

*Thanks for buying the **Wouxun** KG-659E series transceiver. This transceiver offers latest in design, multi-functionality, stable behaviour and easy operation. We believe you will be pleased with the high quality and dependable features for all your communication needs.*

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User Safety, Training, and General Information

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR **Wouxun** PORTABLE TWO-WAY RADIO.

Compliance with RF Energy Exposure Standards

Your **Wouxun** two-way radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environment at duty cycles of up to 50% talk-50% listen and should be used for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your radio radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

NOTE

- » The approved batteries supplied with this radio are rated for a 5-5-90 duty cycle (5% talk-5% listen-90% standby), even though this radio complies with the FCC occupational RF exposure limits at duty cycles of up to 50% talk.

Your **Wouxun** two-way radio Complies with the following of RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit no more than 50% of the time and always adhere to the following procedures:

Transmit and Receive

To transmit (talk), push the Push-To-Talk (PTT) button; to receive, release the PTT button.

Hand-held radio operation

Hold the radio in a vertical position with the microphone 5 cm away from the lips and let the antenna

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farther away from your head.

Body-worn operation

Always place the radio in an **Wouxun** approved clip, holder, holster, case, or body harness for this product. Use of non-**Wouxun**-approved accessories may exceed FCC RF exposure guidelines.

Antennas & Batteries

- Use only **Wouxun** approved, supplied antenna or **Wouxun** approved replacement antenna.
- Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.
- Use only **Wouxun** approved, supplied batteries or **Wouxun** approved replacement batteries.
- Use of non-**Wouxun**-approved batteries may exceed FCC RF exposure guidelines.



Approved Accessories

For a list of **Wouxun** approved accessories, see the accessories page of this user manual or visit the following website which lists approved accessories: <http://www.wouxun.com>

Notices to the User

- Government law prohibits the operation of unlicensed radio transmitters within the territories under government control.
- Illegal operation is punishable by fine or imprisonment or both.
- Refer service to qualified technicians only.

WARNING: It is important that the operator is aware of and understand hazards common to the operation of any transceiver. Explosive environment(such as gases, dust, fumes, etc). Turn off your transceiver while talking on fuel, or while parked in gasoline service stations.

If you require this machine to be developed or some changed, pleased connect with  **Wouxun** or your  dealer.

FCC Caution:

This equipment has been tested and found to comply with the part 90 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

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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.

FCC Licensing Requirements

Your radio must be properly licensed Federal Communications Commission prior to use. Your  **Wouxun** Wireless dealer can assist you in meeting these requirements. Your dealer will program each radio with your authorized frequencies, signaling codes, etc., and will be there to meet your communications needs as your system expands.

Precautions

Only qualified technicians are allowed to maintain this product.

Do not use the radio or charge a battery in explosive areas such as coal gas, dust, steam, etc.

Switch OFF the radio while refueling or parking at gas station.

Do not modify or adjust this radio without permission.

Do not expose the radio to direct sunlight over a long time, nor place it close to heating source.

Do not place the radio in excessively dusty, humid areas, nor on unstable surfaces.

Safety: It is important that the operator is aware of and understands hazards common to the operation of any radio.

CE Caution:

Hereby, **Wouxun** declares that this Two-way radio is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

A copy of the DOC may be obtained through the following address.

Address: No.928 Nanhuan Road, Jiangnan High Technology Industrial Park, Quanzhou, Fujian 362000, China

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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 battery pack



Intelligent charger



Adapter



Belt clip



Hand strap



User's manual



Service card

01

Description of functions

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1. VHF: 66-88MHz 136-174MHz 245-246MHz
UHF: 300-350MHz 350-390MHz 400-470.9875MHz 450-520MHz
2. Output power: 5W VHF / 4W UHF
3. 128 groups memory channels+ 1 group emergency calling channel
4. DTMF encoding and decoding
5. ANI code (caller ID)
6. VOX
7. CTCSS/DCS
8. All calls, group calls and selective calls function (only for receive, but with call back function)
9. Calling function
10. Scrambler = In which you can select 4 different groups. (optional accessory)
11. Voice guide (English/Chinese)
12. Wide/Narrow bandwidth selection (25KHz/12.5KHz)
13. Distant urgency alarm function
14. Emergency calling function
15. Multi scan function
16. FM radio function

