NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the 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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.



USER'S MANUAL



Thank you for purchasing this Radio.
We believe this easy-to-use radio will provide reliable and dependable communication.

QS Radio incorporates the latest advanced technology. As a result, we know that you will be pleased with the quality and features of this product.

PRECAUTIONS BEFORE USING

Please read the User's Manual before using. It gives you important information about how to operate the portable radio.

Please put the radio and accessories where the children can not touch.

Maintenance can only be performed by professional technicians.

Please use the standard battery pack and charger in order not to destroy the radio.

Please use the standard antenna, in order not to shorten the distance.

Do not expose the radio to sunlight for a long period of time, nor put it near the heat, nor use it in a high temperature environment.

Do not put it in extreme dust nor wet or on unsteady surfaces.

Keep it dry. (Rain or moisture will erode the electronic board).

Do not transmit when the antenna is not installed.

FEATURES

\sim		1111	1 1	1 1		/
()	TIHE /	V/HE	ULIDI	nand	receive	tranemi

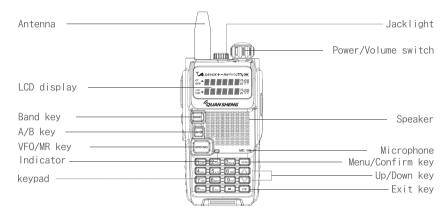
- O Large LCD display
- O High capacity Li-ion battery and smart charger
- O PC programmable
- O Fast MENU operation
- O Emergency alarm function
- O H/L output power selective
- O Squelch level adjustable
- O Multi power saving function
- O Voice prompt (Chinese and English)
- O Reminding switch
- O Dual display of frequency and channel
- O Channel name edit
- O Channel storing
- O Frequency/channel mode shift
- O Multi LCD backlight selective
- O Time of backlight auto off selective
- O VOX function
- O Dual-watch operation
- O Receive/transmit code setting separately O CTCSS/DCS
- O Cable clone

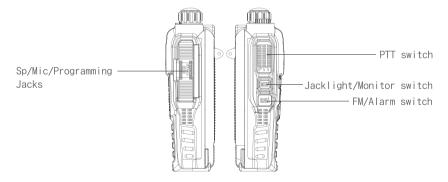
- O CTCSS/DCS code search automatically
- O Offset frequency and offset direction setting
- O Multi step frequency
- O Busy channel lock
- O Time-out-timer (TOT)
- O Multi display mode: channel/frequency/ channel name
- O Multi scan function selective
- O Channel scan additive
- O Wide/narrow bandwidth selective
- O Main/sub channel shift
- O 1750Hz call tone
- O Reminding of repeater transfer
- O Auto-keylock
- O 128 channels
- O Channel delete function
- O Reset
- O DTMF function
- O PTT-ID
- O Reverse function

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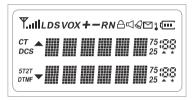
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DIAGRAM





LCD DISPLAY



СТ	This symbol will appear when transmitting, it means transmitting CTCSS code.							
DCS	This symbol will appear when transmitting, it means transmitting DCS code.							
+	In frequency mode, this symbol will appear, it means transmitting frequency equals receiving frequency plus the difference of frequency. It can set different frequency.							
-	In frequency mode, it will appear this symbol, it means transmitting frequency equals receiving frequency minus the difference of frequency. It can set different frequencies							
+-	It means the transmitting and receiving frequencies are different at current channel							
S	It means it already set dual watch operation function.							
vox	VOX function							
R	Reverse function							
N	Narrow bandwidth							
<u> </u>	It represents the remaining battery when the battery is almost used up, the frame starts to flicker and it forbid transmitting the radio.							
А	It means the keypad is locked pressing key #/Lock can unlock the keypad.							
L	Low frequency.							
	Current frequency and current menu setting.							
Y.ad	Signal strength.							
(88)	Channel number display							
75 25	Frequency ending display							

BASIC OPERATION

PTT Kev

- Transmitting/Receiving switch key: Press "PTT" to transmit and speak to microphone.
- Release "PTT" to receive.

FM/Alarm Key

- Press it for a short time to turn on FM radio function. Operate it again to turn it off.
- Press it for a long time to turn on Alarm function. Operate it again to turn it off.

