store parameters.

29. **[F Key] + [2 Key] + [8 Key]: CHNAME:** channel name editing. Edit the name of the current channel in the channel mode. After adjustment, press [F Key] to store

parameters.

30. **[F Key] + [2 Key] + [9 Key]: CA-MDF:** A channel display setting. FREQ is to display the channel in a frequency manner in the channel mode, CH is to display the channel in a channel number manner in the channel mode, and NAME is to display the channel in a channel name manner in the channel mode (specific name is set in writing frequency software). After adjustment, press [F Key] to store parameters.

31. **[F Key] + [3 Key] + [0 Key]: CB-MDF:** B channel display setting. FREQ is to display the channel in a frequency manner in the channel mode, CH is to display the channel in a channel number manner in the channel mode, and NAME is to display the channel in a channel name manner in the channel mode (specific name is set in writing frequency software). After adjustment, press [F Key] to store parameters.

32. **[F Key] + [3 Key] + [1 Key]: AUTOLK:** autolock setting. OFF is to close autolock, and ON is to open autolock. After adjustment, press [F Key] to store parameters.

33. **[F Key] + [3 Key] + [2 Key]: PONMSG:** start display mode setting. FULL is full screen display during start, MSG is to display pointed message during start, and BATT-V is to display the current power supply voltage during start. After adjustment, press [F Key] to store parameters.

34. **[F Key] + [3 Key] + [3 Key]: WT-LED:** standby backlight selection setting. OFF is to close standby backlight, BLUE is to select standby backlight as blue, ORANGE is to select standby backlight as orange, and PURPLE is to select standby backlight as purple. After adjustment, press [F Key] to store parameters.

35. **[F Key] + [3 Key] + [4 Key]: RX-LED:** receiving signal backlight selection setting. OFF is to close receiving backlight, BLUE is to select receiving signal backlight as blue, ORANGE is to select receiving signal backlight as orange, and PURPLE is to select receiving signal backlight as purple. After adjustment, press [F Key] to store parameters.

36. **[F Key] + [3 Key] + [5 Key]: TX-LED:** transmitting backlight selection setting. OFF is to close transmitting backlight, BLUE is to select transmitting backlight as blue, ORANGE is to select transmitting backlight as orange, and PURPLE is to select transmitting backlight as purple. After adjustment, press [F Key] to store parameters.

37. **[F Key] + [3 Key] + [6 Key]: MEM-CH:** channel storage setting. 000-199 channels are used for indicating

to-be-stored channel number during channel storage. If CH- is displayed in front of the digit, it indicates that this channel is originally stored with channel parameters. After adjustment, press [F Key] to store parameters.

38. **[F Key] + [3 Key] + [7 Key]: DEL-CH:** channel deletion setting. 000-199 channels are used for deleting channel parameters of pointed channels. If no CH- is displayed in front, it indicates that this channel has no parameter and operation is invalid. After adjustment, press [F Key] to store parameters.

39. **[F Key] + [3 Key] + [8 Key]: SFT-D:** frequency difference direction setting. OFF is that transmitting frequency and receiving frequency have no difference in the frequency mode, + is that transmitting frequency is equal to receiving frequency plus frequency difference in the frequency mode, and - is that transmitting frequency is equal to receiving frequency minus frequency difference in the frequency mode. After adjustment, press [F Key] to store parameters.

40. **[F Key] + [3 Key] + [9 Key]: OFFSET:** frequency difference setting. 00.000-69.990MHZ is the difference of transmitting frequency and receiving frequency in the frequency mode (controlled by frequency difference direction). After adjustment, press [F Key] to store parameters.

41. **[F Key] + [4 Key] + [0 Key]: ANI:** transceiver ID code. It is used for observing the transceiver ID code which can only be written in via writing frequency software. After adjustment, press [F Key] to store parameters.

42. **[F Key] + [4 Key] + [1 Key]: ANI-L:** transceiver ID code length. 3.4.5 is to set the effective length of the transceiver ID code. After adjustment, press [F Key] to store parameters.

