Thanks for buying the WOUXUN KG-639E series transceiver. This transceiver offers the latest in design, multifunctionality, stable behavior and easy operation, We believe you will be pleased with the high quality and dependable features for all your communication needs.

Warning ⚠

» *Please turn off your transceiver while taking on fuel, or while parked at a gasoline service station.*

To fully use and understand this radio, please read the manual before using. Then you will fully benefit from all intelligent functions of the KG-639E.

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

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 WOUXUN 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

cause harmfu l 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

Contents

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

WOUXUN Professional FM Transceiver

1. VHF:66-88MHz 136-174MHz 245-246MHz
   UHF:300-350MHz 350-390MHz 400-470.9875MHz 450-520MHz
2. Outpower: VHF:5W/1W UHF:4W/1W
3. 200 memory channels
4. DTMF decoding and encoding
5. 5 tones (including 15 kinds standard)
6. 2 tones
7. 1750Hz burst tone
8. Priority scan
9. FM radio function
10. DCS/CTCSS of RX and TX can be set respectively.
11. VOX
12. Calling ring function
13. Scrambler available
14. 105 groups DCS and 50 groups CTCSS
15. Voiceguide (English/Chinese)
16. Wide/Narrow bandwidth selection (25KHz/12.5KHz)

Description of functions

17. Distant urgency alarm function
18. Multi scan function
18. Channel steps (5/6.25/10/12.5/25KHz)
19. High/Low power changeable when on transmitting.
20. Intelligentcharger (Warming sound and dualcolor light)
21. Busy channel lockout
22. Lowvoltage batterypack voiceprompt
23. Transmit over time prompt
24. Adding channel scan function
25. Wireclone function
26. Powersaving function
27. Voice compress function

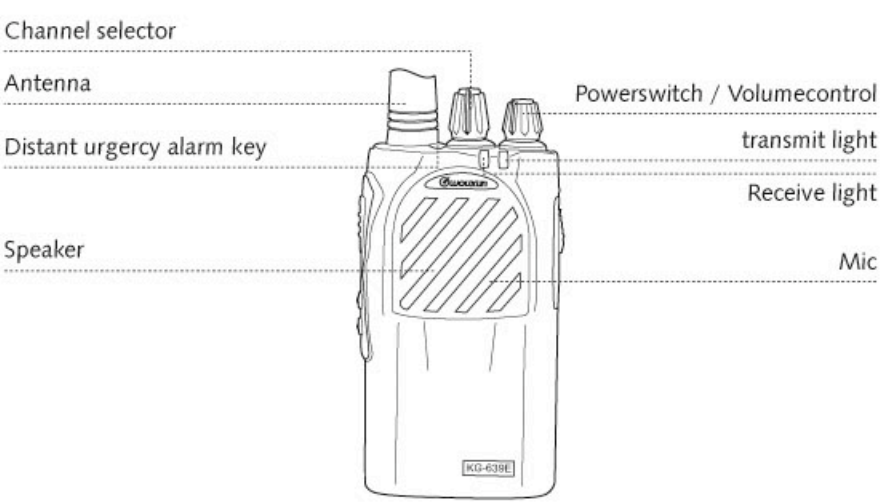
NOTE ⚠

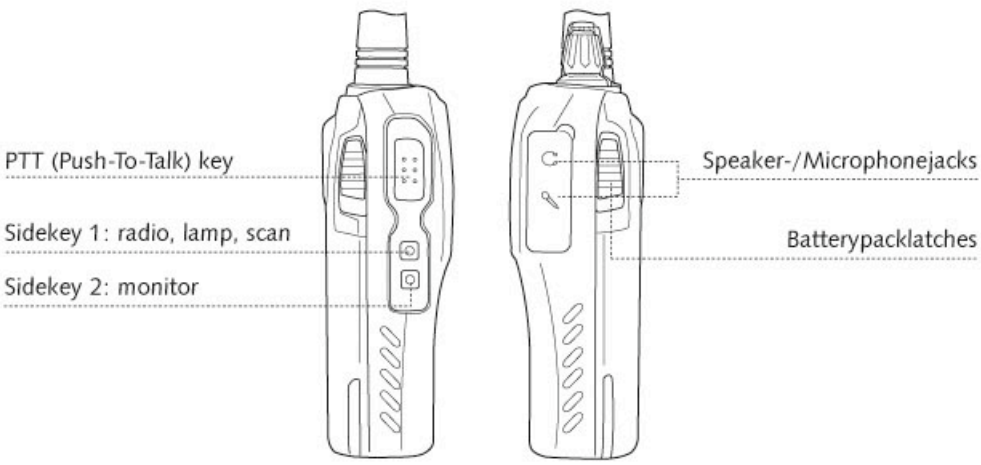
» All the above functions only can be edited via KG-639E programming software.

Getting started

wouxun
Professional FM Transceiver

Description of transceiver





Programming assistant functions

According to your need, you can set sidekey 1 and topkey as the following assistant functions via KG-639E programming software:

1. FM radio
2. Current signal calling key
3. Cancel receiving CTCSS
4. Switch to priority channel scan
5. Switch to alarm channel
6. Turn on alarm function

NOTE

» All functions only can be edited via KG-639E programming software.

CTCSS and DCS

This transceiver has CTCSS (Continuous Tone Controlled Squelch System) and DCS (Digitally Coded Squelch) function, using CTCSS or DCS, you can ignore other's needless calling who use the same frequency, when transceiver receives the same CTCSS tone or DCS signalcode, then squelch will be released.

NOTE ⚠

» CTCSS or DCS can not make the voice encrypt compress or secretively, it only make you not hear needless communication.