Jacklight/Monitor Key

- Press it for a short time to turn on Jacklight. Operate it again to turn on Flashing Alarming light. Operate it again to turn it off.
- Press it for a long time to turn on Monitor function.
- Press Jacklight/Monitor key to turn the power on and then enter channel clone condition, It can copy one radio's channel parameter to another one.

NOTE: Cloning cable must be used to connect these two radios.

Band Key

- UHF/VHF frequency band shift;
- In transmitting mode, press Band key to send 1750Hz call tone.

BASIC OPERATION

Function Keypads

- Menu/Confirm key: MENU It's used for activating the menu, choose each menu item and confirm the parameter.
- Up key (Press more than 2s to scan, press up key to upward scanning):
- Down key (Press more than 2s to scan, press down key to downward scanning):



• Press key Exit to exit and clear.

Number Keypads

- Input the information to the radio.
- Input the non-standard CTCSS code in non-standard mode.
- In transmitting mode, press number keys to send corresponding DTMF code.







BASIC OPERATION

*Scan Key

- Press scan key for a short time to activate RX/TX reverse function.
- Press scan key for more than 2s to start frequency or channel scanning.
- In FM radio mode, press scan key to automatically search FM radio channel.
- In CTCSS/DCS mode, press scan key to start CTCSS/DCS code scanning.

--o Key

- In channel mode, press # -0 for a short time to switch H/L output power.
- Press #m-0 key for more than 2 seconds to lock or unlock the keypad.

Power/Volume Switch

- Turn the Power/Volume switch clockwise to turn the power on.
- Turn the Power/Volume switch counter-clockwise to turn the power off.

Indicator

- Transmitting:see the red light
- Receiving:see the green light

Sp/Mic/Programming Jacks

- It's used for external speaker/microphone.
- It's used for the connection of program by computer.

FAST MENU SETTING

- 1 Press Menu key;
- 2 Press Menu key again;
- 3 Press Up/Down key to select Menu No.
- 4 Press Menu to exit/confirm(As picture below).



NOTE:

- ① In channel mode, the setting of following features is invalid: CTCSS/DCS, Wide/narrow bandwidth, PTT-ID.
- Busy channel lock, Channel scan additive, Channel name edit.
- ② High/Low power can only be changed by pressing fast key #.

FAST MENU OPERATION FLOW

No.	Feature	Function Character	Function Set	LCD Display	Parameter	LCD Display	Selectable	Confirm key	Back Key	Page
0	Squelch Level	SQL	MENU+0	▲ SQL 0	Press Menu key, and then press ▲or▼key to choose.	▼ 6 SQL 0	0-9 levels 0:Lowest 9:Highest	MENU	PTT or EXIT	P17
1	Step Frequency	STEP	MENU+1	▲ STEP 1 25. 0K	Press Menu key, and then press ▲or▼key to choose.	STEP 1 ▼ 12.5K	2. 5/5. 0/6. 25 /10. 0/12. 5/ 25. 0KHZ	MENU	PTT or EXIT	P18
2	Output Power	TXP	MENU+2	TXP 2	Press Menu key, and then press ▲or▼key to choose.	TXP 2 ▼ LOW	HIGH: 4 W LOW: 1W	MENU	PTT or EXIT	P18
3	Battery Saving	SAVE	MENU+3	SAVE 3	Press Menu key, and then press ▲or▼key to choose.	SAVE 3	0FF: 0FF 1:1 2:2 3:3 4:4	MENU	PTT or EXIT	P19
4	VOX	VOX	MENU+4	VOX 4	Press Menu key, and then press ▲or▼key to choose.	VOX 4 ▼ 9	OFF: OFF 1: Lowest Sensitivity 10: Highest Sensitivity	MENU	PTT or EXIT	P19
5	Channel Bandwidth	W/N	MENU+5	▲ WN 5 WIDE	Press Menu key, and then press ▲or▼key to choose.	WN 5 ▼ NARR	W: 25.0K N: 12.5K	MENU	PTT or EXIT	P20
6	Auto Backlight	ABR	MENU+6	ABR 6	Press Menu key, and then press ▲or▼key to choose.	▼ ABR 6	0FF 1-5s	MENU	PTT or EXIT	P20
7	Dual-watch Operation	TDR	MENU+7	▲ TDR 7	Press Menu key, and then press ▲or▼key to choose.	TDR 7 ▼ ON	ON OFF	MENU	PTT or EXIT	P21
8	Keypad Sound Reminding	BEEP	MENU+8	BEEP 8 OFF	Press Menu key, and then press ▲or▼key to choose.	■ BEEP 8	ON OFF	MENU	PTT or EXIT	P21
9	Time-Out- Timer	ТОТ	MENU+9	↑ TOT 9	Press Menu key, and then press ▲or▼key to choose.	TOT 9 € 600	15, 30····· 600S	MENU	PTT or EXIT	P22
10	Receive DCS	R-DCS	MENU+10	R-DCS10 OFF	Press Menu key, and then press ▲or▼key to choose.	R-DCS 10 ▼ D023N	OFF D023N-D754N D0231-D7541	MENU	PTT or EXIT	P22

