16.2x11cm

Thanks for buying the @wouxun transceiver.

This transceiver offers latest design, multi-functionality, stable performance and easy operation. We believe you will be pleased with the high quality and powerful functions.

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR **TO WOUXUN** PORTABLE TWO-WAY RADIO. This manual is suitable ONLY: KG-988.

#### **PRECAUTIONS**

This transceiver is with excellent design and advanced technology.

Please follow the below suggestions and warning to assist you to carry out the responsibilities on warranty terms, and learn the safety before using the transceiver.

- 1. Please keep the transceiver and accessories out of the reach of children.
- 2. Do not disassemble the transceiver to avoid the possibility of damaging by a non-professional.
- 3. Please ONLY use **Swouxun** supplied batterypack and charger to avoid the possibility of damaging the transceiver.
- 4. Please ONLY use **Twouxun** supplied antenna to avoid the possibility of damaging the transceiver.
- 5. Neither expose the transceiver directly to the sunlight nor in the overheated places for a long time.
- 6. Keep the transceiver away from the dusty or humid places.
- Clean the transceiver with a mild brush/cloth or detergents instead of the aggressive chemical material.
- 8. Do not transmit before well installing the antenna.
- 9. If any abnormal odor or smoke is detected from the transceiver, please power it off immediately, then remove the batterypack from the transceiver. And contact your @wouxun dealer.



# NOTE 🗥

- >> All the above mentioned suggestions and warnings are compatible for all **Twouxun** series transceivers and accessories. Please contact your **Twouxun** dealer about any upset operation.
- >> **Twouxun** manufacturer is not responsible for any safety or operation problems, which are caused by using the incompatible accessories or parts.

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### Unpacking and checking of your equipment

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

#### Supplied accessories



Transceiver



High gain antenna



Lithium-ion batterypack



Intelligent charger



Beltclip



Handstrap



User's manual



Service card

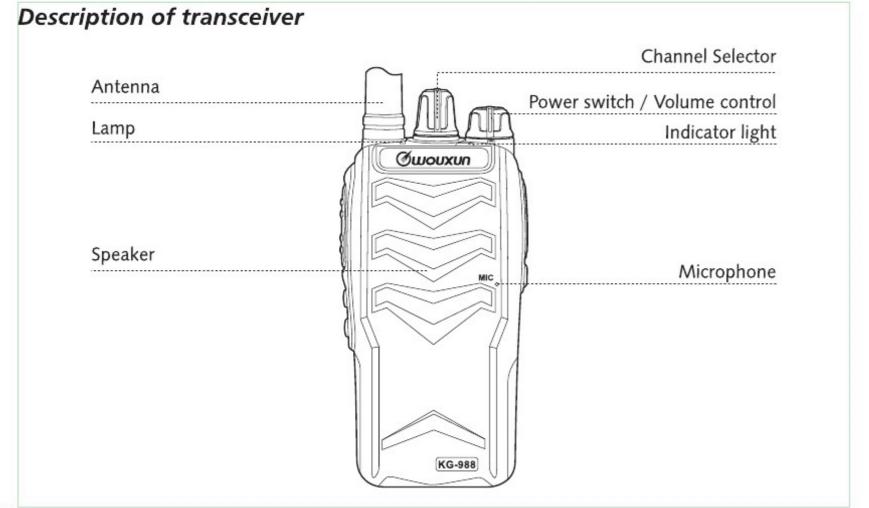
### **Description of functions**



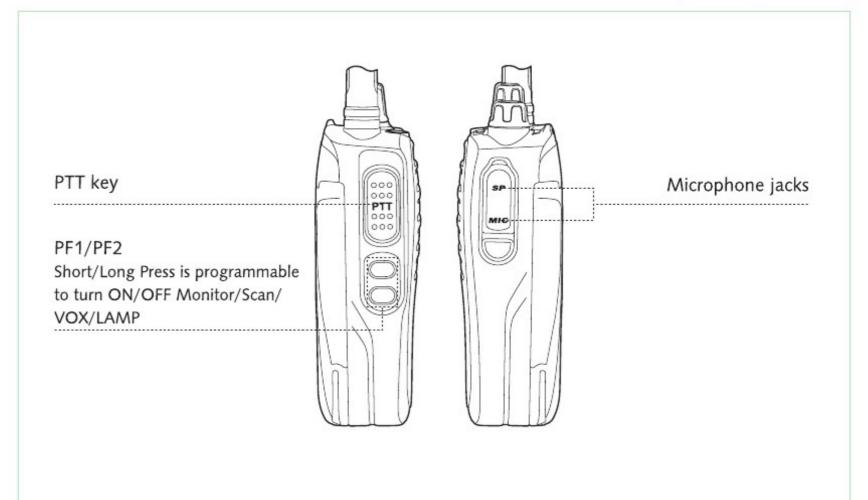
- 1. 400-480MHz
- Output power: 10W(H)/4W(M)/1W(L)
- 3. DTMF Encoding and Decoding
- A. VOX
- CTCSS/D.C.S
- 6. Chinese/English Voice Guide
- Wide/Narrow Bandwidth(25KHz/12.5KHz)
- 8. High/Middle/Low Output Power Selectable
- 9. High Battery Capacity(2600mAh)

