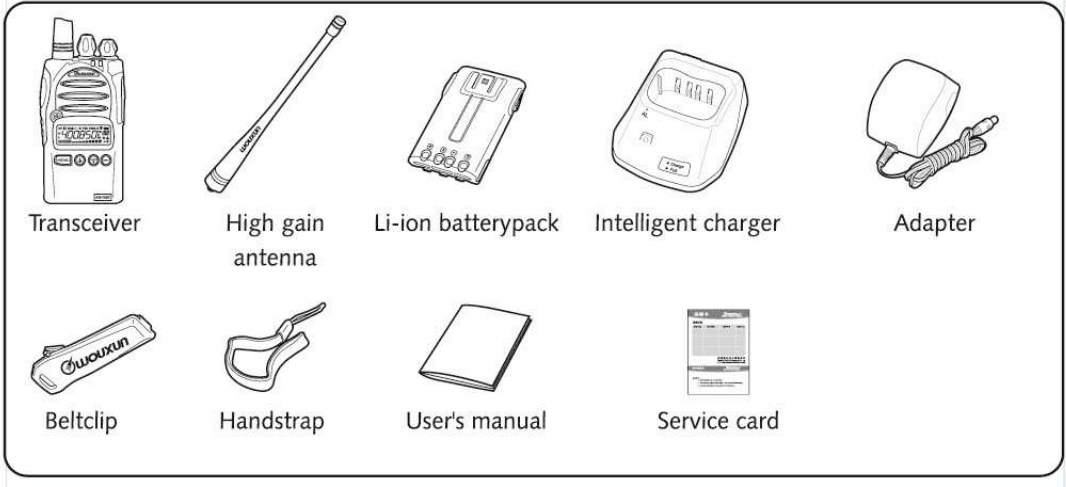# Unpacking and checking of your equipment

Carefully unpack the transceiver. We recommend that you identify the items in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, please notify your **wouxun** dealer.

Supplied accessories

| Transceiver | High gain antenna | Li-ion batterypack | Intelligent charger | Adapter |

| Beltclip | Handstrap | User's manual | Service card |

Description of functions

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Professional FM Transceiver

1. VHF: 66-88MHz   VHF: 136-174MHz   VHF: 245-246MHz
   UHF: 300-350MHz   UHF: 350-390MHz   UHF: 400-470.9875MHz   UHF: 450-520MHz

2. Output power: VHF: 5W/1W   UHF: 4W/1W

3. 128 memory channels

4. DTMF encoding and decoding

5. Inspection, monitor, alarm, stun, kill and revive.

6. 8 groups rolling voice encrypt.

7. FM radio with frequency display

8. ANI (caller ID)

9. VOX

10. All calls, group calls and selective calls function

11. Calling ring function

12. 105 groups DCS/50 groups CTCSS

13. Voiceguide (English/Chinese)

14. Wide/Narrow bandwidth selection (25KHz/12.5KHz)

15. Three color backlight displays

16. Channel order, channel frequency, channel name multi-display method

Description of functions

17. Reverse frequency function
18. Distant urgency alarm function
19. Multi scan function
20. High/Low power changeable when on transmitting.
21. Intelligentcharger (Warning sound and dualcolor light)
22. Busy channel lockout
23. Lowvoltage batterypack voiceprompt
24. Transmit overtime prompt
25. Keyboard lock (auto / manual)
26. Adding channelscan function
27. Programmable by computer
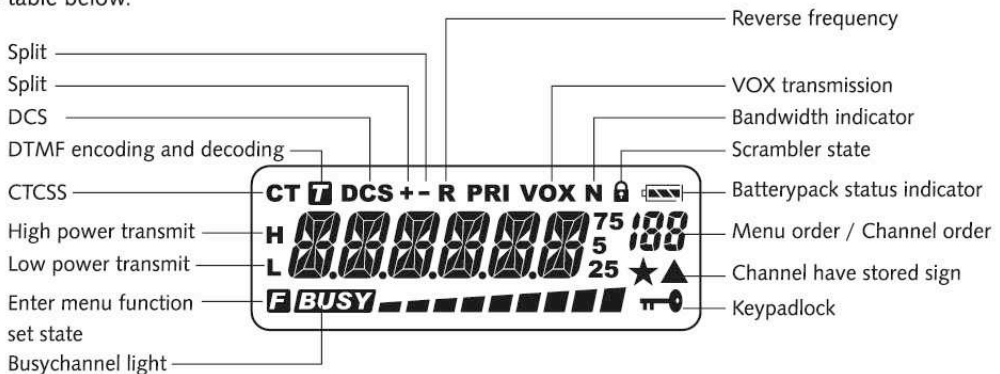28. Menu / Channel reset
29. Wireclone function

Getting started

Professional FM Transceiver

LCD display

On the display you will see various indicators that show what function you have selected. Sometimes you may not recall what those indicators mean, or how to select them, in such a case, you can refer to the table below.

Split
Split
DCS
DTMF encoding and decoding
CTCSS
High power transmit
Low power transmit
Enter menu function set state
Busychannel light

Reverse frequency
VOX transmission
Bandwidth indicator
Scrambler state
Batterypack status indicator
Menu order / Channel order
Channel have stored sign
Keypadlock

Note:

Batterypack capacity indicator (full)

Batterypack capacity spare indicator

Batterypack capacity is exhausted

Receive signal meter

Description of transceiver

Topkey: Distant urgency alarm

Channel switch

Antenna

Powerswitch / Volumecontrol

Receive light

Transmit light

Startup reverse frequency
function when press one time.
Startup scan function when
press 2 seconds.

Screen / LCD display

Functionkey

Exitkey/Lockkey

Up / Downkey

KG-703E

Professional FM Transceiver

PTT (Push-To-Talk) key

Speaker / Microphonejacks

Sidekey 1: radio/scan

Batterylatches

Sidekey 2: monitor

Getting started

■ **Speed search**

When setting each function or parameter, press the (UP) or (DOWN) key one time can speed search the function or parameter.