FAST MENU OPERATION FLOW

No.	Feature	Function Character	Function Set	LCD Display	Parameter	LCD Display	Selectable	Confirm key	Back Key	Page
11	Receive CTCSS	R-CTCS	MENU+11	R-CTCS 11	Press Menu key, and then press ▲or▼key to choose.	R-CTCS 11 ▼ 67. 0HZ	0FF 67. 0-254. 1HZ	MENU	PTT or EXIT	P23
12	Transmit DCS	T-DCS	MENU+12	T-DCS 12 OFF	Press Menu key, and then press ▲or▼key to choose.	T-DCS 12 ▼ D023N	OFF D023N-D754N D0231-D7541	MENU	PTT or EXIT	P23
13	Transmit CTCSS	T-CTCS	MENU+13	T-CTCS13 OFF	Press Menu key, and then press ▲or▼key to choose	T-CTCS ¹³ ▼ 67. 0HZ	0FF 67. 0-254. 1HZ	MENU	PTT or EXIT	P24
14	Voice Reminding	VOICE	MENU+14	VOICE 14 OFF	Press Menu key, and then press ▲or▼key to choose.	VOICE 14 ▼ ON	ON OFF	MENU	PTT or EXIT	P24
15	ANI-ID	ANI-ID	MENU+15	ANI-ID15		ANI−ID ¹⁵ ▼ *****	1-5 digit arbitrary selection(It can be programmed by software.)		PTT or EXIT	P24
16	DTMFST	DTMFST	MENU+16	DTMFST 16	Press ▲or▼key or input numbers directly.		OFF DT-ST: Sending by keypads ANI-ST: Auto sending DT+ANI: Auto sending and sending by keypads	MENU	PTT or EXIT	P25
17	Signal Code	S-CODE	MENU+17	S-CODE 17	Press Menu key, and then press ▲or▼key to choose.	S-CODE 17 ▼ 13	1-15 group (It can be programmed by software.)	MENU	PTT or EXIT	P25
18	Scan Resume Mode	SC-REV	MENU+18	SC-REV 18	Press Menu key, and then press ▲or▼key to choose.	SC-REV 18 ▼ SE	TO: Time scanning CO: Carrier wave scanning SE: Search scanning	MENU	PTT or EXIT	P26
19	PTT ID	PTT-ID	MENU+19	PTT-ID 19 OFF	Press Menu key, and then press ▲or▼key to choose.	PTT-ID 19 ▼ BOT	OFF:Press PTT not send BOT: Press PTT to send. (PTT ID code can choose from program software EOT: Release PTT to send. BOTH: Press or release PTT to send.	MENU	PTT or EXIT	P26
20	PTT ID Prolong Time	PTT-LT	MENU+20	PTT-LT 20	Press Menu key, and then press ▲or▼key to choose	PTT-LT 20 ▼ 1	0, 1, 2····· 30ms	MENU	PTT or EXIT	P27

