Thanks for buying the WOUXUN series transceiver.

This transceiver offers latest in design, multi-functionality, stable performance and easy operation. We believe you will be pleased with the high quality and dependable features for all your communication needs.

To get a thorough understanding of this transceiver, please kindly read this manual before using. This manual is suitable for model KG-UVA1.

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.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1)this device may not cause harmful interference, and

(2)this device must accept any interference received, including interference that may cause undesired operation.

WARNING:MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

CE Caution:

Hereby, Wouxun declares that this Two-way radio is in complance 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 Industry Park, Quanzhou, Fujian 362000, China

CONTENTS

Wouxun Professional FM Transceiver

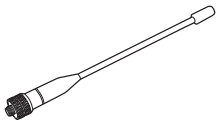
CONTENTS

UNPACKING AND CHECKING OF YOUR EQUIPMENT

Carefully unpack the transceiver. We recommend you to identify the items as listed in the following table before discarding the packing material. If any missed or damaged items during the transportation, please notify your dealer.

Supplied Accessories


Transceiver


High gain antenna


Li-ion batterypack


Intelligent charger


Belt clip


Handstrap


User's manual


Service card

DESCRIPTION OF FUNCTIONS

wouxun
Professional FM Transceiver

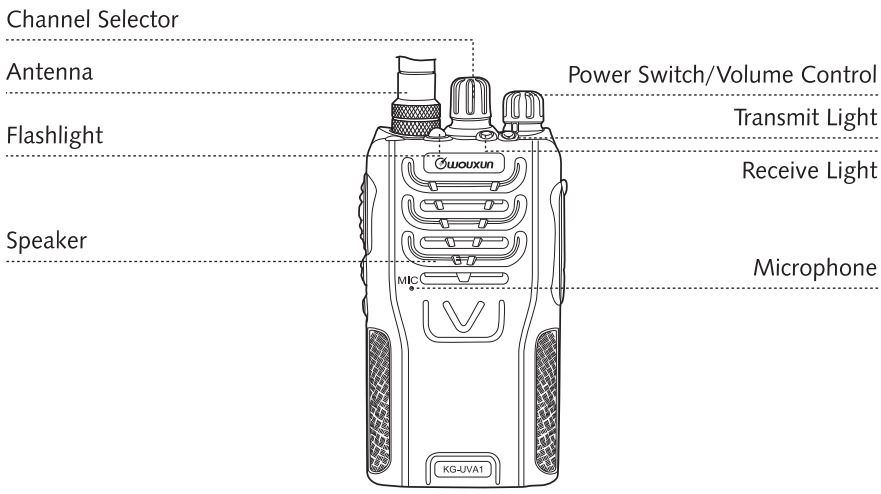
1. Frequency Range Can Be Suitable for Different Countries or Areas:
   136-174&216-280MHz (RX/TX)
   136-174&350-470MHz (RX/TX)
   136-174&400-480MHz (RX/TX)
   136-174&420-520MHz (RX/TX)
   144-146&430-440MHz (RX/TX)
   144-148&222-225MHz (RX/TX)
   66-88&136-174MHz (RX/TX)
   66-88&400-480MHz (RX/TX)
   FM: 76-108MHz
2. Working Mode Can be Set Freely: VHF(TX)-UHF(RX) or UHF(TX)-VHF(RX)
3. Digital FM Radio (76-108MHz)
4. Output Power: 5W VHF / 4W UHF
5. DTMF Encoding Function
6. VOX
7. 105 groups DCS & 50 groups CTCSS
8. 1750Hz Burst Tone