■ **DTMF encoding**

This transceiver has DTMF encoding. By pressing the right number key on transmitting you can choose the right DTMF tone which you want to TX.

(MENU)	(UP)	(DOWN)	(EXIT)
A	B	C	D

■ ***This transceiver only works in channel mode.***

Shortcut operation sheet

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Professional FM Transceiver

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter-explanation	Confirm	Back	See page
0 NO definition								
1 NO definition								
2 Setting squelch level	(MENU) ➡ (UP)/(DOWN) ➡	"SQL--LE ²"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	Squelchlevel from 0-9	➡ (MENU) ➡	(EXIT)	P14
3 Setting batterypack savemode	(MENU) ➡ (UP)/(DOWN) ➡	" SAVE ³"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	ON: Turn on save function OFF: Turn off save function	➡ (MENU) ➡	(EXIT)	P15
4 Selecting transmit power	(MENU) ➡ (UP)/(DOWN) ➡	" TXP ⁴"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	6-10: High power (5W). 1-5: Low power (1W)	➡ (MENU) ➡	(EXIT)	P15
5 8 groups rolling voice encrypt	(MENU) ➡ (UP)/(DOWN) ➡	" SCR ⁵"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	1-8: 8 groups scrambler. OFF: Turn off scrambler.	➡ (MENU) ➡	(EXIT)	P16
6 Transmit over timer	(MENU) ➡ (UP)/(DOWN) ➡	" TOT ⁶"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	TOT has 40 levels in steps of 15 seconds. OFF: Turn off TOT.	➡ (MENU) ➡	(EXIT)	P16
7 Setting VOX	(MENU) ➡ (UP)/(DOWN) ➡	" VOX ⁷"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	VOX has levels from 1 to 10. OFF: Turn off VOX.	➡ (MENU) ➡	(EXIT)	P17
8 Setting bandwidth	(MENU) ➡ (UP)/(DOWN) ➡	" WN ⁸"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	WIDE: 25KHz. NARROW: 12.5KHz.	➡ (MENU) ➡	(EXIT)	P17
9 Setting auto back light	(MENU) ➡ (UP)/(DOWN) ➡	" ABR ⁹"	➡ (MENU) ➡	Press (UP) or (DOWN) key Select parameter	Auto backlight has 5 levels in steps of 1 second. OFF: Turn off auto back light	➡ (MENU) ➡	(EXIT)	P18

10 Setting receive DCS	MENU → UP/DOWN → " R-DCS 10 → MENU	Press ▲ or ▼ key Select parameter	105 groups DCS (D023N-D754I) OFF: Turn off DCS	MENU → EXIT P18
11 Setting receive CTCSS	MENU → UP/DOWN → "R-CTCS 11 → MENU	Press ▲ or ▼ key Select parameter	50 groups CTCSS (67 -254.1Hz) OFF: Turn off CTCSS	MENU → EXIT P19
12 Setting transmit DCS	MENU → UP/DOWN → " T-DCS 12 → MENU	Press ▲ or ▼ key Select parameter	105 groups DCS (D023N-D754I) OFF: Turn off DCS	MENU → EXIT P19
13 Setting transmit CTCSS	MENU → UP/DOWN → "T-CTCS 13 → MENU	Press ▲ or ▼ key Select parameter	50 groups CTCSS (67 -254.1Hz) OFF: Turn off CTCSS	MENU → EXIT P20
14 Setting voiceguide	MENU → UP/DOWN → " VOICE 14 → MENU	Press ▲ or ▼ key Select parameter	CHINES: Chinese ENGLSH: English OFF: Turn off voiceguide	MENU → EXIT P20
15 Setting beepprompt	MENU → UP/DOWN → " BEEP 15 → MENU	Press ▲ or ▼ key Select parameter	ON: Turn on beepprompt OFF: Turn off beepprompt	MENU → EXIT P21
16 Setting ANI ID CODE switch	MENU → UP/DOWN → " ANI-SW 16 → MENU	Press ▲ or ▼ key Select parameter	ON: Turn on ANI ID CODE OFF: Turn off all	MENU → EXIT P21
17 Setting ANI ID CODE edit	MENU → UP/DOWN → " ANI-ID 17 → MENU	Setting through programming software	The range of ANI ID CODE can selectable from 100-99999.	MENU → EXIT P22

18 Setting ring time	MENU → UP/DOWN → " RING 18 → MENU	Press ▲ or ▼ key Select parameter	10 levels, 1second different. OFF: turn off the ring time prompt	MENU → EXIT P22
19 Setting DTMF sidetone	MENU → UP/DOWN → " DTMFST 19 → MENU	Press ▲ or ▼ key Select parameter	DT-ST: Turn on side key when transmitting. ANI-ST: Turn on ANI side tone when transmitting. DT+ANI: Turn on side key and ANI side tone when transmitting. OFF: Turn off all.	MENU → EXIT P23
20 Setting scanmode	MENU → UP/DOWN → " SC-REV 20 → MENU	Press ▲ or ▼ key Select parameter	TO: Scan with time. CO: Scan with carrier wave 1. SE: Scan with carrier wave 2.	MENU → EXIT P24
21 Setting DTMF option signal.	MENU → UP/DOWN → " OPTSIG 21 → MENU	Press ▲ or ▼ key Select parameter	DTMF: Turn on DTMF option signal. OFF: Turn off DTMF option signal.	MENU → EXIT P24
22 Setting signal information code	MENU → UP/DOWN → " S-CODE 22 → MENU	Press ▲ or ▼ key Select parameter	15 groups signal information	MENU → EXIT P29
23 Setting mutemode	MENU → UP/DOWN → " SMPUTE 23 → MENU	Press ▲ or ▼ key Select parameter	3 kindes of mutemode QT/AND/OR	MENU → EXIT P30
24 Setting PTT transmit	MENU → UP/DOWN → " PTT-ID 24 → MENU	Press ▲ or ▼ key Select parameter	BOT: ID code was transmitted when press PTT key. EOT: ID code was transmitted when release PTT key. BOTH: ID code was transmitted when press or release PTT key. OFF: Turn off all	MENU → EXIT P30 -31

| 25 Setting information code plus delay transmit | MENU ➡ ▲UP/DOWN▼ ➡ "PTT-LT 25 ➡ MENU ➡ Press ▲ or ▼ key Select parameter | Permit transmit ANI delay time from 1-30. unit: 100 ms 0: Turn off ANI delay transmit. | ➡ MENU ➡ EXIT P31 |