FAST MENU OPERATION FLOW

No.	Feature	Function Character	Function Set	LCD Display	Parameter	LCD Display		Confirm key	Back Key	Page
21	A Channel Display Mode	MDF-A	MENU+21	MDF-A 21 FREQ	Press Menu key, and then press ▲or▼key to choose.	MDF-A 21 ▼ CH	FREQ: Channel+ frequency CH: Channel NAME: Channel name (It can be programmed by software.)	MENU	PTT or EXIT	P27
22	B Channel Display Mode	MDF-B	MENU+22	▲ MDF-B 22 FREQ	choose.	MDF-B 22 ▼ CH	FREQ: Channel+ frequency CH: Channel NAME: Channel name (It can be programmed by software.)	MENU	PTT or EXIT	P28
23	Busy Channel Lock	BCL	MENU+23	BCL 23 OFF	Press Menu key, and then press Aor key to choose.	▼ BCL 23	ON OFF	MENU	PTT or EXIT	P28
24	Auto Keypad Lock	AUTOLK	MENU+24	AUTOLK ²⁴ OFF	Press Menu key, and then press Aor Vkey to choose.	AUTOLK ²⁴ ▼ ON	ON OFF	MENU	PTT or EXIT	P29
25	Frequency Deviation Setting	SFT-D	MENU+25	A SFT-D 25 OFF	Press Menu key, and then press ▲or▼key to choose.	SFT-D 25	OFF +: TX frequency >RX frequency -: TX frequency <rx frequency<="" td=""><td>MENU</td><td>PTT or EXIT</td><td>P29</td></rx>	MENU	PTT or EXIT	P29
26	Frequency of Different Frequency	0FFSET	MENU+26	OFFSET 26 00. 000	numbers directly.	0FFSET ²⁶ ▼ 05. 000	00. 000- 69. 990MHZ	MENU	PTT or EXIT	P30
27	Channel Store	MEM-CH	MENU+27	MEM-CH 27	Press Menu, and then press ▲or▼key to choose.Or input three numbers directly.	MEM-CH ²⁷ ▼ 036	0-127 Channels	MENU	PTT or EXIT	P30 -32
28	Channel Delete	DEL-CH	MENU+28	DEL-CH 28	Press Menu, and then press ▲or▼key to choose.Or input channel numbers directly.	DEL_CH ²⁸ ▼ 006	Any one of the stored channels.	MENU	PTT or EXIT	P32 -33
29	Standby Backlight	WT-LED	MENU+29	▲ WT-LED ²⁹ OFF	Press Menu, and then press ▲or ▼key to choose.	WT-LED ²⁹ ▼ RED	OFF Green Red Yellow	MENU	PTT or EXIT	P33
30	RX Backlight	RX-LED	MENU+30	A RX-LED 30 OFF	Press Menu, and then press ▲or ▼key to choose.	RX-LED 30 RED	OFF Green Red Yellow	MENU	PTT or EXIT	P33

FAST MENU OPERATION FLOW

No.	Feature	Function Character	Function Set	LCD Display	Parameter	LCD Display	Selectable	Confirm key	Back Key	Page
31	TX Backlight	TX-LED	MENU+31	TX-LED 31 OFF	Press Menu key, and then press ▲or▼key to choose.	TX-LED 31 ▼ RED	OFF Green Red Yellow	MENU	PTT or EXIT	P34
32	Alarm Mode	AL-MOD	MENU+32	AL-MOD ³² OFF	Press Menu key, and then press ▲or▼key to choose.	AL-MOD 32 ▼ SITE	SITE: Site alarm TONE: Sending alarm tone CODE: Sending alarm code	MENU	PTT or EXIT	P34
33	Frequency Band Shift	BAND	MENU+33	BAND 33 UHF	Press Menu key, and then press ▲or▼key to choose.	BAND 33 ▼ VHF	UHF: 400 - 450 MHZ VHF: 136 - 150 MHZ	MENU	PTT or EXIT	P34
34	Dual-watch Operation (Cross Band TX/RX)	TDR-AB	MENU+34	TDR-AB ³⁴ OFF	Press Menu key, and then press ▲or▼key to choose.	TDR−AB 34 ▼ A	OFF A band transmit (Upper row frequency) A band transmit (Bottom row frequency)	MENIII	PTT or EXIT	P35
35	Tail Tone Elimination	STE	MENU+35	STE 35 OFF	Press Menu key, and then press Aor Vkey to choose.	STE 35 ▼ ON	ON OFF	MENU	PTT or EXIT	P35
36	Repeater Tail Tone Elimination	RP-STE	MENU+36	RP-STE 36 OFF	Press Menu kev	RP-STE 36 ▼ 5	OFF 1, 2·····10ms	MENU	PTT or EXIT	P36
37	Time of Repeater Tail Tone Elimination	RPT-RL	MENU+37	ARPT-RL 37 OFF	Press Menu key, and then press Aor Vkey to choose.	RPT-RL ³⁷ ▼ 5	0FF 1, 2·····10ms	MENU	PTT or EXIT	P36
38	Displays of Power On	PONMSG	MENU+38	PONMSG 38 FULL	Press Menu key, and then press ▲or▼key to choose.	PONMSG ³⁸ ▼ MSG	FULL: Full frequency character MSG:Display of Quansheng logo	MENU	PTT or EXIT	P37
39	Reminding of End Talk	ROGER	MENU+39	ROGER 39 OFF	Press Menu key, and then press ▲or▼key to choose.	ROGER 39 ▼ ON	ON OFF	MENU	PTT or EXIT	P37
40	Reset	RESET	MENU+40	RESET 40	Press Menu key, and then press Aor key to choose.	RESET 40	VFO: Menu initialization ALL: Menu and channel initialization	MENU	PTT or EXIT	P37 -38
	Manually Lock the Keypads		Press key "#" for more than 2s.	400. 875 1 136. 225		400. 875 136. 225	Repeatedly press key "#" for more than 2s to lock or unlock.		Auto	P38