02

Description of functions

17. High-/ Lowpower selectable (UHF: 4W/1W VHF: 5W/1W)
18. Li-ion batterypack
19. Intelligent charger (warning sound and dualcolor light)
20. Busy channel lockout
21. Multidisplay mode when power on (full screen / Batt-V / others)
22. Lowvoltage batterypack voiceprompt
23. Setting transmit overtime voiceprompt.
24. High-/Lowpower can changeable when transmitting.
25. Adding channelscan function
26. Wireclone function
27. Keyboardlock (auto / manual)
28. Menu / Channel reset
29. Program by computer

03

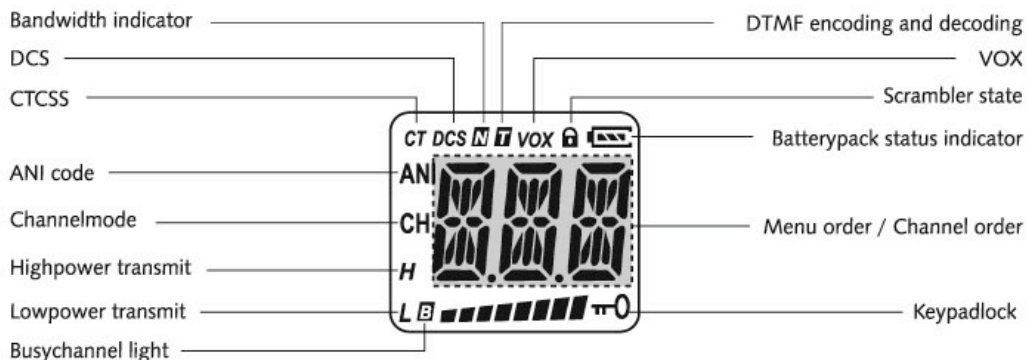
Getting started

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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.



Note:

Batterypack capacity indicator (full)

Batterypack capacity is exhausted

Batterypack capacity spare indicator

Receive signal meter

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Getting started

Description of transceiver

Topkey: Distant urgency alarm and emergency calling

Antenna

Receivelight

Upkey

Screen-/LCDdisplay

Downkey

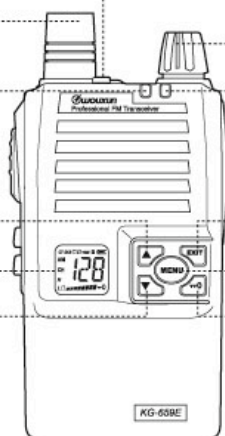
Powerswitch/Volumecontrol

Transmitlight

Exitkey/Scankey

Functionkey

Lockkey



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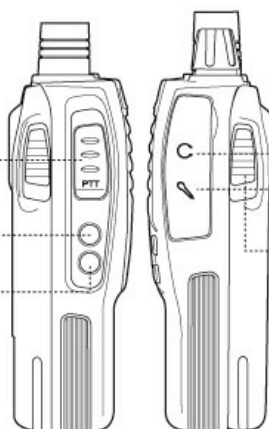
PTT (Push-To-Talk) key