26 NO definition

| 27 Setting working mode | MENU ➡ ▲UP/DOWN▼ ➡ "CH-MDF 27 ➡ MENU ➡ Press ▲ or ▼ key Select parameter | 3 kinds of working mode: CH: channel order FREQ:frequency+ channel order NAME: channel name + channel order | ➡ MENU ➡ EXIT P32 |

28 NO definition

29 Side key 1 editable (PF1)	MENU ➡ ▲UP/DOWN▼ ➡ "PF1 29 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	RADIO: radio function key SCAN: scan function key OFF: Turn off all	➡ MENU ➡ EXIT P32 -34
30 Setting distant urgency alarm on top key (PF2)	MENU ➡ ▲UP/DOWN▼ ➡ "PF2 30 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	ALARM: Distant urgency alarm OFF: Turn off this function	➡ MENU ➡ EXIT P34
31 Setting busy channel lockout	MENU ➡ ▲UP/DOWN▼ ➡ "BCL 31 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	ON: Turn on busy channel lockout. OFF: Turn off busy channel lockout.	➡ MENU ➡ EXIT P35

32 NO definition

| 33 Setting keyboard lock | MENU ➡ ▲UP/DOWN▼ ➡ "AUTOLK 33 ➡ MENU ➡ Press ▲ or ▼ key Select parameter | ON: Turn on autolock OFF: Turn off autolock | ➡ MENU ➡ EXIT P35 -36 |

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34 Setting standy display-color	MENU ➡ ▲UP/DOWN▼ ➡ "WT-LED 34 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	BLUE: Blue backlight ORANGE: Orange backlight PURPLE: Purple backlight OFF: Turn off backlight	➡ MENU ➡ EXIT P36
35 Setting receive display-color	MENU ➡ ▲UP/DOWN▼ ➡ "RX-LED 35 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	BLUE: Blue backlight ORANGE: Orange backlight PURPLE: Purple backlight OFF: Turn off backlight	➡ MENU ➡ EXIT P36
36 Setting transmit display-color	MENU ➡ ▲UP/DOWN▼ ➡ "TX-LED 36 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	BLUE: Blue backlight ORANGE: Orange backlight PURPLE: Purple backlight OFF: Turn off backlight	➡ MENU ➡ EXIT P37
37 Setting memory-channel	MENU ➡ ▲UP/DOWN▼ ➡ "MEM-CH 37 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	128 channels	➡ MENU ➡ EXIT P37
38 Delete channel	MENU ➡ ▲UP/DOWN▼ ➡ "DEL-CH 38 ➡ MENU ➡ Press ▲ or ▼ key Select parameter	128 channels	➡ MENU ➡ EXIT P37

39 NO definition

40 NO definition

| 41 Setting reset | MENU ➡ ▲UP/DOWN▼ ➡ "RESET 41 ➡ MENU ➡ Press ▲ or ▼ key Select parameter | VFO: Menu reset ALL: All message reset | ➡ MENU ➡ EXIT P38 |

- Speed search (▲UP)/(▼DOWN) (See page 7)
- High/Low power changeable when on transmitting (See page 15)
- All calls, group calls and selective calls (See page 25)
- Setting reverse frequency function (See page 39)
- Setting transmit overtime prompt (See page 39)
- Lowvoltage batterypack voiceprompt (See page 39)
- Adding channelscan (See page 40)
- Wireclone function(See page 40)
- Programming repeater function (See page 40)

How to operate

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NOTE ⚠

≫ As this transceiver only works in channel mode, the next 10 settings are not available to change (only can be set via KG-703E programming software.): transmit output power, CTCSS, DCS, channel bandwidth, PTT-ID, option signal, mute mode, busy channellock, scrambler, signal information code.

No definition (UNDEF) ---- MENU 0
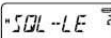
No definition (UNDEF) ---- MENU 1

Setting squelch level (SQL-LE) --- MENU 2

Select the level of squelch so that you will have no difficulty receiving the desired signal. When you set the level too high you will loose communication in a fringe area.

NOTE ⚠

≫ This transceiver has steps from 0-9, which step 0 is always open squelch. From 1 to 9 gives different levels of noise reduction.

In standby, press (MENU) + (▲UP) / (▼DOWN) and the screen will display `SQL-LE ?`
Press (MENU) enter, press (▲UP) / (▼DOWN) to select the desired level .
Press (MENU) to confirm, then press (EXIT) to return to standby.

Setting batterypack savemode (SAVE)--- MENU3

In order to reduce current consuming, this function will be turned off circuit for a minute, then it will turn on again to check signals.

In standby, press [MENU] + (UP) / (DOWN) and the screen will display ⟨ *SAVE* ³ ⟩

Press [MENU] enter, press (UP) / (DOWN) select ON turn on this function or OFF turn off this function.

Press [MENU] to confirm, then press (EXIT) to return to standby.

Selecting transmit power (TXP) --- MENU4

NOTE ⚠

>> This transceiver has 5W and 1W selectable.
>> High/Low power can be changed during transmit. Press PTT key and topkey at the same time, this will change High/Low power.
>> This menu function is not available in channel mode, only setting via KG-703E programming software.