FAST MENU OPERATION FLOW

No.	Feature	Function Character		LCD Display	Parameter	LCD Display	Selectable	Confirm key	Back Key	Page
	Rapid Alert	ALARM	Press CALL key for more than 2s.	ALARM 148. 625				Auto	PTT	P39
	Jacklight		Tap MON key				Repeatedly tap MON key to turn Jackight/Warning light off.	Auto	Auto	P39
	Monitor	MON	Press key MON for more than 2s.				Press key MON for more than 2s to turn it on. Release key MON to turn it off.	Auto	Auto	P39
	Cable Clone	COPING	Press key MON to turn the power on.	COPING				Auto	Auto	P40
	Channel / Frequency Mode Conversion	VFO/MR	Press the VFO/MR key.	440. 875 146. 225		440. 875 3 146. 225 4	Display channel mode according to menu21 and 22.	Auto	Auto	P40
	TX 1750Hz Call Tone		Press key PTT+BAND					Auto	Release PTT	P40
	Reverse Function	R	Tap "*" key	R 440. 875 146. 225			Repeatedly tap key "*" to turn it on or off.	Auto	Auto	P40
	Frequency Scanning	FM	In frequency mode, press key "*" for more than 2s.	440. 875	Press key ▲or▼to change the scanning direction.		Scan upward or downward according to the set step frequency.	Auto	PTT or EXIT	P40 -41
	Channel Scanning		In channel mode, press key "*" for more than 2s.	▲ 440. 875 3	Press key ▲or▼to change the scanning direction.		Scan upward or downward according to the set channels.	Auto	PTT or EXIT	P41
	Research CTCSS/DCS Code		MENU+10 or MENU+11	R-CTCS or R-DCS	Press "*" key		Automatcally research CTCSS/ DCS code	MENU	PTT or EXIT	P42
	Cursor "▲" Conversion	A/B	Tap key "AB"	▲440. 875 3 146. 225 4	Repeatedly press key "AB"		A (Upper row) / B (Bottom row)	Auto	Auto	P42
	High/low Power Fast Conversion	H/L	In Channel mode, tap key "#"	H 440. 875 3 146. 225 4	Repeatedly press key "*".	440. 875 3 146. 225 4	H: 4W L: 1W	Auto	Auto	P42

FAST MENU OPERATION FLOW

NOTE: This model has dual-frequency display function. In frequency mode it can display two different receiving and transmitting frequencies; In channel mode it can display two related parameters of two different channels.

In frequency or channel mode, press key A/B to shift between main-channel A and sub-channel B. When " \blacktriangle " points to the main channel, all operations are against channelA; When " \blacktriangledown " points to the sub-channel, all operations are against the sub-channel.

FUNCTION OPERATION AND DESCRIPTION (The following description is without voice prompt.)