43. **[F Key] + [4 Key] + [2 Key]: REP-S:** repeating activation signaling setting. During 1000 transmitting, press [CALL] key to emit 1KHZ single tone frequency for activating the repeater. During 1450 transmitting, press [CALL] key to emit 1.45KHZ single tone frequency for activating the repeater. During 1750 transmitting, press [CALL] key to emit 1.75KHZ single tone frequency for activating the repeater. During 2100 transmitting, press [CALL] key to emit 2.1KHZ single tone frequency for activating the repeater. After adjustment, press [F Key] to store parameters.

44. **[F Key] + [4 Key] + [3 Key]: REP-M:** repeating transponding mode setting. OFF is to close repeating

transponding, CARRI is to transpond when the carrier is received, CTDCS is to transpond when the received subaudio frequency is matched, TONE is to transpond when the received single audio frequency is matched, and DTMF is to transpond when pointed DTMF code (transceiver ID code) is received. After adjustment, press [F Key] to store parameters.

45. **[F Key] + [4 Key] + [4 Key]: RESET:** initialization setting. VFO: menu parameter reset setting. ALL: menu parameter and channel parameter reset setting. After adjustment, press [F Key] to store parameters.

Press [EXIT/AB] key to exit after menu setting completion.

Manual channel storage and deletion operation

Channel storage:

1. Directly input to-be-used frequency with the keyboard in the frequency mode. E.g.: for frequency 435.125, directly input 4, 3, 5, 1, 2 and 5.

2. Set to-be-used receiving subaudio frequency (Items 10 and 11), and set to-be-used transmitting subaudio frequency (Items 12 and 13). E.g.: for receiving subaudio frequency 67.0HZ and transmitting subaudio frequency 67.0HZ, press [F] key + [1] key + [1] key + [F] key + [DOWN] to select 67.0HZ + [F] key + [EXIT/AB] to exit and save; for transmitting subaudio frequency, press [F] key + [1] key + [3] key + [F] key + [DOWN] to select 67.0HZ + [F] key + [EXIT/AB] to exit and save. (Select OFF if no subaudio frequency is required.)

3. Select Item 36 to perform channel storage. Sequentially press [F] key + [3] key + [6] key + [F] key + [UP] (DOWN) to select channel number + [F] key to store channels.

Channel deletion:

Select Item 37 to perform channel deletion. Sequentially press [F] key + [3] key + [7] key + [F] key + [UP] (DOWN) to select to-be-deleted channel number + [F] key to delete channels.

Storage of FM radio channels

You can store radio programs and corresponding program names via PC writing frequency software (click FM channel of writing frequency software to edit). The microphone handle of the transceiver can transmit DTMF code in real time in the transmitting state. In FM mode, press [*] key of the microphone keyboard to sequentially search radio channels.

Switching of keyboard lock

Long press [#] key of the microphone keyboard for over 2s to open or close the keyboard lock function during standby.

Transmitting of transfer signaling

Select to-be-transmitted transfer signaling frequency (the transceiver provides 4 kinds of transfer signaling frequency). Sequentially press [F] key + [4] key + [2] key + [F] key + [UP] (DOWN) to select transfer signaling frequency + [F] key to save. Press [PTT] key and [CALL] key to transmit preset transfer signaling.

Setting of PTT ID

PTT-ID transmitted by the transceiver is ID code prestored by writing frequency software. You can write in via PC writing frequency software (click PTT-ID option box of optional parameter option of writing frequency software to edit).

1. Select Item 20 to select to-be-used signaling. Sequentially press [F] key + [2] key + [0] key + [F] key + [UP] (DOWN) to select to-be-used signaling + [F] key to save.
2. Select Item 22 to perform PTT transmitting setting. Sequentially press [F] key + [2] key + [2] key + [F] key + [UP] (DOWN) to select to-be-transmitted PTT-ID time period + [F] key to save.
3. Select Item 23 to perform PTT transmitting time delay setting. Sequentially press [F] key + [2] key + [3] key + [F] key + [UP] (DOWN) to select delay time + [F] key to save.
4. Press PTT to transmit set ID code.