- 10. Intelligent Charger(Bicolor Light)
- 11. Multi Scan Function
- 12. Busy Channel Lockout
- 13. Low Voltage Prompt
- 14. Transmit Overtime Prompt
- 15. Adding Channel Scanning
- 16. PC Programmable
- 17. PTT ID

# Getting started







### Programming assistance function

User can, as required, set the following assisted functions for PF1 and topkey via KG-988 programming software:

- Monitor ON
- Monitor OFF
- Scan ON
- Scan OFF
- VOX ON
- VOX OFF
- Lamp ON
- Lamp OFF

### Operation steps



- Rotate the power switch / volume control knob clockwise to conduct the power supply. Then adjust
  the volume by rotating the knob. Rotate the knob counter-clockwise to power off.
- Rotate the encoder knob to select the desired channel. Clockwise rotation can raise the channel number while counter-clockwise rotation lowers the number. The encoder also can hear the annoucement of the current channel number.

### Function operation and instruction

# NOTE <u>∧</u>

>> All the function operations are programmable via KG-988 programming software.

#### CTCSS & D.C.S

This transceiver is equiped with CTCSS (Continuous Tone Controlled Squelch System) and D.C.S (Digital Controlled Squelch) functions. You can ignore the unwanted calling from the frequency via this function. Only when receiving the same CTCSS tone or D.C.S code, the transceiver will release mute.

# NOTE <u>∧</u>

>> CTCSS or D.C.S cannot make the dialogue concealed or encrypted, but only can prevent you from the unwanted dialogue.

#### Power Save Mode

When save function is ON, the transceiver automatically activates to voltage save mode 10 seconds after there is no signals or any operations. It cuts off the receiver circuit for a while in order to save voltage, and it continues working when there is signal detected. The save mode is exit if there is any signal or operation onto the transceiver.



#### Time-out Timer

Time-out timer is to prevent the transceiver from continuous transmitting for a long time. The transmitting will be interrupted compulsorily when the continuous transmitting time is over than the preset value.

This function is to prevent the transceiver from being overheated and damaged.

#### Scan

This function is a receiving way for monitoring the wanted channel communication.

Press PF1 that is programmed as "Scan". The transceiver will scan one by one according to the channel numbers on the scan list. When scanning, green light flashes. Indicator LED illuminates green when a certain channel receives signals and the signaling types are matched.

While the scan function is activated, the transceiver will check the calling being available in the scan channel.

If there are signals, it will switch to the channel for receiving calling.

#### Scan Mode

TO: After searching signals, the transceiver will continue scanning if without any operation within 5 seconds. Press PTT key, the transceiver transmits the appointed channel by encoder. Scan will stop after transmitting.

### Function operation and instruction

CO: The transceiver will stop scanning when searching a signal. It will resume after 3 seconds when the signal disappears. Press PTT key, the transceiver will transmit the appointed channel by encoder. It will stop scanning after transmitting.

SE: Scan will stop when receiving a signal. Press PTT key, the transceiver will transmit the searched channel.

It will be back to the appointed channel by encoder after transmitting if there is no operation in 10 seconds.

#### Scan Adding

Note: Radio only scans the channels which is added to scan list.

Method: Program it via software.

#### Busy channel lockout

This function is to prevent the interference of other communicating channels. If the selected channel is occupied, press PTT, the transceiver can not transmit.

#### VOX

When detecting voice, the transceiver will switch to transmitting mode automatically.

As VOX should detect voice, transmitting will be a little delayed, and the beginning of the voice may not be transmitted.



There are 10 levels for VOX. Higher level, less sensitive.

#### VOX Delay Setting

When VOX transmits is started after tone is detected, but there is no any more new tones, there is delay time programmable to keep transmission.

#### Voice Guide

It is supported to have English and Chinese as voice guide.

#### TX/RX Programmable

It is programmable to program any lawful frequencies for RX and TX within the specified frequency range.

#### Low voltage prompt

When the voltage is low, the transceiver will sound two "Toot", and the light will flash every 10 seconds and a "Toot" sounds.

#### How to use the intelligent charger

 Insert the AC plug into the outlet (AC: 90-240V), the charger indicator flashes once. That means the charging is in standby.

### Function operation and instruction

Insert the battery into the charger, the RED indicator continuously flashes. That means the charging is on the progress.

While the GREEN indicator continuously flashes. That means the charging is complete.

## NOTE 🗥

- >> When inserting the exhausted batterypack, the intelligent charger will precharge the batterypack in trickle form.