Squelch Level (SQL) ——Menu No. 0

This function can turn on or off the monitor according to signal strength. The operation steps are as follows:

- 1. In frequency or channel mode, press Menu+O, the LCD displays
- 2. Press key Menu, the LCD displays $\sqrt{\frac{\text{SQL 0}}{6}}$
- Press key ▲ or ▼ to choose squelch level.
 There are 0-9 levels. 0: Lowest 9: Highest
- 4. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

NOTE:Too high squelch level may result in failing to receive in weak signals.

Too low squelch level will make it be disturbed by other signals.

Step Frequency (STEP) ——Menu No. 1

This function can choose the step frequency you want to set.

The operation steps are as follows:

1. In frequency mode, press Menu+1, the LCD displays:



2、Press key Menu, the LCD displays: STEP 1
▼ 12.5K

3. Press key ▲ or ▼ to choose your desired step frequency. You can set 2.5/5.0/6.25/10.0/12.5/25.0KHz step frequency.

4. After setting, press key Menu to confirm, and then press key PTT or Exit to standby,

NOTE: In channel mode, this function is invalid.

Output Power (TXP) ——Menu No. 2

This function can choose High/Low output power.

The operation steps are as follows:

1. In frequency or channel mode, press Menu+2, the LCD displays:



2. Press key Menu, the LCD displays:

3、Press key Menu, and then press key ▲ or ▼ to choose. High: 4 W, Low: 1W.

4. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

NOTE: Selecting high output power can improve the quality, of the call, low output power canreduce radiation and the battery capacity loss.

In channel mode, press fast key "#" to switch between high and low output power (See Menu No. 55).

Battery Saving (SAVE) ——Menu No. 3

This function is mainly to save the capacity of battery when the radio is standby.

The operation steps are as follows:

1. In frequency or channel mode, press Menu+3, the LCD displays:



2. Press key Menu and then press key ▲ or ▼ to choose battery saving function. The LCD displays: SAVE 3

There are five kinds of mode. (1)0FF (2)1: 1 (3)1: 2 (4)1: 3 (5)1: 4

Example: 1: 1(1s' working, 1s' battery saving,) 1: 2 (1s' working, 2s' battery saving.)

3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

NOTE: If you choose OFF, the radio is not battery saving. In general, we suggest you choose 1:1.

VOX Function (VOX) ——Menu No. 4

When this function is on, the system will inspect your talking to the microphone and then it will automatically shift to transmitting mode without manual operation (This function is useful for earphone users).

The operation steps are as follows:

1. In frequency or channel mode, press Menu+4, the LCD displays: \[\bigstyle \text{VOX} \frac{4}{27} \]



2. Press key Menu, and then press key ▲ or ▼ to choose VOX level. The LCD displays: There are (OFF-10) levels. OFF:OFF 10: Lowest level 1: Highest level



NOTE: The higher the level is, the higher the sensitivity of microphone is. This function is invalid in scanning and FM radio mode.

Wide/Narrow Bandwidth (W/N) ——Menu No. 5

This function is used to set the working bandwidth of the radio.

The operation steps are as follows:

1. In frequency mode, press Menu+5, the LCD displays:

2. Press key Menu, and then press key ▲ or ▼ to choose wide or narrow bandwidth.

The LCD displays:

WN 5

NABDP

ADDROVED

The LCD displays:

WN 5

WIDE: 25KHz, NARR: 12.5 KHz

3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

NOTE: The radio normally use wide band.
In channel mode, this function is invalid.

Auto Backlight (ABR) ——Menu No. 6

This function can adjust the auto off time after radio display backlight is on. The operation steps are as follows:

- 1. In frequency or channel mode, press Menu+6, the LCD displays: $lack ABR = 6 \ OFF$
- 2. Press key Menu, and then press key \blacktriangle or \blacktriangledown to choose the backlight display time(1-5s). The LCD displays: $\begin{bmatrix} ABR & 6 \\ \blacktriangledown & 3 \end{bmatrix}$
- 3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

NOTE: We suggest you set 4-5 levels.

Dual-watch Operation (TDR) ——Menu No. 7

When this function is on, you may receive the frequency of channel A and channel B at the same time.

If any AB channel or frequency receives signal, " \blacktriangle " will glitter on corresponding channel or frequency.