15

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8 groups rolling voice scrambler (SCR) --- MENU 5

SCR: Use the scrambler, it can encrypt the communication and make the transceiver who do not use the scrambler can't hear clear what you are talking, meanwhile you also can't hear clear others, who do not use the scrambler, what they are talking.

NOTE ⚠

>> 8 groups scrambler sclectable.
>> To ensure effective communications the radio's must be set to the same voice encrypt.
>> This menu function is not available in channel mode, only setting via KG-703E programming software.

Transmit over timer (TOT) ---- MENU 6

The TOT is designed to prevent your radio to transmit too long. When the transceiver is exceeding the preset time limit, it will stop transmitting and give you a warning signal.

This transceiver can be set in 40 steps of 15 seconds, between 15 and 600 seconds.

In standby, press [MENU] + (UP) / (DOWN) and the screen will display ⟨ *TOT* ⁶ ⟩

Press [MENU] enter, press (UP) / (DOWN) to select the level you need when on transmitting.

Press [MENU] to confirm, then press (EXIT) to return to standby.

Setting VOX (VOX) ---- MENU 7

In standby, press [MENU] + [UP] / [DOWN] and the screen will display [" *VOX*]
Press [MENU] enter, press [UP] / [DOWN] to select VOX OFF or to switch on the 1 to 10 different sensitivity-
levels. Press [MENU] to confirm, then press [EXIT] to return to standby.

NOTE ⚠

>> When level is too high the VOX needs more volume to get activated.
>> When scan or radio is in using, you can not use VOX.

Setting wide and narrow bandwidth (WN) ---- MENU 8

NOTE ⚠

>> This menu function is not available in channel mode, only setting via KG-703E programming software.

17

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Setting auto backlight (ABR) ---- MENU 9

In standby, press [MENU] + [UP] / [DOWN] and the screen will display [" *ABR*]
Press [MENU] enter, press [UP] / [DOWN] key and select 1 to 5 to turn on auto backlight or OFF when you want
to switch off backlight. Press [MENU] to confirm, then press [EXIT] to return to standby.

NOTE ⚠

>> Time of auto backlight of this transceiver has 5 levels of which 1 second difference.

Setting receive DCS (R-DCS) ---- MENU 10

Sometimes may be you only want to hear the calling which comes from the specific individual or group,
then you can ignore some (can not hear from others who using the same frequency) calling through
CTCSS/DCS.Only when receive the same signal of CTCSS/DCS,the radio will release the mutemode.

NOTE ⚠

>> This transceiver has 105 groups different DCS codes, see appendix (2) DCS frequency sheet. And DxxxN
means positive code, DxxxI means negative code. The range of positive code is between D023N and D754N,
negative code is between D023I and D754I.
>> This menu function is not available in channel mode, only setting via KG-703E programming software.

18

Setting receive CTCSS (R-CTCSS) ---- MENU 11

NOTE ⚠

>> This transceiver has 50 groups different CTCSS tones, see appendix (1) CTCSS frequency sheet.

>> Meanwhile, you can edit CTCSS tones arbitrary via keyboard in the range of 60.0Hz-259.9Hz.

>> This menu function is not available in channel mode, only setting via KG-703E programming software.

Setting transmit DCS (T-DCS) ---- MENU 12

NOTE ⚠

>> This transceiver has 105 groups different DCS codes, see appendix (2) DCS frequency sheet. And DxxxN means positive code, DxxxI means negative code. The range of positive code is between D023N and D754N, negative code is between D023I and D754I.

>> This menu function is not available in channel mode, only setting via KG-703E programming software.

Setting transmit CTCSS (T-CTCSS) ---- MENU 13

NOTE ⚠

>> This transceiver has 50 groups different CTCSS codes, see appendix (1) CTCSS frequency shift.

>> Meanwhile, you can edit arbitrary via keyboard in the range of 60.0Hz-259.9Hz.

>> This menu function is not available in channel mode, only setting via KG-703E programming software.

Setting voiceguide (VOICE) ---- MENU 14

This transceiver has a selectable voiceguide in English and Chinese. It will display ENGLSH when it is English and CHINES when it is Chinese.

In standby, press [MENU] + (▲ UP) / (▼ DOWN) and the screen will display $\boxed{\cdot VOICE}$

Press [MENU] enter, press (▲ UP) / (▼ DOWN) key to select Chinese, English or OFF to switch off the voiceguide.

Press [MENU] to confirm, then press [EXIT] to return to standby.

NOTE ⚠

>> If want turn off all keypad voiceguide should turn off MENU15 and MENU14 at the same time.

Setting beepprompt function (BEEP) ---- MENU 15

Beepprompt is to tell you if the transceiver is operating well or has a malfunction.

We kindly advice you to switch on this function.

This function will inform you for any possible malfunction.

In standby, press [MENU] + (▲UP) / (DOWN▼) and the screen will display [·BEEP 15]

Press [MENU] enter, press (▲UP) / (DOWN▼) to switch on the beep or OFF when you want to switch off the beep.

Press [MENU] to confirm, then press (EXIT) to return to standby.

NOTE ⚠

>> When MENU 14 is switched on, the voice guide gets priority.

Setting ANI ID CODE switch (ANI-SW) ---- MENU 16

In standby, press [MENU] + (▲UP) / (DOWN▼) and the screen will display [·ANI-SW 16]

Press [MENU] enter, press (▲UP) / (DOWN▼) key and select ON to switch on ANI or OFF to switch off ANI.

Press [MENU] and confirm, then press (EXIT) to return to standby.

21

Setting ANI ID CODE edit (ANI-ID) ---- MENU 17

NOTE ⚠

>> This function only can be edited via KG-703E programming software.

>> ID CODE is selectable in a range of 100-99999.

>> This transceiver has different of 3 bits, 4bits and 5 bits, so the length of ANI CODE must keep the same bits as which used in group.