Setting of optional signaling

Setting of DTMF signaling

The transceiver has DTMF coding and decoding functions. You can write in signaling information code via PC writing frequency software (click signaling editing DTMF option of writing frequency software to set).

DTMF signaling

After the receiver sets DTMF signaling, it can execute ring prompt and display the information code when the received DTMF signal is consistent with the preset ID code. Intercommunication can be performed within the effective time (ID code can be preset via PC writing frequency software).

Patrol function

When the received DTMF signal is consistent with the preset patrol code, the receiver will transmit its ID code, and the master control screen can display the ID code. This function can select whether signaling is controlled by master control ID and not controlled by receiving signaling (patrol code can be preset via PC writing frequency software).

Monitor function

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

Remote Stun

When the received DTMF signal is consistent with the preset stunning code, the receiver will limit the transmitting function to only operate in the receiving state, and the display screen prompts. Normal function is not recovered until the corresponding start code is received. This function can select whether signaling is controlled by master control ID and not controlled by receiving signaling (stunning code can be preset via PC writing frequency software).

Remote Kill

When the received DTMF signal is consistent with the preset inhibition code, the receiver will limit all functions, and the display screen prompts. Normal function is not recovered until the corresponding start code is received. This function can select whether signaling is controlled by master control ID and not controlled by receiving signaling (inhibition code can be preset via PC writing frequency software).

Start function

When the received DTMF signal is consistent with the preset start code, the receiver will cancel the inhibition and stunning state to recover normal function. This function can select whether signaling is controlled by master control ID and not controlled by receiving signaling (start code can be preset via PC writing frequency software).

Alarm function

When the received DTMF signal is consistent with the preset alarm code, the receiver gives an alarm, and the alarm mode and alarm channel can be edited through optional parameter

options of PC writing frequency software. This function can select whether signaling is controlled by master control ID and not controlled by receiving signaling (alarm code can be preset via PC writing frequency software).

Signaling is controlled by master control ID means that this function cannot be executed until master control ID is consistent besides signaling code.

Coding format of signaling not controlled by master control ID: signaling code + # (separation code) + information code

Coding format of signaling controlled by master control ID: signaling code + # (separation code) + master control ID code + # (separation code) + information code

Setting of transmitting DTMF with CALL key

1. Select DTMF signaling. Sequentially press [F] key + [2] key + [0] key + [F] key + [UP] (DOWN) to select DTMF signaling + [F] key to save.
2. Select signaling information code. Sequentially press [F] key + [2] key + [4] key + [F] key + [UP] (DOWN) to select decoded signaling information code block (1-15) + [F] key to save (set DTMF coding via PC writing frequency software).
3. Press [CALL] in the standby state to transmit the selected DTMF information code block.

Setting of transmitting dual tone and dual tone signaling with CALL key

1. Press [MENU] key (menu function key) to select Item 20 OPTSIG, and then press [F] key to select 2TONE to start 2TONE signaling.
2. Press [MENU] key to select Item 24 S-INFO, and then press [F] key to select pre-edited signaling group number 1-16 (set 2TONE purpose via PC writing frequency software).
3. When the received 2TONE signal is consistent with the preset 2TONE code, execute the corresponding function.
4. Press [CALL] key in the standby state to transmit the selected 2TONE information code block.

Setting of 5TONE signaling

The transceiver has 5-tone coding and decoding functions. You can write in signaling information code via PC writing frequency software (click signaling editing 5TONE option of writing frequency software to set). After the receiver sets 5TONE signaling, it can execute ring prompt and display the information code when the received 5TONE signal is

consistent with the preset ID code (5 digits). Intercommunication can be performed within the effective time (ID code can be preset via PC writing frequency software).