Sidekey 1: radio/scan/lamp

Sidekey 2: monitor

Speaker-/Microphonejacks

Batterypacklatches



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Shortcut operation sheet

Function name	Enter function set	Screen display	Select parameter	Confirm	Back	See page
Setting squelch level	MENU → ▲/▼ →	SOL	MENU → Press ▲/▼ key Select parameter	Squelch level from 0-9	MENU → EXIT	11
Setting batterypack savemode	MENU → ▲/▼ →	SAV	MENU → Press ▲/▼ key Select parameter	ON: Turn on savefunction OFF: Turn off savefunction	MENU → EXIT	11
Selecting transmit power	MENU → ▲/▼ →	TP	MENU → Press ▲/▼ key Select parameter	H: High power (VHF-5W/UHF-4W) L: Low power (1W)	MENU → EXIT	12
Setting scrambler	MENU → ▲/▼ →	SCP	MENU → Press ▲/▼ key Select parameter	1 to 4: 4 kinds of scrambler mode OFF: Turn off scrambler	MENU → EXIT	12-13
Transmit over timer	MENU → ▲/▼ →	TOT	MENU → Press ▲/▼ key Select parameter	TOT has 40 levels in steps of 15 seconds. OFF: Turn off TOT.	MENU → EXIT	13
Setting VOX	MENU → ▲/▼ →	VOX	MENU → Press ▲/▼ key Select parameter	VOX has levels from 1 to 10. OFF: Turn off VOX.	MENU → EXIT	14
Setting bandwidth	MENU → ▲/▼ →	W	MENU → Press ▲/▼ key Select parameter	W: 25KHz. N: 12.5KHz.	MENU → EXIT	14
Setting auto backlight	MENU → ▲/▼ →	ABL	MENU → Press ▲/▼ key Select parameter	ON: Turn on auto backlight OFF: Turn off auto backlight	MENU → EXIT	15
Setting voiceguide	MENU → ▲/▼ →	VG	MENU → Press ▲/▼ key Select parameter	CHN: Chinese ENG: English OFF: Turn off voiceguide	MENU → EXIT	15

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Setting beeprompt	MENU → ▲/▼ →	BP	MENU → Press ▲/▼ key Select parameter	ON: Turn on beeprompt OFF: Turn off beeprompt	MENU → EXIT	16
Setting ANI ID CODE	MENU → ▲/▼ →	ANI	MENU → Press ▲/▼ key Select parameter	ON: Turn on ANI ID CODE OFF: Turn off ANI ID CODE	MENU → EXIT	16
Setting callingring	MENU → ▲/▼ →	CR	MENU → Press ▲/▼ key Select parameter	ON: Turn on callingring OFF: Turn off callingring	MENU → EXIT	17
Setting ringtime	MENU → ▲/▼ →	RT	MENU → Press ▲/▼ key Select parameter	Ringtime has 10 levels in steps of 1 second. OFF: Turn off ringprompt.	MENU → EXIT	17
Setting DTMFsignal	MENU → ▲/▼ →	DTMF	MENU → Press ▲/▼ key Select parameter	ON: Turn on DTMFsignal OFF: Turn off DTMFsignal	MENU → EXIT	18
Setting ANI ID CODE transmit	MENU → ▲/▼ →	ANI	MENU → Press ▲/▼ key Select parameter	Transmit ANI delay time from 1 to 30 Unit: 100ms OFF: Turn off ANI transmit	MENU → EXIT	19
Setting mutemode	MENU → ▲/▼ →	MP	MENU → Press ▲/▼ key Select parameter	3 kinds of mute mode QT/Q+D/QxD	MENU → EXIT	20
Setting DTMF sidetone	MENU → ▲/▼ →	DTMF	MENU → Press ▲/▼ key Select parameter	DT: Turn on the sidekey tone ANI: Turn on the ANI side tone D+A: Turn on sidekey and ANI tone OFF: Turn off all	MENU → EXIT	23
Transmit overtime alarm	MENU → ▲/▼ →	TOA	MENU → Press ▲/▼ key Select parameter	Transmit overtime alarm in 1 second steps from 1 to 10. OFF: Turn off transmit overtime alarm.	MENU → EXIT	23