DESCRIPTION OF FUNCTIONS

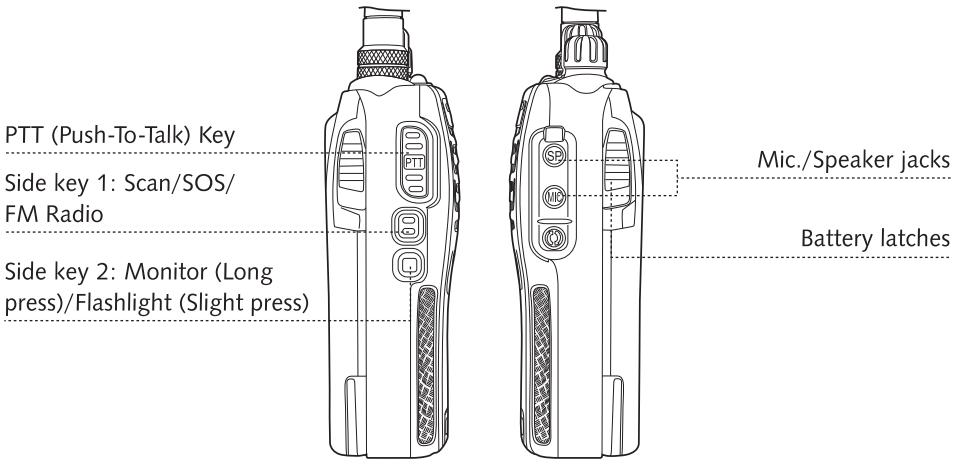
9. SOS Function
10. Voice Prompt
11. Wide/Narrow Bandwidth Selectable (25KHz/12.5KHz)
12. 16 Memory Channels
13. Multi Scan
14. Priority Channel Scan
15. Adding Scanning Channel
16. High/Low Power Selectable (5W/1W)
17. Busy Channel Lockout
18. Bright Flashlight Illumination
19. Battery Capacity Distinguish
20. Low Voltage Prompt
21. Begin/End Transmitting Prompt
22. Transmit Overtime Prompt
23. Program by Computer
24. Wire-clone Function
25. Intelligent Charger
26. High Capacity Li-ion Battery
27. IP55 Waterproof

GETTING STARTED

Description of Transceiver



GETTING STARTED



SUBSIDIARY PROGRAMMABLE FUNCTIONS

The users can set the following desired subsidiary functions of the side key 1 by the programming software.

- Turn ON/OFF FM radio
- Turn ON/OFF the scan function
- Turn ON/OFF SOS function

BASIC OPERATIONS

Adjust Volume

Clockwise rotation the Power switch/Volume control to power ON the transceiver, and fine-rotating this knob to adjust the volume. While counterclockwise it to power OFF the transceiver.

Select Channel

Rotate the Channel Selector to choose the desired channel. Clockwise rotate this knob to increase the channel number while counterclockwise rotate to decrease. Meanwhile, you will hear the voice guide of the current channel. The transceiver will prompt 'du du ...' if the current channel is empty.

Monitor Key

Slight press: Turn ON/OFF flashlight function

Long press: Turn ON squelch

Transmit 1750Hz Burst Tone

Press PTT and meanwhile press side key 1 to transmit the 1750Hz burst tone. The transmitting time depends on how long you press this combination keys.

NOTE ⚠

» All the functions ONLY can be edited by the programming software.

HOW TO OPERATE

High/Low Power Selection

Press PTT+MONI to change the output power temporary. The RED light flashes twice means High power, while flashes one time stands for Low power.

CTCSS & D.C.S

This transceiver has CTCSS (Continuous Tone Controlled Squelch System) and DCS (Digital Coded Squelch) functions. Set this function, you can neglect the unwanted callings from the other user who set the same frequencies with you. Only received the corresponding CTCCS/DCS tone, the transceiver can un-mute and communicate.

NOTE ⚠

» CTCSS/DCS will not make the conversation concealed or encrypted, but only will neglect the unwanted callings.

FM Radio

Turn ON the radio: Press side key 1 (set as FM radio function in advance), the transceiver's GREEN receiving light will flash, it means under searching the radio station. It will stop once searched the station, and you can listen the radio.