Transmit 5TONE with [CALL] key

1. Press [MENU] key (menu function key) to select Item 20 OPTSIG, and then press [F] key to select 5TONE to start once, and it may be null as required).
2. Press [MENU] key to select Item 24 S-INFO, and then 1-16 (5TONE information code can be set via PC writing 5TONE signaling.
3. Press [CALL] key in the standby state to transmit the selected 5TONE information code block.

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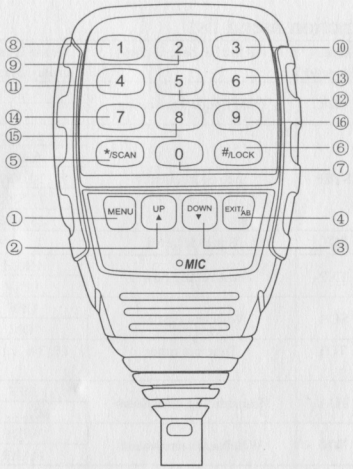
■ Description of speaker microphone

1 “MENU”: Function key
2 “UP”: Frequency stepping up
3 “DOWN”: Frequency stepping down
4 “EXIT”: Exit AB channel switching and alarm function
5 “*/SCAN”: Scrambling function and scanning, "*"
6 “#/LOCK”: Keyboard lock function, "#"
7 “0”: 0
8 “1”: 1
9 “2”: 2
10 “3”: 3
11 “4”: 4
12 “5”: 5
13 “6”: 6
14 “7”: 7
15 “8”: 8
16 “9”: 9



■ Function menu list

No.	Display character	Function description	Grade II menu display character	Grade II menu setting description
0	TDR	Dual frequency waiting	OFF	Close dual frequency waiting
			ON	Start dual frequency waiting
1	STEP	Step of frequency	5.00K	Press UP/DOWN key in the frequency mode to change the frequency step value
			6.25K	
			10.00K	
			12.50K	
			25.00K	
2	SQL	Squelch Level	0, …, 9	Mute grade
3	TXP	Transmitting power	HIGH	High-power transmitting
			LOW	Low-power transmitting
4	SCR	Voice encryption	OFF	Close voice encryption function
			ON	Open voice encryption function
5	TOT	Time out timer	15, 30, …, 600	Ranging from 15 to 600, stepping by 15, and indicating the maximum transmitting time by pressing PTT key
6	TOA	Transmitting over alarm	OFF	Close transmitting end warning
			1, 2, …, 10	The transmitting time limit comes to an end and the transmitting indicator lamp flickers
7	WN	Wideband/narrowband	WIDE	Wideband operation
			NARR	Narrowband operation
8	ABR	Automatic backlight	OFF	Close automatic backlight
			1, 2, 3, 4, …, 50	Time from backlight opening to automatic closing
9	BEEP	Prompt tone on/off	OFF	Close operation prompt tone
			ON	Open operation prompt tone
10	R-DCS	Receiving digital subaudio frequency	OFF	No subaudio frequency
			D023N, …, D754I	Standard sequence of digital subaudio frequency
11	R-CTCS	Receiving analog subaudio	OFF	No subaudio frequency