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Shortcut operation sheet

Setting scanmode	MENU → [▲] [▼] → [SCAN] → MENU → Press [▲] or [▼] key Select parameter	3 kinds of scan mode TO: Time mode scan CO: Carrier mode 1 scan SE: Carrier mode 2 scan	MENU → EXIT	24
Setting power on message	MENU → [▲] [▼] → [POM] → MENU → Press [▲] or [▼] key Select parameter	OFF: Full screen display VOT: Battery voltage display MSG: OK	MENU → EXIT	24
RADIO/ LAMP/SCAN (SIDEKEY 1)	MENU → [▲] [▼] → [PF1] → MENU → Press [▲] or [▼] key Select parameter	FM: FMradio turn on key LAM: lampkey SCN: Scan function key OFF: Turn off the function	MENU → EXIT	25 -26
Distant urgency alarm and emergency calling(TOPKEY)	MENU → [▲] [▼] → [PF2] → MENU → Press [▲] or [▼] key Select parameter	ALM: Distant urgency alarm EMC: Emergency calling OFF: Turn off the function	MENU → EXIT	26 -27
Busy channel lockout	MENU → [▲] [▼] → [BCL] → MENU → Press [▲] or [▼] key Select parameter	ON: Turn on busy channel lockout OFF: Turn off busy channel lockout	MENU → EXIT	27 -28
Setting keyboard lock	MENU → [▲] [▼] → [ALK] → MENU → Press [▲] or [▼] key Select parameter	ON: Turn on auto lock OFF: Turn off auto lock	MENU → EXIT	28
Setting reset	MENU → [▲] [▼] → [PRM] → MENU → Press [▲] or [▼] key Select parameter	VFO: Menu reset	MENU → EXIT	29

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- All calls, group calls and selective calls (See page P21-22)
- Low voltage batterypack voiceprompt (See page P30)
- Setting transmit overtime prompt (See page P30)
- High-/Lowpower can changeable when transmitting.(See page P12)
- Adding channelscan(See page P30)
- Wireclone function(See page P30)
- Receive and transmit frequency,CTCSS/DCS all program by computer.
- Speed search

When setting each function or parameter, press the [▲] or [▼] key one time can speed search the function or parameter.

How to operate

Setting squelch level(SQL)

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 lose 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** +  /  till the screen will display 

Press **MENU** enter, press  /  to select the desired squelch level.

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

Setting batterypack savemode(SAV)



In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press  /  to select ON/OFF and this switches savingmode ON or OFF.

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

Selecting transmitpower(TXP)





In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press  /  and you will select H or L power.

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

This transceiver has 5W/VHF, 4W/UHF and 1W on both bands.



NOTE

» This menu permits to change the transmit power (H/L) of current channel in temporary. If you not press  /  key the data of channel will always store. Once you have pressed  /  key to change the channel, the parameter is set will return to the default of setting.

» High/Low power can be changed during transmit. Press PTT key and topkey at the same, this will change H/L power.

4 groups Scrambler available (Optional accessory)

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press  /  and select OFF to switch the scrambler off or 1 of the 4 different scrambler sets.

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

NOTE

- » 4 different groups of scrambling can be chosen in the menu.
- » To ensure effective communications the radio's must be set to the same scrambling "mode".



Transmit over timer(TOT)

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  +  /  till the screen will display 

Press  enter, press  /  to select the level you need when on transmit.

Press  and confirm, then press  to return to standby.

Setting VOX(VOX)

In standby, press  +  /  till the screen will display 




Press  enter, press  /  to select VOX OFF or to switch on the 1 to 10 different sensitivity-levels. Press  and confirm, then press  to return to standby.



NOTE

- » When level is too high the VOX needs more volume to get activated.



Setting wide or narrow bandwidth(WN)

In standby, press  +  /  till the screen will display 

Press  enter, press  /  and you can select W or N bandwidth.

Press  and confirm, then press  to return to standby.



NOTE

- » This menu only permits to change the parameter temporarily, but can't store this. Once you have pressed  /  key to change the channel, the parameter is set and will return to the default setting.

How to operate

Setting auto backlight(ABR)

In standby, press **MENU** +  /  till the screen will display 



Press **MENU** enter, press  /  key and select ON to turn on auto backlight or OFF to turn off auto backlight.

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

Setting voiceguide(VOC)

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

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press  /  key to either select English or Chinese or OFF to switch off the voiceguide. Press **MENU** and confirm, then press **EXIT** to return to standby.

NOTE

- » When select turn off voiceguide, the beeprompt function will be set at startup, if you want to turn off all keyboard prompts you must turn off voiceguide and beeprompt function at the same time.