HOW TO OPERATE

Operate the radio: Press Monitor key to tune the radio automatically (it will stop on the available stations), and the GREEN receiving light will flash once.

Turn OFF the radio: Press side key 1 again.

NOTE ⚠

» a. When you are listening to the radio, the current channels are still working (in standby). Once received the signals, it will return to the transceivers communicating mode. After signals disappeared 5 seconds, return to the radio model automatically.

» b. 5 seconds after end transmission, the transceiver will return to radio mode automatically.

SOS Function

Set the Side key 1 as the SOS function (SOS-CH), when you are in emergency circumstances, press the side key 1 to transmit the "wu wu..." SOS signals to the outside for help. Meanwhile, the transceiver will also sound "wu wu..." and the light flash. It will transmit the SOS signals every 5 minutes, lasting for 10 seconds each time.

During transmitting the SOS signals, press any key to exit.

If carrier signal appears during the transmission, it starts receiving, but will return to the SOS-CH (SOS function) mode after the carrier signal disappears. Press any key to exit.

Squelch Level (SQL-LE)

This function means to turn ON the squelch when the signal is strong, while turn OFF when is weak. The speaker will open when turn ON the squelch and receive the same signaling from other transceiver. Higher level makes it harder to receive the weak signals, and lower level will be interfered by noises and/or unwanted signals.

Begin/End Transmitting Voice Prompt (ROGER)

This function means the different ways of voice prompt when transmitting.

OFF: Turn off all voice prompt when transmitting.

Begin: Voice prompt when press PTT (begin of transmission).

End: Voice prompt when release PTT (end of transmission).

Begin/End: Voice prompt both press (Begin) and release (End) PTT to transmit.

HOW TO OPERATE

Battery Saver Mode (SAVE)

Set this function on, if the transceiver received none signals and without any operation for 10 seconds, it will be in the Battery saver mode.

To saver the battery consuming, this function will turn off the receiving circuit for a period time, then turn on to check the signal, if operate the transceiver or received any signals, the transceiver will exit the battery saver mode.

Battery Capacity Distinguish

If you want to estimate the battery capacity, you can turn OFF the transceiver and then turn ON again,

If the receiving green light flashes 4 times, it means the battery is very full.

If the receiving green light flashes 3 times, it means the battery is full.

If the receiving green light flashes 2 times, it means the battery is not full.

If the receiving green light flashes 1 time, it means the battery is low.

If the transmitting red light flashes 4 times, it means the battery is very low, In this case, the transceiver is not allowed to transmit, and it will prompt in 5 seconds interval, with the transmitting RED light flashes.

Time-out Timer (TOT)

The TOT is designed to prevent your transceiver in long period transmitting, and also avoid any damages to the transceiver.

When the transmitting time is exceeding the preset limited time, it will stop transmitting and give you a warning sound "OVER TIME".

The TOT of this transceiver can be set between 15 and 600 seconds.

Transmit Overtime Alarm (TOA)

This TOA means the transceivers transmitting indicator light flashes and alarms "OVER TIME" before the transmitting time reached the pre-set transmit time (TOT).

This transceiver has 1 to 10 TOA level available, each level is 1 second. E.g. 1 level means the transceiver will alarm and transmit light flashes 1 second before the transmitting time reaches preset TOT time.

Beep Prompt (BEEP)

Beep prompt function means the transceiver will prompt if it is in confirmed, wrong or malfunction operating.

ANI-ID Transmit Switch

This function means to turn ON or OFF the ANI-ID transmitting.

ANI-ID Transmit Delay

This setting means the delay time of transmitting ANI-ID code after press PTT to communicate.
This transceiver has 1 to 30 delay time levels available, each level with 100ms difference.
OFF means turn off the ANI-ID transmit function.

ANI-ID Edit

This transceiver can edit 1 to 6 digits available.

DTMF Sidetone

This function means to turn ON or OFF the speaker when transmitting DTMF code, and get the corresponding DTMF tone.