		frequency	67.0HZ, …, 254.1HZ	Standard sequence of analog subaudio frequency, and standard or non-standard analog subaudio frequency can be directly keyed by the keyboard
12	T-DCS	Transmitting digital subaudio frequency	OFF	No subaudio frequency
			D023N, …, D754I	Standard sequence of digital subaudio frequency
13	T-CTCS	Transmitting analog subaudio frequency	OFF	No subaudio frequency
			67.0HZ, …, 254.1HZ	Standard sequence of analog subaudio frequency, and standard or non-standard analog subaudio frequency can be directly keyed by the keyboard
14	DTMFST	Sidetone on/off	OFF	The transceiver does not make a sound of the code during DTMF code transmitting
			KEY	The transceiver makes a sound of the code during DTMF code transmitting
			ANI	The transceiver makes a sound of the code during automatic code transmitting
			BOTH	The transceiver makes a sound of the code during keying and automatic code transmitting
15	BCL	Busy Call Lock	OFF	Transmitting is allowed when the channel is occupied.
			ON	Transmitting is forbidden when the channel is occupied.
16	SC-ADD	Scanning addition	OFF	The stored channel is not added to the scanning list during channel storage.
			ON	The stored channel is added to the scanning list during channel storage.
17	PRI-SC	Priority scanning	OFF	Close priority scanning function
			ON	Open priority scanning function
18	PRI-CH	Priority channel	000, …, 199	After the priority scanning function is opened, the priority scanning channel is pointed, and the channel with CH displayed in front is an effective channel
19	SC-REV	Scanning recovery mode	TO	Time mode scanning
			CO	Carrier mode scanning
			SE	Search mode scanning
20	OPTSIG	Optional signaling	OFF	Close optional signaling
			DTMF	Current optional signaling is DTMF signaling
			2TONE	Current optional signaling is 2TONE signaling
			5TONE	Current optional signaling is 5TONE signaling
21	SPMUTE	Speaker opening mode	QT	The speaker is opened when the subaudio frequency is matched
			AND	The speaker is opened when the subaudio frequency and optional signaling are matched
			OR	The speaker is opened when the subaudio frequency or optional signaling is matched
22	PTT-ID	PTT key transmitting	OFF	Press PTT but not transmit code
			BOT	Press PTT to transmit code (transmitted code content is set by writing frequency software)

			EOT	Release PTT to transmit code
			BOTH	Press and release PTT to transmit code
23	PTT-LT	Code transmitting delay	0, 1, …, 30	Delay time (s) before automatic code transmitting
24	S-INFO	Signaling information code	1, …, 15	Transmit the information code as required (it can only be written in via writing frequency software)
25	EMC-TP	Alarm mode	ALARM	The transceiver emits alarm tone during alarm
			ANI	The transceiver transmits alarm code and transceiver ID code during alarm
			BOTH	The transceiver emits an alarm tone and transmits alarm code and transceiver ID code during alarm
26	EMC-CH	Alarm channel	000, …, 199	They are pointed alarm channels during alarm, and the channel with CH displayed in front is an effective channel
27	RING-T	Ring time	OFF, 1, 2, …, 10	When the matched signaling code is received, it is the time of the transceiver emitting calling tone, and the speaker is opened when the time is reached
28	CHNAME	Channel name editing		Edit the name of the current channel in the channel mode
29	CA-MDF	A channel display mode	FREQ	Display A channel in a frequency manner in the channel mode
			CH	Display A channel in a channel number manner in the channel mode
			NAME	Display A channel in a channel name manner in the channel mode (specific name is set in writing frequency software)
30	CB-MDF	B channel display mode	FREQ	Display B channel in a frequency manner in the channel mode
			CH	Display B channel in a channel number manner in the channel mode
			NAME	Display B channel in a channel name manner in the channel mode (specific name is set in writing frequency software)
31	AUTOLK	Autolock	OFF	Close autolock
			ON	Open autolock
32	PONMSG	Start display mode	FULL	Full screen display
			MSG	Display pointed message
33	WT-LED	Standby backlight selection	OFF	Close backlight lamp
			BLUE	Open blue lamp in the standby state
			ORANGE	Open orange lamp in the standby state
			PURPLE	Open purple lamp in the standby state
34	RX-LED	Receiving backlight selection	OFF	Close backlight lamp
			BLUE	Open blue lamp in the receiving state