Setting beeprompt function(BP)

Beeprompt 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** +  /  till the screen will display 



Press **MENU** enter, press  /  to switch ON the beep or OFF when you want to switch off the beep. Press **MENU** and confirm, then press **EXIT** to return to standby.

NOTE

- » When voiceguide is switched on, the voiceguide gets priority.

Setting ANI ID CODE(ANI)

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press the  /  and select ON to switch on ANI or OFF to switch off ANI.

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

How to operate

Setting callingring(RIN)

Callingring switch is in using when the transceiver receives a matching DTMF signal and a tone will be heard. The ringprompt time is set via ringtime menu, it will switch on the speaker when it is over the preset ringtime.

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press the  /  to select ON or OFF .

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

Setting ringtime(ART)

When the right DTMFsignal is received,you will hear a clear ring.

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press  /  to select the time of the ring between 0 and 10.

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

NOTE

» This transceiver has 10 different steps of ringtime of which everystep is 1 second difference, this means that 0 will switch the ring off.

ANI CODE edit(ID)

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, and you can see the default ID code of the radio.

NOTE

» This function is only programmable with our software which can change the parameters.
» ID CODE is selectable in a range from 100 to 999.

Setting DTMFsignal(SIG)

In standby, press **MENU** +  /  till the screen will display 




Press **MENU** enter,press  /  and select DT to switch on DTMF or OFF to switch off DTMF.

Press **MENU** to confirm, press **EXIT** to return radio to standby.

Setting ANI ID CODE transmit(PTT)

Setting ANI ID CODE on transmit is needed to send ANI everytime when you press your PTT button.

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, press  /  to select 1 to 30 for delay transmit ANI or OFF to switch off ANI transmit. Press **MENU** to confirm, press  to return radio to standby.

NOTE

- » From 1 to 30 does permit to transmit ANI. The number means the delay (in seconds) of ANI transmit time when you press PTT to start transmit. Unit: 100ms.
- » When alarming and this menu is not set to "OFF" and selected between 1 to 30, the delay ANI and ALARM code will be transmitted. When this menu is set OFF, the default time is 2 seconds before ANI and ALARM code will be transmitted.



Setting mutemode (SPM)


The mutemode is to turn the speaker audio on/off according to your optional signal setting.

This transceiver has three kinds of modes which can be selected.



1. **QT**: When the transceiver receives a signal and matching CTCSS tone, it will switch 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. **Q+D**: When the transceiver receives a matching QT and DTMF signal, it will switch on the speaker.
3. **QxD**: When the transceiver receives a matching QT or Q+D, it will switch on the speaker.

In standby, press **MENU** +  /  till the screen will display 

Press **MENU**, press  /  and select one of QT or Q+D or QxD.

Press **MENU** to confirm, press  to return radio to standby.

NOTE

- » This menu only permits to change the parameter in temporary, but can't store this. Once you have pressed  /  key to change the channel, the parameter is set and will return to the default setting.

How to operate

■ All calls, group calls and selective calls

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

How to program all calls, group calls and selective calls

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

ANI ID CODE: ID---XX

$\frac{\text{ID}}{\text{—}}$

ANI ID CODE sign

$\frac{\text{X}}{\text{—}}$

Grouplist

$\frac{\text{XX}}{\text{—}}$

a unique ANI ID CODE

1 to 9 groups and 9 groups maximum.

From 00 to 99 maximum.

This is how to build up ANI .

The detail of edit method see: ANI ID CODE edit (ID)P18.

2. Setting signal

NOTE: Every transceiver in the group must switch on the proper DTMF code.

The details of DTMFsetting see Setting DTMFsignal (SIG)P18 .

3. The detail of setting ANI ID CODE see: Setting ANI ID CODE (ANI)P16.

4. Setting mutemode is Q+D. The detail of setting method see: Setting mutemode (SPM)P20.

5. Setting of ringprompt with ringtime (setting when needed). The setting method see in Setting ringtime (ART)P17 and Setting callingring (RIN)P17.