Setting ring time (RING) ---- MENU 18

When the right DTMF signal is received from the speaker, it will sound a clear ring.

In standby, press [MENU] + (▲UP) / (DOWN▼) and the screen will display [·RING 18]

Press [MENU] enter, press (▲UP) / (DOWN▼) key and select the time of the ring between 1 and 10 or OFF to switch off the ring time.

Press [MENU] and confirm, then press (EXIT) to return to standby.

NOTE ⚠

>> This transceiver has 10 different steps of ringtime of which every step is 1 second difference.

22

Setting DTMF sidetone (DTMFST) ---- MENU 19

Setting DTMF sidetone gives you the opportunity to switch on or off the speaker when transmit DTMF. The transceiver has 4 different options.

DT-ST: Switch on the key-press sidetone when transmitting.

ANI-ST: Switch on the ANI sidetone when transmitting.

DT+ANI: key-press and ANI sidetone are both on.

OFF: Turn off all.

In standby, press MENU + (UP) / (DOWN) and the screen will display "DTMFST 19"

Press MENU enter, press (UP) / (DOWN) key to select one function of the DT-ST/ANI-ST/DT+ANI/OFF.

Press MENU to confirm, then press (EXIT) to return to standby.
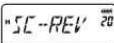
Setting scanmode (SC-REV) ---- MENU 20

This transceiver has three kinds of scanmodes selectable.

TO: After signal in channel disappeared, the transceiver will start scanning if without any operation within 5 seconds.

CO: After the transceiver stopped on a signal, it will resume scanning again when signal disappeared after 3 seconds .

SE: Scanning stops when signal is received.

In standby, press MENU + (UP) / (DOWN) and the screen will display "SC-REV 20"

Press MENU enter, press (UP) / (DOWN) key to select one function of TO, CO or SE.

Press MENU to confirm, then press (EXIT) to return to standby.

NOTE ⚠

》Press the (NB) 2 seconds, then it can go into the scanmode.

Setting DTMF option signal (OPTSIG) ---- MENU 21

NOTE ⚠

》This menu function is not available in channel mode, only setting via KG-703E programming software.

■ **All calls, group calls and selective calls**

The transceiver offers transmit ANI ID CODE, edit ANI ID CODE and DTMF decoding functions, without by other tool user can achieve all calls, group calls and selective calls.

How to use all calls, group calls and selective calls

Automatic dialing

I. ID CODE edit   **NOTE:** Every transceiver in the group needs a unique ANI ID CODE.

ANI ID CODE: ANI-XXX   ANI-XXXX   ANI-XXXXX (Total has three kinds of editting methods.)

XXX: means can program 3 bits ANI ID CODE

XXXX: means can program 4 bits ANI ID CODE

XXXXX: means can program 5 bits ANI ID CODE

ID	X	XX
Personal ANI ID CODE sign	Grouplist	A unique ANI ID CODE
	1 to 9 groups and 9 groups maximum.	From 0 to 99 and 100 groups maximum.

This is how to build up ANI .

ID	X	XXX
Personal ANI ID CODE sign	Group list	A unique ANI ID CODE
	From 1 to 9 group and 9 groups maximum	From 0 to 999 and 1000 groups maximum

This is how to build up ANI ID CODE

ID	X	XXXX
Personal ANI ID CODE sign	Group list	A unique ANI ID CODE
	From 1 to 9 group and 9 groups maximum	From 0 to 9999 and 10000 groups maximum

This is how to build up ANI ID CODE

NOTE ⚠

≫ This function only can be edited via the DTMF encoding and decoding parameter of transceiver's ID code of KG-703E programming software.

2. Every transceiver in the group must switch on the proper DTMF option signal.

The details of setting DTMF option signal see MENU (21) Setting DTMF option signal (OPTSIG).

How to operate

3. The mutemode must be set as AND. The details of setting method:See to MENU(23)Setting Mutemode(SPMUTE)

4. Press PTT transmit:To select the way of transmit DTMF code. One of the BOT/EOT/BOTH can be selected.(Automatic dialing)

5. Signal information code(S-CODE): To select the NO. of DTMF code. There are 1-15 kinds can be selected. (Automatic dialing)

6. Setting ringtime(Set when needed): The details see to the MENU(18).

7. Setting PTT-LT: According to the actual situation, the signal can delay before transmitted, the details see to the MENU (25).

8. Setting ANI ID CODE switch(ANI-SW): This function means whether to display others' ANI ID CODE (Set when needed).

9. Setting DTMF sidetone(DTMF-ST): This means can monitor the DTMF tone(Set when needed), the details see to the MENU(19).

NOTE ⚠

>> Every transceiver using in the group must set the same frequency, channel and parameter.
>> This transceiver has difference of 3, 4, 5 bits,so all the ANI ID CODE in the group have better set the same bit.

Inspection, monitor, emergency alarm, stun, kill, revive

NOTE ⚠

>> This menu function is not available in channel mode, only setting via KG-703E programming software.

Inspection:

Manager can use this function when he/she want to know whether their staff are on the working; manager send the inspection signal, and the member's transceiver in the group will reply to the manager automatically(what it replied is the ANI ID CODE).

Monitor:

Manager can use this function when he/she want to know what their staff are doing at the moment. When manager transmit the monitor signal, the member's transceiver in the group will transmit autom- atically, then manager can hear the member's voice.

Emergency alarm:

You can use this function when on duty, and meet some emergency situation; user can transmit the emergency alarm signal which the distant emergency alarm is turned on and can display the transmitter's ANI ID CODE in order to take the corresponding actions.

Stun:

Manager can use this function when he/she only want to let their member receive and can't transmit. Manager only need to stun the member's radio and after this over, to activate it through transmit the power on signal when needed.

Kill:

When the radio was lost or other special circumstance happened,in order to let others disable to transmit and receive ,manager can use this function to kill the radio.