Scan (SCAN)

This function is a receive way to listen the current conversations on all channels.
Press side key 1, the transceiver will scan all channels one by one according to the scan list. The GREEN light flashes during the scanning. When the channel received signals, it will change to this channel and get the calling.
This transceiver has Adding Scanning Channel function, the users can add the desired scanning channels.

Scan Mode (SC-REV)

This transceiver will stop scanning on the frequency or stored channel if checked signals.
According to your desired scan mode, the transceiver will go on or stop scanning.

Time: After received signals, without doing any operation within 5 seconds, the transceiver will go on scanning. Press PTT, it will transmit the scanned channel, and stop scanning after end transmitting.

Carrier Wave: Scanning will stop when the transceiver received signals, it will go on scanning after signal disappeared 3 seconds. Press PTT, it will transmit the scanned channel, and stop scanning after end transmitting.

Search: Scanning will stop when the transceiver received signals. Press PTT to transmit the scanned channel. If no operation within 5 seconds after transmitted, it will return to the current indicated channel.

Priority Channel Scan (PRIORITY CHANNEL)

If you want to monitor other channels and check the certain preferred channel at the same time, you can set this Priority scan function.

E.g.: Scan six channels CH1, CH2, CH3, CH4, CH5 and the priority channel CH6. Scanning sequence as following chart:

→CH1→CH6→CH2→CH6→CH3→CH6→CH4→CH6→CH5→CH6

If the transceiver checks the signal on "Priority Channel", it will call out this channel first.

Select the desired priority channels via the programming software.

Adding Scanning Channel (SCAN ADD)

NOTE

» The transceiver will only scan the channels which added into the scanning list.

» Edit via the programming software.

Busy Channel Lockout (BCL)

This function means to prevent in interfering other communicating channels, if the selected channel is occupied, press PTT, the transceiver will alarm and cannot transmit.

VOX (VOX)

The VOX function means the transceiver will return to transmit mode automatically when checks the existing signals.

As the VOX circuit must check the existing signals, the transmitting will be a little delay, and the beginning transmission may not be transmitted completely.

This transceiver has 10 VOX level available, the higher level the less sensitivity.

Voice Prompt (VOICE)

This transceiver has English and Chinese voice prompt function.

Rx/Tx Frequency Edit

Users can edit the receive (Rx)/transmit (Tx) frequencies within the original frequency range.

Low Voltage Prompt

When the battery is in low-voltage, the transceiver will prompt in 5 seconds interval, and the transmit RED light flashes. Press PTT, the transceiver will not allow to transmit, it will prompt 'LOW BATTERY' (if the voice prompt function is ON).

Wire-clone Function

1. Well installed the battery into the source radio and target radio, and then connect the wire-clone cable of these two radios.
2. Turn ON the target radio
3. Press the MONI key of the source radio meanwhile turn ON.
4. The RED light of source radio flashing, it means start copying data.
5. The GREEN light of target radio flashing, it means start receiving the data.
6. After finished copying, the RED and GREEN light of the two radios went off, and then return to the standby mode.

How to Use the Intelligent Charger

1. Insert the AC plugs into the outlet (AC:90-240V), the charger indicator light flashes, it means in charging standby.
2. Insert the batterypack to the charger, the RED light turns on means in charging, fully charged when the GREEN light turns on.

NOTE ⚠

» When insert the exhausted battery into the charger, it will pre-charge the battery in trickling charge, you will see the RED light flashes and lasts 10 to 20 minutes, then start normal charging with RED light keep on, it will turn to GREEN when fully charged.

» Trickling charge the exhausted battery is to well protect the Li-ion battery.

HOW TO OPERATE

How to Program the Transceiver

1. Download, unzip and install the USB driver according to different PC operating system.
2. Restart the computer, it shows the driver is installed successfully.
3. Download and unzip the corresponding programming software.
4. Well connected the transceiver and computer with USB cable, then power on the transceiver.
5. Read from the transceiver to check the connection.
6. Set the desired data on the software, then write to the transceiver.