NOTE

- » All transceivers in the same group must set their radio to the same frequency, channel and parameter.
- » Due to this radio's keypad is small, all calls, group calls and selective calls will work only on receive.
- » When receive the ANI, callback will autotransmit the ANI of transmitside.

How to operate

Setting DTMF sidetone(DST)

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

DT: Switch on sidekey when transmitting.

ANI: Switch on the ANI sidetone when transmitting

D+A: Sidekey and ANI sidetone are both on.

OFF: Turn OFF all.

In standby, press **MENU** + / till the screen will display

Press **MENU** enter, press / and select one function of DT/ANI/D+A or OFF.

Press **MENU** and confirm, then press to return to standby.

Setting transmit overtime alarm(TOA)

Transmit overtime alarm is the setting to alarm the user that he/she has reached the preset time limited and a voiceprompt and light will flicker during transmit.

The transceiver can be set from 1 to 10 TOA in steps of 1 second.

In standby, press **MENU** + / till the screen will display

Press **MENU** enter, press / to select OFF or to set 1 to 10 for the overtime alarm.

Press **MENU** and confirm, then press to return to standby.

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Setting scanmode(SCN)

The transceiver has three scan modes.

TO: After signal in channel disappears the transceiver will start scanning within 5 seconds if you don't do any operation.

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

SE: Scanning stops when a signal is received.

In standby, press **MENU** + / till the screen will display

Press **MENU** enter, press / and select one of TO/CO/SE.

Press **MENU** confirm. Press to return to standby.

Setting power on message(POM)

Transceiver power on message:

1. **OFF:** Full display 2. **VOT:** Display the current voltage of battery pack 3. **MSG:** OK

In standby, press **MENU** + / till the screen will display

Press **MENU** enter, press / and select OFF/VOT/ MSG,

Press **MENU** and confirm, then press to return to standby.


How to operate



Setting radio, lamp and scan function on sidekey 1 (PF1)



This key has 4 functions which are selectable

FM: FM radio **LAM:** Lamp **SCN:** Scan **OFF:** Turn off this key function

I. Selecting FM radio function:

In standby, press sidekey 1 which will turn on the radio. The radio is for the FM band from 88-108MHz till the screen will display 

When in radiomode, press  to move up the channel, the screen will display 

Press  the radio will change frequency till the screen will display 

In radiomode:

a. When pressing PTT you will switch to transceiver and you will leave FMradio.

b. Press topkey or sidekey 2 to switch to relevant function.

» For listening to the FMradio you must have the standard antenna connected to the transceiver.



NOTE

» When you are listening to the radio, the channel/frequency you are operating on will still function. At the moment your transceiver receives a signal the FMradio will stop and you will listen to your operating channel/frequency. After the signal disappears 5 seconds the transceiver will switch back to radiomode. If you want to exit the FMradio please press sidekey 1 again.

Selecting lamp function:

In standby, press sidekey 1 to startup lamp, press sidekey 1 again to turn off lamp.

In standby, press  +  /  till the screen will display 

Press  and confirm, then press  to return to standby.

Selecting Scan function:

In standby, press the sidekey 1 and the transceiver will switch to scanningmode (depending on setting in scanmode). Pressing any key will stop scanning.

Setting distant urgency alarm and emergency calling function on topkey (PF2)

The topkey offers three kinds of functions:



ALM: Start up distant urgency alarm

EMC: Calling emergency channel

OFF: Turn off this function

In standby, press  +  /  till the screen will display 

Press  enter, press  /  and select one of the functions of ALM/EMC/ OFF.

Press  and confirm, then press  to return to standby.

How to operate

1. When you have selected ALM, in standby press topkey and the speaker will give an alarm sound and the red and green lamp will flicker at the same time. Press the topkey again to exit.
2. When you have selected EMC emergency channel, in standby, press the topkey and this will switch the transmitter to emergency channel and press PTT start transmitting. If turn out the emergency channel not press PTT within 3 seconds, the speaker will sound "DU, DU" prompt each 3 seconds. Press topkey again to exit.

NOTE



» Emergency calling channel is CH-000.