Revive:

When the manager transmit the power on signal can activate the radio which is being stuned or killed.

Setting signal information code (S-CODE) ---- MENU 22

This function means to appoint the DTMF code of setting DTMF encoding and decoding parameter of programming software.

NOTE ⚠️

≫ This menu function is not available in channel mode, only setting via KG-703E programming software.

Setting mutemode (SPMUTE) ---- MENU 23

The mutemode is to turn on/off the speaker audio according to your optional signal setting. This transceiver has three kinds of modes which can be selected.

1. **QT:** When the transceiver receivers a signal and matching CTCSS tone, it will swith on the speaker, When the transceiver has not set a CTCSS tone and a signal is received, you will hear that through the loudspeaker.

2. AND: When the transceiver receives a matching QT and DTMF signal, it will switch on the speaker.

3. OR: When the transceiver receives a matching QT or AND, it will switch on the speaker.

NOTE ⚠️

≫ This menu function is not available in channel mode, only setting via KG-703E programming software.

Setting PTT transmit (PTT-ID) ---- MENU 24

This function means that the way of selecting to transmit information code or ID code.

① **BOT:** When press the PTT key, then ID code is transmitted.

② **EOT:** When release the PTT key, then ID code is transmitted.

③ **BOTH:** When press or release the PTT key, then ID code is transmitted.

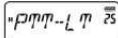④ **OFF:** ID code can not be transmitted when turn off all.

> **NOTE** ⚠️
>
> ≫ This menu function is not available in channel mode, only setting via KG-703E programming software.

Setting signal information code plus delay transmit (PTT-LT) ---- MENU 25

This function means that to delay the ID code which will be transmitted.

① 1-30: Permit transmit ANI delayed time from 1-30. unit: 100ms

② 0: Do not delay to transmit ANI ID CODE.

In standby, press [MENU] + (UP) / (DOWN) and the screen will display "PTT-LT ²⁵"

Press [MENU] enter, press (UP) / (DOWN) to select from 1 to 30 for delay transmit ANI or OFF to switch off ANI delay transmit. Press [MENU] to confirm, then press (EXIT) to return to standby.
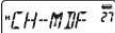
> **NOTE** ⚠️
>
> ≫ When alarming or the frequency has set DTMF signal, if the Menu has not be set as "0", but be set one of the number between 1 and 30, then the setting delayed time will be delayed to transmit signal code and alam code or ANI code.
>
> ≫ If the repeater has not respond to the transmitted ID CODE of transceiver, you should adjust the parameter.

No definition (UNDEF) ---- MENU 26

Setting working mode (CH-MDF)---MENU 27

This transceiver has three selectable display modes: channelorder display, channelfrequency + channelorder display, channelname + channelorder display.

In standby, press [MENU] + (UP) / (DOWN) and the screen will display "CH-MDF ²⁷"

Press [MENU] enter, press (UP) / (DOWN) select CH/FREQ/NAME.

Press [MENU] to confirm, then press (EXIT) to exit.

Channelname display mode: To operate this function you need to edit the channelname first.

Edit method: Program via KG-703E programming software.

No definition (UNDEF) ---- MENU 28

Sidekey 1 editable (PF1)---MNEU 29

This transceiver sidekey 1 has 3 kinds function can be selected:

①. **SCAN**: Scan key

②. **RADIO**: Radio key

③. **OFF**: Turn off the key function.

How to operate

1. Select SCAN function.

   In standby, press sidekey 1 and the transceiver will switch to scanning mode (Scanmode depending on the setting of MENU 20), press any key will stop scanning.

2. Select FM radio function.

   In standby, press the sidekey 1 to switch on FM radio, this FM radio is frequency modulation, frequency range is 87-108MHz, and the screen will display `"88.9  29`

   a. In radio mode, press ⊕ / ⊖ or channel knod to select program

   b. Press side key 2 (Squelch), you can check the working frequency and channel, after 5 seconds the screen will resume `"88.9  29` , the radio works in normally when you are on operation.

   c. Press PTT, sidekey 2 and topkey, it will go into the relevant operation.

   » When you want to turn off radio, press sidekey 1 again.

   » When you turn on radio, you should install supplied antenna.

   ### NOTE ⚠

   » When in FM radio, the present frequency or channel are still in standby, if transceiver receives a signal,it will return to radio, After the signal disappeared 5 seconds, it will auto return to FM radio. If you want to exit radio, please press sidekey 1 again.

In standby, press MENU + ⊕ / ⊖ and the screen will display `" RADIO  29`

Press MENU enter, press ⊕ / ⊖ and select one function of SCAN/RADIO/OFF.

Press MENU to confirm, then press EXIT to return to standby.

Setting distant urgency alarm function on topkey (PF2) ---MENU 30

The topkey offers two kinds of function:

① **ALARM**: Startup the distant urgency alarm

② **OFF**: Turn off this key function

In standby, press MENU + ⊕ / ⊖ and the screen will display `"PF2  30`

Press MENU enter, press ⊕ / ⊖ and select ALARM or OFF.

Press MENU to confirm, then press EXIT to return to standby.

NOTE ⚠

» When you have selected ALARM, in standby: press topkey and from your speaker,an alarm will sound and the red and green lamp will flicker at the same time. Press topkey again to exit.

Busy channel lockout (BCL) ---- MENU 31

Turn on this function is to prevent interfere others who is on communicating. If the selected channel are using by others, this time press PTT key, the transceiver can not transmit.

NOTE ⚠

>> This menu function is not available in channel mode, only setting via KG-703E programming software.

No definition (UNDEF) ---- MENU 32

Setting keyboard lock (AUTOLK) ---- MENU33

The transceiver has two options, auto lock and manual lock.

AUTOLK: When you set autolock the keyboard will be locked within 15 seconds if you don't to any operation. To release keyboard press (EXIT) for more than 2 seconds.

OFF: Turn off auto lock.