  The RED indicator will be flashing at the moment. This process is lasting for 10-20 minutes. And then the charging is normal. Red indicator continuously flashes. And then the GREEN indicator flashes when the charging completes.
- >> Trickling charging the exhausted batterypack is in order to protect lithium-ion batterypack better.

### Trouble shooting



Please check carefully if your transceiver is faulty by following this chart.

If you maintain to have trouble you can reset your transceiver, which will help you eliminate your problem very often.

Problem	Possible Cause	Possible Solution		
Transceiver will not	1. The batterypack is not installed properly.	1. Re-install the batterypack.		
be powered on.	2. The batterpack maybe exhausted.	2. Charge the batterypack.		
	3. The batterypack is broken.	3. Change the batterypack.		
The receiver light is				
on and there is no	1. The power switch is not adjusted well.	1. Turn the volume control again.		
sound from the	2. Confirm if you use the right mute mode.	2. Reset the mute mode.		
speaker.				
There is no	1. Check if you have installed your antenna	1. Install the supplied antenna.		
receiving.	right.	2. Move the radio around till		
	2. The signal you are receiving is very weak.	you receive the desired signal.		

# Trouble shooting

Problem	Possible Cause	Possible Solution			
The transmitting light is on, but can not transmit.	1. Check whether you set the busy channel lockout function.	1. Turn off the busy channel lockout function.			
Transmit automatically when the transceiver is in standby.	1. Check whether the VOX level is too low.	1. Turn off the VOX function, or set the VOX to high level.			

# Technology parameter



	Appendix 1								
стся	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 D023N 16 D074N D165N 46 D261N 61 D356N 76 D462N 91 D627N 31 D114N 32 D172N D263N 62 D364N D464N D631N D025N 33 63 D026N D115N D174N D265N D365N 78 D465N 93 D632N D116N 34 D205N D266N 64 D371N 79 D466N 94 D645N D031N 35 65 D122N D212N D271N D411N D503N 95 D654N D032N 50 D125N 36 D223N 96 D036N D274N D412N D506N D662N D131N 37 D225N D306N 67 D413N 82 D516N 97 D664N D043N 68 D132N 38 D226N D311N D423N D523N D703N D047N 69 99 D134N 39 D243N D315N D431N D526N D712N D051N D053N D143N 40 D244N D325N 70 D432N 85 D532N 100 D723N D054N D145N D245N D331N D445N 86 D546N 101 D731N D152N D246N D332N D446N D565N D065N 42 102 D732N D071N D155N 43 D251N D343N D452N D606N 103 D734N 44 104 D072N D156N D252N D346N 74 D454N 89 D612N D743N

45

D255N

60

D351N

75

D455N

90

D624N

105

D754N

D162N

### Technology specification



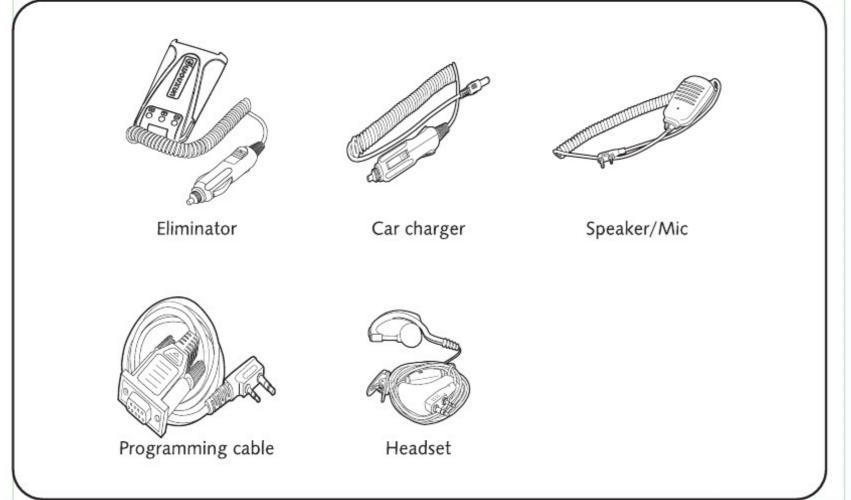
Frequency ranges are suitable for different countries or areas	UHF: 400 – 480MHz
Channel numbers	16 channels
Operating voltage	7.4V
Operating temperature	-30℃ to 60℃
Operating mode	Co-channel or Dis-channel simplex
Output power	UHF H:10W M:4W L:1W
Modulation	FM (F3E)
Maximum deviation	≤ ± 5KHz
Spurious radiation	<-60dB
Frequency stability	± 5ppm
Receiving sensitivity	< 0.2µV
Audio output power	≥500mW
Waterproof	IP66
Weight	320g
Size	132 × 62 × 37 (mm)



>> Specifications are subject to change without notice.

D073N

### Optional accessories



#### **Announcement**



**Twowwn** 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 **Twowwn** without prior notice.

English Version: KG-988-1712-V1