NOTE ⚠

- » If 'Failed Connection' displays when reading from the transceiver, please recheck the first five steps as well as the communication ports.
- » Please note, once well done the first three steps, the com port will be selected automatically. However, as the different computer settings, sometimes you should re-set the com port, in this case, please choose the correct com port from the device manager according to the port assignment.
- » If the connection still failed, try to use another cable or another transceiver on another computer to double check.
- » Please refer to the detailed programming guidance on our website www.wouxun.com.

TROUBLE SHOOTING

After confirmed the transceiver with real problems, please kindly check it according to the following chart.

PROBLEM	SOLUTION
Cannot turn ON the transceiver.	» The battery may exhausted, pls change the new battery or re-charge. » The battery installed incorrect, pls take out the battery and re-install.
Battery life not long after charged.	» The batterys life is over, pls change a new battery. » Not charging completely, make sure fully charged before take out.
Receiving light keep ON, but can hear nothing.	» Make sure if the volume is highest. » Make sure if the CTCSS/DCS code is the same with other members.

TROUBLE SHOOTING

PROBLEM	SOLUTION
Keypad do not work.	» Make sure if the programmable key is undefined. » Make sure if any other key stuck.
In standby, it will auto-transmit without pressing PTT.	» Make sure if VOX function is ON, and the level is too low.
Receive other groups signal while communicating.	» Change another CTCSS/DCS code of your whole group.

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

TECHNOLOGY PARAMETER

Appendix 2

D. C. S

1	D023N	16	D074N	31	D165N	46	D261N	61	D356N	76	D462N	91	D627N
2	D025N	17	D114N	32	D172N	47	D263N	62	D364N	77	D464N	92	D631N
3	D026N	18	D115N	33	D174N	48	D265N	63	D365N	78	D465N	93	D632N
4	D031N	19	D116N	34	D205N	49	D266N	64	D371N	79	D466N	94	D645N
5	D032N	20	D122N	35	D212N	50	D271N	65	D411N	80	D503N	95	D654N
6	D036N	21	D125N	36	D223N	51	D274N	66	D412N	81	D506N	96	D662N
7	D043N	22	D131N	37	D225N	52	D306N	67	D413N	82	D516N	97	D664N
8	D047N	23	D132N	38	D226N	53	D311N	68	D423N	83	D523N	98	D703N
9	D051N	24	D134N	39	D243N	54	D315N	69	D431N	84	D526N	99	D712N
10	D053N	25	D143N	40	D244N	55	D325N	70	D432N	85	D532N	100	D723N
11	D054N	26	D145N	41	D245N	56	D331N	71	D445N	86	D546N	101	D731N
12	D065N	27	D152N	42	D246N	57	D332N	72	D446N	87	D565N	102	D732N
13	D071N	28	D155N	43	D251N	58	D343N	73	D452N	88	D606N	103	D734N
14	D072N	29	D156N	44	D252N	59	D346N	74	D454N	89	D612N	104	D743N
15	D073N	30	D162N	45	D255N	60	D351N	75	D455N	90	D624N	105	D754N