In standby, press (MENU) + (UP) / (DOWN) and the screen will display "AUTOLK 33"

Press (MENU) enter, press (UP) / (DOWN) and select ON for autolock or OFF to switch off autolock.

Press (MENU) to confirm, then press (EXIT) to return to standby.
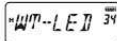
NOTE ⚠

>> Manual lock: In standby, press (EXIT) for more than 2 seconds will lock keyboard, release keyboard press (EXIT) for more than 2 seconds.

Selecting standby display color (WT-LED) ---- MENU 34

The transceiver has four colors available:

BLUE / ORANGE / PURPLE / OFF

In standby, press (MENU) + (UP) / (DOWN) and the screen will display "WT-LED 34"

Press (MENU) enter, press (UP) / (DOWN) and select the desired color of BLUE/ORANGE/PURPLE/OFF.

Press (MENU) to confirm, then press (EXIT) to return to standby.

Selecting receive display color (RX-LED) ---- MENU 35

The transceiver has four colors available:

BLUE / ORANGE / PURPLE / OFF

In standby, press (MENU) + (UP) / (DOWN) and the screen will display "RX-LED 35"

Press (MENU) enter, press (UP) / (DOWN) and select the desired color of BLUE / ORANGE / PURPLE/OFF.

Press (MENU) to confirm, then press (EXIT) to return to standby.

Selecting transmit display color (TX-LED) ---- MENU 36

The transceiver has four colors available:

BLUE / ORANGE / PURPLE/OFF

In standby, press [MENU] + (▲) / (▼) and the screen will display `"TX-LED ³⁶`

Press [MENU] enter, press (▲) / (▼) and select the desired color of BLUE / ORANGE / PURPLE/OFF.

Press [MENU] to confirm, then press (EXIT) to return to standby.

Setting memory channel=setting co-channel and dis-channel (MEM-CH) ---- MENU 37

> ### NOTE ⚠

> ≫ As this transceiver only works in channel mode, the storage of the frequency and all kinds of parameter only store in the channel which had been programmed.

Delete channel (DEL-CH) ---- MENU 38

In standby, press [MENU] + (▲) / (▼) and the screen will display `"DEL-CH ³⁸`

Press [MENU] enter, press (▲) / (▼) to select the channel you want to delete, press [MENU] to confirm.

The select channel and message are deleted, press (EXIT) to return to standby.

No difinition (UNDEF) ---- MENU 39

No difinition (UNDEF) ---- MENU 40

Setting reset (RESET) ---- MENU 41

The transceiver has a menu which resets VFO and ALL messages.

When you use RESET VFO all parameters of menu will return to factory default.

When you use RESET ALL all menu and channel parameters will return to factory default.

I. MENU reset (VFO):

In standby, press [MENU] + (▲) / (▼) and the screen will display `"RESET ⁴¹`

Press [MENU] enter, press (▲) / (▼) select VFO, press [MENU] key and the screen will display `"SOURE? ⁴¹`

Press [MENU] again and the screen will display `"WAIT ⁴¹`

When the reset has worked well the transceiver will auto power off and auto switch on again.

2. All message reset (ALL):

In standby, press [MENU] + (▲) / (▼) the screen will display `"RESET ⁴¹`

Press [MENU] enter, press (▲) / (▼) and select ALL, press [MENU] and the screen will display `"SOURE? ⁴¹`

Press [MENU] again and the screen will display `"WAIT ⁴¹`

When reset has worked well, the transceiver will auto power off and auto switch on again.

Setting reverse frequency function

When using reverse frequency function, the transceiver's transmit and receive freuency will interchange and the setting of CTCSS and/or DCS encode and decode also will interchange.

■ **Operating reverse frequency function:**

   In standby, press (A/B) and this will turn on reverse frequency function, press (A/B) again and this will turn off reverse frequency function.

Lowvoltage batterypack voiceprompt

When the batterypack has lowvoltage, the transceiver will sound "low batterypack" voice prompt, and the LED will flicker every 5 seconds, meanwhile it will sound "DI".

Setting transmit overtime prompt

When transmitter works longer than settime, the transceiver will announce "transmit overtime" by voice and stops transmitting. If you want to transmit again, please press **PTT.** (Setting overtime prompt Pease see MENU 6)

Adding channelscan

NOTE ⚠

   ≫ Only scan according programming list which have added channel scan on programming software.
   ≫ Edit method: Strictly via KG-703E programming software.

Wireclone function

Using wireclone	Switch sourceradio on,after you have connected the targetradio to the sourceradio via the cloningcable,push the [MONI] key and the sourceradio starts cloning.	LED is flashing red during cloning. LED goes out in case of successful cloning. LED grows continuous red in case of cloning failure.
	Targetradio	LED is flashing green during cloning. LED will switch OFF when cloning complete.

Programming repeater function

Most repeaters use standard or different splits and/or matching CTCSS/DCS or DTMF signals.

When you need to join a repeater, you need to set different parameters on receiving and in appoint channel, then it will communicate with the preset channel.

How to use your intelligentcharger

1. When the poweradapter is connected the intelligentcharger, the poweradapter should be plugged into the matchingvoltage. The intelligentcharger will flicker once, then go into the standby mode which means that you can charge the batterypack; When you plug in the batterypack, the intelligentcharger will switch to red LED which means that it has being charged.

2. When the green light flickers, the batterypack is fully charged.

3. After you plug in the batterypack which the voltage is lower than 6V (it is lower than 6V if you can not power on the transceiver), the red LED flickers which means that the batterypack is being trickle charged by intelligentcharger and this will last about 10 minutes. When the light turns red, it will go into the normal charge.

4. After you plug in the batterypack which the voltage is higher than 6V(it is higher than 6 V if you can power on the transceiver), the red LED flickers, at this time, please confirm whether the batterypack is plugged in right with intelligentcharger.