Setting battery savemode (SAVE)

When transceiver doesn't receive signal or not operate, and the battery save function has turned on, then after 10 seconds transceiver will be auto activate battery savemode. 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, if it has operation or receive signal, transceiver will be activated and exit savemode.

NOTE ⚠

» 1:1/1:2/1:3/1:4 means the pulse ratio of transceiver receive circuit between turn on and turn off.

Selecting transmitpower

Press PTT and topkey at the same time, then you can switch transceiver's transmitpower between high power and low power.

Transmit over timer

This function is to prevent any transmitter posses channel and limit users to transmit too a long time. Meanwhile, it also can avoid the damage of transceiver caused by transmit too long time. When transceiver has continual transmitted overtime you have set, then transceiver will be intermitted, and you will hear a promptvoice. The range of transmit limited time of overtimer is 15-600 seconds.

Setting scan function

This function is a way to receive the communication in all channels. Press sidekey 1, transceiver will according scan list to scan one by one . When one of the channels has received a signal, it will switch to this channel to receiving calling.

Priority scan function

Sometimes you need to monitor other frequency and check action of priority frequency at the time. On this condition, you can use priority scan function.

NOTE

- This transceiver priority scan channel from 0-199 can selectable.
- Startup priority scan function need two conditions: 1) Do priority scan function switch on. 2) This function only scan the channel which has been stored.
- In frequencymode, channelmode or scanning, when transceiver detects a signal, it will transfer the priority channel, after the signal disappeared 3 seconds if you don't do any operation, transceiver will back to frequency and go on priority scan.
- The speed of startup or resume priority scan is relative to the setting backlight. When if the backlight be set as "1" , the speed of startup or resume priority scan will be the fastest.
- When the priority channel which has been set parameter receive signal, if with the same frequency, radio can transfer the priority channel.
- The transferred priority channel only can be used to communication, you can't do any other operation until radio resumes frequency.

Busy channel lockout

This function is to prevent that interfere others who is on communicating. If the channel you have selected which is used by other radio, at this time press PTT key, you can not transmit.

Lowvoltage batterypack voiceprompt

When the batterypack has lowvoltage, the transceiver will sound " low batterypack" voice prompt.

Setting VOX

This function is that you can transmit the voice by speaking, if VOX circuit checks you speak to the MIC, transceiver will auto switch to TX mode and transmit voice, needn't to press PTT key. When you stop speaking, transmitting also stop.

Due to VOX circuit has to check the existent of voice, so you may note that transmitting will be delayed, and the first part of voice message may not be transmitted.

The VOX of this transceiver has 10 levels, the higher level it will worse sensitivity.

Setting voice encrypt compress

Voice encrypt compress means that encrypt the content of communication, switch on encrypt function, and make the transceiver who not set voice encrypt compress can not hear clear what you are talking, meanwhile you also can't hear clear others, who not set voice encrypt compress, what they are talking.

2-TONES, 5-TONES

1. When 2-TONES/5-TONES signaling is programming in a channel, press PTT to transmit 2-TONES/5-TONES signal.
2. When a channel be set as 2-TONES/5-TONES, the preset function will be activated only the matching 2-TONES/5-TONES signals are received.
3. Only when the 2-TONES/5-TONES signal the same as your transceiver, it can receive the signal which you transmit.
4. Setting signal:
   a. Every transceiver using in the group should be set 2-TONES/5-TONES optional signal.
   b. Setting sidetone: Select according to your need.
   c. Mutemode should be set as AND
   d. Setting PTT: Depend on your need to select one of the BOT/EOT/BOTH.
   e. Setting S-INFO: RX and TX should be set the same signaling.
   f. Setting PTT-LT: Accordiong to the actual situation, delay transmit code.

Signaling control relationship (Mutemode)

"AMD": When using two signaling control, satisfied with both side, the squelch will be turned on.

"OR": When using two signaling control, satisfied with one side, the squelch will be turned on.

Transmit PTT

This function means that the ANI ID CODE of begin and end of transmit used continual and cut off some communication.

"BOT": When press PTT, ID signal will be transmitted.

"EOT": When release PTT, ID signal will be transmitted.

"BOTH": When press or release PTT, ID signal both be permitted to transmit.

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. Glow 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 your intelligentcharger

1. When the poweradapter is connected the intelligentcharger, the poweradapter should be plugged into the matchingvoltage. The intelligentcharger will flicker green/red/orange LED and you will hear one sound "Di", then the flicker become orange.
2. When you plug in the batterypack,the intelligentcharger will switch to red LED and you will hear one sound "Di". The intelligentcharger has entered quickcharging.
3. When the light turns green and you hear 10 times "Di" the batterypack is fully charged.
4. When you plug in the batterypack,the red LED flickers and you hear "Di Di"twice,the batterypack is not plugged in right.

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.	1. The batterypack is not installed properly. 2. The batterpack 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 you use the right mutemode.	1. Turn the volumecontrol. 2. 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.

Trouble shooting

Problem	Possible Cause	Possible Solution
The receivelight is on and you can not transmit.	If you have set transceiver to busychannel lockout.	Switch off busychannel lockout.
Autotransmit when you are in standby.	The VOX level too LOW.	Switch off VOX or set VOX to a HIGHER level.

Technology parameter

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	200 channels	
Voltage	7.4V DC	
Working temperature	-30C(-22F) to + 60C(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	⩾700mW	
Weight	242g	
Size	62 X 103 X 39 (mm)	2.44x4.13x1.54(inch)

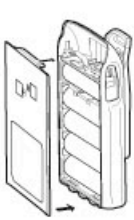
NOTE ⚠

» Specifications are subject to change without notice.

Optional accessories

WOUXUN Professional FM Transceiver

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:639E-A-0804-V1