Busy channel lockout (BCL)

This function is to prevent that interfere others who is on communicating. If the channel you have selected which is using by other radio, at this time, press PTT key the alarm prompt disappeared and return to receive mode.

In standby, press  +  /  till the screen will display 

Press  enter, press  /  and select between ON or OFF.



Press  and confirm, then press  to return to standby.

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 Wouxun

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NOTE

» This menu only permits to change the parameter temporarily, but can't store this. Once you have pressed  /  key to change the channel, the parameter is set and will return to the default setting.

Setting keyboardlock (ALK)



The transceiver has two options, autolock and manuallock.

ALK: When you set autolock the keyboard will be locked within 15 seconds if you don't do any operation.




To release keyboard press  for more than 2 seconds.



OFF: This will switch off autolock.

NOTE

» **MANUALLOCK:** In standby press  for 2 seconds and this will lock keyboard, to switch off press  again for more than 2 seconds.

In standby, press  +  /  till the screen will display 

Press  enter, press  /  and select ON for autolock or OFF to switch off autolock.

Press  and confirm, then press  to return to standby.



How to operate


Setting reset (RST)

Menu reset makes that all parameters will return to default factoryset.

MENU reset (VFO):

In standby, press **MENU** +  /  till the screen will display 

Press **MENU** enter, the screen will display  then press **MENU** key and the screen will display 

Press **MENU** again and the screen will display 

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

NOTE

» Because this radio only has channelmode, it will do only menu reset(VFO).

Lowvoltage batterypack voiceprompt

When the batterypack has lowvoltage, the transceiver will sound "low batterypack" voiceprompt and the background will flicker once every 5 seconds and will sound "Di" at the same time.

Setting transmit overtime prompt

When transmitter works longer than preset time, the transceiver will announce "transmit overtime" by voice and stops transmitting. If you want to transmit again, please press **PTT**. (Setting overtimeprompt please see P13)

Adding channelscan

Edit method: Strictly via KG-659E programming software.

Only scan according programming list which had added channel scan on 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 glows continuous red in case of cloning failure.
	Targetradio	LED is flashing green during cloning. LED will switch OFF when cloning complete.

How to operate



How to use the intelligent charger

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

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.	<ol style="list-style-type: none">1. The batterypack is not installed properly.2. The batterypack maybe exhausted.3. The batterypack is getting too old.	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">1. The powerswitch is not adjusted well.2. Confirm if you use the right mutemode.	<ol style="list-style-type: none">1. Turn the volumecontrol again.2. Reset the mutemode.
There is no reception	<ol style="list-style-type: none">1. Check if you have installed your antenna right.2. The signal you are receiving is very weak.	<ol style="list-style-type: none">1. Install the supplied antenna.2. Move the radio around till you receive the desired signal or press  to reset the radio, then press the  go to the right channel.

Trouble shooting

Problem	Possible Cause	Possible Solution
Keyboard and PTT switch do not work.	1. The keyboard is locked. 2. RADIO "mode" is switched on, see display FM.	1. Set keyboard to free. 2. Please exit RADIO mode.
The receiver light is on and you can not transmit.	If you have set transceiver to busy channel lockout.	Switch off busy channel lockout.
Autotransmit when you are in standby.	The VOX level too LOW.	Switch off VOX or set VOX to a HIGHER level.

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

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: 350-390 MHz
	UHF: 400-470.9875 MHz	UHF: 450-520 MHz
Memorychannels	128 channels + 1 emergency alarm channel	
Voltage	7.4V DC	
Working temperature	-30°C (-22°F) to +60°C (140°F)	
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	242g	
Size	62 X 103 X 39 (mm)	2.44x4.06x1.54(inch)

NOTE

» Specifications are subject to change without notice.

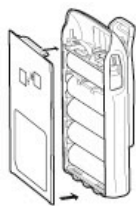
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Optional accessories

Wouxun
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Dual slot charger



"AA" battery pack



Eliminator



Programming cable



Car charger



Wireless cable



Headset



Speaker/MIC



Switching adapter



1700mAh Li-ion battery pack



Programming Software

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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.

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