Trouble shooting

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Please check carefully if your transceiver has problems by following this chart.
If you maintain to have trouble you can reset your transceiver and very often this will eliminate your problem.

Problem	Possible Cause	Possible Solution
Transceiver will not switch on.	*1.* The batterypack is not installed properly. *2.* The batterypack maybe exhausted. *3.* The batterypack is getting too old.	*1.* Re-install the batterypack. *2.* Charge the batterypack. *3.* Change the batterypack.
The receiverlight is on and there is no sound from the speaker.	*1.* The powerswitch is not adjusted well. *2.* Confirm if your CTCSS/DCS tone is the same as others. *3.* Confirm if you use the right mutemode.	*1.* Tum the volumecontrol. *2.* Reset the CTCSS/DCS *3.* Reset the mutemode.
There is no reception	*1.* Check if you have installed your antenna right. *2.* The signal you are receiving is very weak.	*1.* Install the supplied antenna. *2.* Move the radio around till you receive the desired signal or press ⊙ to reset and then press ⊙ to go to right channel.

Trouble shooting

Problem	Possible Cause	Possible Solution
Keyboard and PTT switch do not work.	The keyboard is locked.	Set keyboard to free.
The receivelight is on and you can not transmit.	If you have set transceiver to busychannel lockout.	Switch off busychannel lockout.
You can not store certain settings.	In channel mode or frequency+channel mode you cannot set parameters.	Set transceiver to frequency mode.
Autotransmit when you are in standby.	The VOX level too LOW	Switch off VOX or set VOX to a HIGHER level.
During communication you receive other group(s) or receive distorted signal.	The frequency and the CTCSS/DCS are the same as other users.	Change the setting of CTCSS/DCS,frequency or channel.

Technology parameter

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Appendix 1

CTCSS

1	67.0	11	94.8	21	131.8	31	171.3	41	203.5
2	69.3	12	97.4	22	136.5	32	173.8	42	206.5
3	71.9	13	100.0	23	141.3	33	177.3	43	210.7
4	74.4	14	103.5	24	146.2	34	179.9	44	218.1
5	77.0	15	107.2	25	151.4	35	183.5	45	225.7
6	79.7	16	110.9	26	156.7	36	186.2	46	229.1
7	82.5	17	114.8	27	159.8	37	189.9	47	233.6
8	85.4	18	118.8	28	162.2	38	192.8	48	241.8
9	88.5	19	123.0	29	165.5	39	196.6	49	250.3
10	91.5	20	127.3	30	167.9	40	199.5	50	254.1

Technology parameter

Appendix 2

DCS

1	D023N	16	D074N	31	D165N	46	D261N	61	D356N
2	D025N	17	D114N	32	D172N	47	D263N	62	D364N
3	D026N	18	D115N	33	D174N	48	D265N	63	D365N
4	D031N	19	D116N	34	D205N	49	D266N	64	D371N
5	D032N	20	D122N	35	D212N	50	D271N	65	D411N
6	D036N	21	D125N	36	D223N	51	D274N	66	D412N
7	D043N	22	D131N	37	D225N	52	D306N	67	D413N
8	D047N	23	D132N	38	D226N	53	D311N	68	D423N
9	D051N	24	D134N	39	D243N	54	D315N	69	D431N
10	D053N	25	D143N	40	D244N	55	D325N	70	D432N
11	D054N	26	D145N	41	D245N	56	D331N	71	D445N
12	D065N	27	D152N	42	D246N	57	D332N	72	D446N
13	D071N	28	D155N	43	D251N	58	D343N	73	D452N
14	D072N	29	D156N	44	D252N	59	D346N	74	D454N
15	D073N	30	D162N	45	D255N	60	D351N	75	D455N

DCS

76	D462N	82	D516N	88	D606N	94	D645N	100	D723N
77	D464N	83	D523N	89	D612N	95	D654N	101	D731N
78	D465N	84	D526N	90	D624N	96	D662N	102	D732N
79	D466N	85	D532N	91	D627N	97	D664N	103	D734N
80	D503N	86	D546N	92	D631N	98	D703N	104	D743N
81	D506N	87	D565N	93	D632N	99	D712N	105	D754N

Technology specification

Frequencyrange	VHF: 66-88MHz	
	VHF: 136-174MHz	VHF: 245-246MHz
	UHF: 300-350MHz	UHF: 350-390MHz
	UHF: 400-470.9875MHz	UHF: 450-520MHz
Memorychannels	128 channels	
Voltage	7.4V DC	
Working temperature	-30℃(-22F) to + 60℃(140F)	
Channels	Co-channel or Dis-channel simplex	
Poweroutput	VHF: 5W / UHF:4W	
Mode	F3E(FM)	
Maximum deviation	≤ ±5KHz	
Adjacent channel power	< -60dB	
Stability	±5 ppm	
Sensitivity	< 0.2 μV	
Audio output power	≥ 500mW	
Weight	250g	
Size	62 X 106 X 39 (mm)	2.44x4.18x1.54(inch)

NOTE ⚠

≫ Specifications are subject to change without notice.

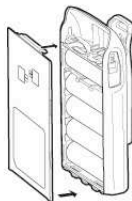# Optional accessories

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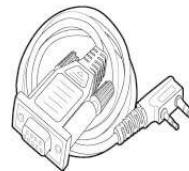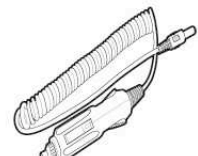
Dual slot charger   "AA" batterypack   Eliminator   Programmingcable   Carcharger

Wireclonecable   Headset   Speaker/MIC   Switching adapter   1700mAh Li-ion batterypack   Programming Software

Announce

Ⓦwouxun endeavors to achieve the accuracy and completeness of this manual, but is not liable for any possible omission and printing errors. All the above specifications are subject to change by *Ⓦwouxun* without prior notice.

English Version:703E-U-0807-V1