			ORANGE	Open orange lamp in the receiving state
			PURPLE	Open purple lamp in the receiving state
35	TX-LED	Transmitting backlight selection	OFF	Close backlight lamp
			BLUE	Open blue lamp in the transmitting state
			ORANGE	Open orange lamp in the transmitting state
			PURPLE	Open purple lamp in the transmitting state
36	MEMCH	Memory storage	000, ..., 199	They are used for indicating to-be-stored channel number during channel storage. If CH- is displayed in front of the digit, it indicates that this channel is originally stored with channel parameters.
37	DELCH	Channel deletion	000, ..., 199	Delete channel parameters of pointed channels. If no CH- is displayed in front, it indicates that this channel has no parameter and operation is invalid
38	SFT-D	Frequency difference direction	OFF	Transmitting frequency and receiving frequency have no difference in the frequency mode
			+	Transmitting frequency is equal to receiving frequency plus frequency difference in the frequency mode
			-	Transmitting frequency is equal to receiving frequency minus frequency difference in the frequency mode
39	OFFSET	Frequency difference	00.000, ... 69.990	Difference of transmitting frequency and receiving frequency in the frequency mode (whether controlled by frequency difference direction)
40	ANI	Transceiver ID code		It is used for observing the transceiver ID code which can only be written in via writing frequency software
41	ANI-L	Transceiver ID code length	3, 4, 5	Effective length of transceiver ID code
42	REP-S	Repeating activation signaling	1000	Press [CALL] key to emit single tone frequency for activating the repeater during transmitting
			1450	Press [CALL] key to emit single tone frequency for activating the repeater during transmitting
			1750	Press [CALL] key to emit single tone frequency for activating the repeater during transmitting
			2100	Press [CALL] key to emit single tone frequency for activating the repeater during transmitting
43	REP-M	Repeating transponding mode	OFF	Close repeating transponding
			CARRI	Transpond when carrier is received
			CTDCS	Transpond when subaudio frequency signaling is received
			TONE	Transpond when single audio frequency signal is received
			DTMF	Transpond when pointed DTMF code (transceiver ID code) is received
44	RESET	Initialization	VFO	Menu initialization
			ALL	Menu and channel initialization

Main technical indexes

General specification

Frequency range	VHF: 136~174MHz 245~245.9875MHz (220~260MHz) UHF: 400~480MHZ 480~520MHz
Channel quantity	200
Channel interval	25KHZ (wideband) 20K (midband) 12.5 (narrowband)
Phase lock step	5KHz, 6.25KHZ, 10KHz, 12.5KHZ, 15KHz, 25KHZ
Working voltage	13.8VDC±15%
Mute mode	CARRI/CTCSS/DCS/5Tone/2Tone/DTMF
Frequency stability	±2.5ppm
Working temperature	-20~+60℃
Dimension	98(W) x 35(H) x 118(D) mm
Weight	408g

Receiving part (ETSI EN 300 086 standard test)

	Wideband	Narrowband
Sensitivity (12dB SINAD)	≤0.25 μ V	≤0.35 μ V
Adjacent channel selectivity	≥70dB	≥60dB
Intermodulation	≥65dB	≥60dB
Spurious response	≥70dB	≥70dB
Audio frequency response	+1~-3dB(0.3~3KHz)	+1~-3dB (0.3~2.55KHz)
Signal to noise ratio	≥45dB	≥40dB
Audio frequency distortion	≤5%	
Audio frequency output power	≥2W@10%	

Transmitting part (ETSI EN 300 086 standard test)

	Wideband	Narrowband
Output power	25W/20W(VHF/UHF)	
Modulation mode	16KΦF3E	11KΦF3E
Adjacent channel power	≥70dB	≥60B
Signal to noise ratio	≥40dB	≥36dB
Parasitism and harmonic	≥60dB	≥60dB
Audio frequency response	+1~-3dB (0.3~3KHZ)	+1~-3dB (0.3~2.55KHZ)
Audio frequency distortion	≤5%	

Note: All specifications can be changed without further notice or responsibility assumption.

Notice

Radio Regulations of the People's Republic of China stipulates that any unit or individual setting or using radio device within the territory of the People's Republic of China must handle the formalities to the corresponding radio management mechanism and receive the station license prior to use.

Thank you for using the wireless transceiver manufactured by our company. This product has the newly developed function menu and individual operation design for easy use, and we believe that delicate size and reasonable price will meet your demand.