Example: Channel A: 440.125 MHz, Channel B: 144.235 MHz,

The LCD displays: $\begin{bmatrix} \frac{4}{440.125} & 3\\ 144.235 & 4 \end{bmatrix}$ or $\begin{bmatrix} \frac{4}{440.125} & 4\\ 144.235 & 4 \end{bmatrix}$ The operation steps are as follows:

- 1. In standby mode, press Menu+7, the LCD displays:
- 2. Press key Menu, and then press key \blacktriangle or \blacktriangledown to choose on, the LCD displays: \blacktriangledown TDR 7 ON
- 3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

 The LCD displays: **\[\frac{3}{4901253} \]

NOTE: In dual-watch operation mode, you can change the parameter of AB channel or frequency freely.

Keypad Sound Reminding (BEEP) ——Menu No. 8

This function is to set the reminding sound. It will beep when you press keypad. The operation steps are as follows:

- 1. In frequency or channel mode, press Menu+8, the LCD displays:
- 2. Press key Menu, and then press key \blacktriangle or \blacktriangledown to choose on, the LCD displays: \blacktriangledown BEEP 8 ON
- 3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

Time-Out-Timer (TOT) ——Menu No. 9

This function is to limit the calling time, the radio will stop transmitting and then launch voice if it transmits over setted time.

Example, if you want to set time limit for 15s. The operation steps are as follows:

2. Press key Menu, and then press key \blacktriangle or \blacktriangledown to choose 15s, The LCD displays: $^{\blacktriangle}$ TOT 9

3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby.

Receiving DCS (R--DCS) ----Menu No. 10

Using this function can set your privacy and prevents disturbance from others or matching with the code of other radios.

The operation steps are as follows:

- 1. In frequency mode, press Menu+10, the LCD displays: AR-DCS1 OFF
- Press key Menu, and then press key ▲ or ▼ to choose. The LCD displays: \$\text{R-DCS}\$\text{10}\$\$
 \text{V}\$
 \text{DO23N}\$
 \text{Press key Menu, and then press key } \text{A or ▼ to choose. The LCD displays: } \text{R-DCS}\$\text{10}\$\$
 \text{V}\$
 \text{DO23N}\$
 \text{Press key Menu, and then press key } \text{A or ▼ to choose. The LCD displays: } \text{R-DCS}\$\text{10}\$
 \text{V}\$
 \text{DO23N}\$
 \text{Press key Menu, and then press key } \text{A or ▼ to choose. The LCD displays: } \text{R-DCS}\$\text{10}\$
 \text{V}\$
 \text{DO23N}\$
 \text{Press key Menu, and then press key } \text{A or ▼ to choose. } \text{The LCD displays: } \text{R-DCS}\$
 \text{R-DCS}\$\text{10}\$
 \te

R-DCS: D023N-D754N (Normal DCS)
R-DCS: D0231-D754I (Inverse DCS)

3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby. The LCD displays: $^{[85]}_{446.225} ^{440.875}_{46.225}$

NOTE: There are 208 groups of normal and inverse DCS in this radio.

This function is invalid in channel mode.

Receiving CTCSS (R--CTCS) ——Menu No. 11

Using this function can set your privacy and prevents disturbance from others or matching with the code of other radios.

The operation steps are as follows:

1. In frequency mode, press Menu+11, the LCD displays:

A_{R-CTCS}11

- 2、 Press key Menu, and then press key ▲ or ▼ to choose from 67.0—254.1Hz. The LCD displays:

 R-CTCS 1
 ▼67.0Hz

 CTCSS: 67.0—254.1Hz. OFF: OFF
- 3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby. The LCD displays: $\frac{440.875}{16.275}$

NOTE:There are 50 groups of CTCSS.

This function is invalid in channel mode.

Transmitting DCS (T--DCS) ----Menu No. 12

Using this function can set your privacy and prevents disturbance from others or matching with the code of other radios.

The operation steps are as follows:

1. In frequency mode, press Menu+12, the LCD displays:

▲ T-DCS 12 OFF

- 2. Press key Menu , and then press key \blacktriangle or \blacktriangledown to choose, the LCD displays: $\begin{smallmatrix} T-DCS & 12 \\ \blacktriangledown & DO23N \end{smallmatrix}$
- 3. After setting, press key Menu to confirm, and then press key PTT or Exit to standby. The LCD displays: $\frac{1}{1000} \frac{440.875}{480.795}$

NOTE: There are 50 groups of CTCSS.

This function is invalid in channel mode.