TECHNOLOGY SPECIFICATION

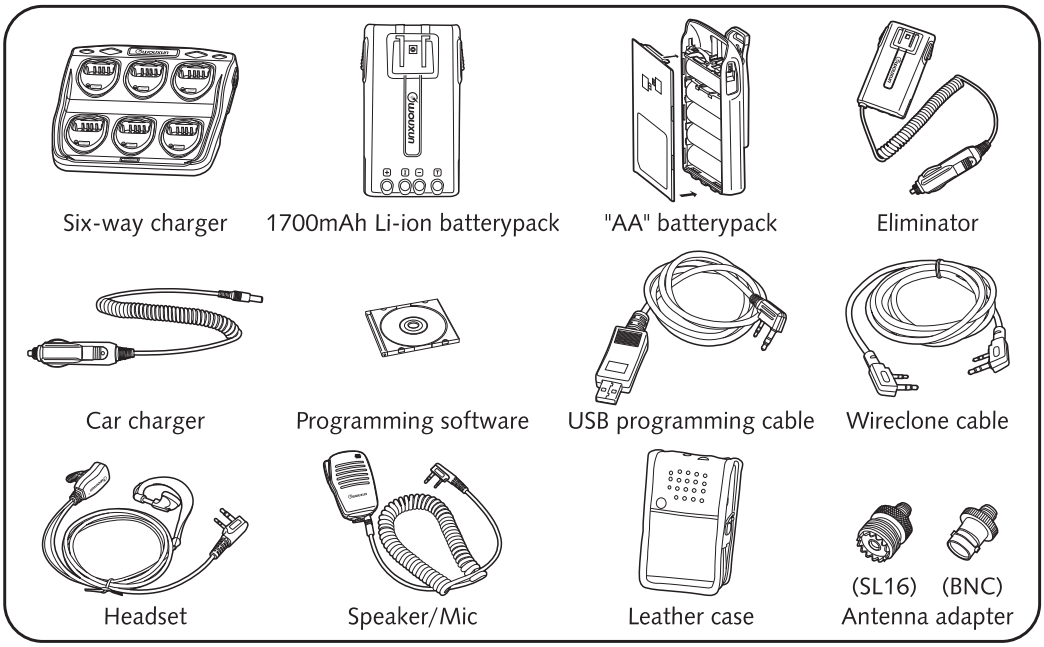
Wouxun
Professional FM Transceiver

Frequency Range (can be suitable for different countries or areas):	FM: 76-108 MHz (Rx) 136-174MHz & 216-280MHz (Rx / Tx), 136-174MHz & 350-470MHz (Rx / Tx), 136-174MHz & 400-480MHz (Rx / Tx), 136-174MHz & 420-520MHz (Rx / Tx), 144-146MHz & 430-440MHz (Rx / Tx), 144-148MHz & 222-225MHz (Rx / Tx), 66-88MHz & 136-174MHz (Rx / Tx), 66-88MHz & 400-480MHz (Rx / Tx).
Memory Channels	16 channels
Operating Voltage	7.4V
Operating Temperature	-30℃ to + 60℃
Working Mode	Co-channel or Dis-channel simplex
Output Power	VHF: 5W / UHF:4W
Modulation	F3E(FM)
Max. Frequency Deviation	⩽±5KHz
Spurious Radiation	<-60dB
Frequency Stability	±2.5 ppm
Receive Sensitivity	< 0.2 μV
Audio Output power	⩾500mW
Waterproof	IP55
Dimension	61 X 121 X 37.5 (mm)
Weight	228g

NOTE ⚠

» Specifications are subject to change without notice.

OPTIONAL ACCESSORIES



ANNOUNCEMENT

Endeavors to achieve the accuracy and completeness of this manual, but is not liable for any possible emission and printing errors. All the above specifications are subject to change without prior notice.

English Version: KG-UVA1-1105-V1

DECLARATION OF CONFORMITY

We, Quanzhou Wouxun Electronics Co.,Ltd,
No.928 Nanhuan Road,Jiangnan High Technology Industry Park,Quanzhou,
Fujian 362000,China,

declare that our product:

Product Description: Two-way Radio
Brand: WOUXUN
Model: KG-UVA1

is in compliance with the essential requirements and other relevant provisions of the R&TTE directive 1999/5/EC and carries the CE mark accordingly.
Supplementary information:
The product complies with the requirements of:

Low Voltage Directive 2006/95/EC
-EN 60950-1: 2006+A11:2009+A1:2010

Efficient use of frequency spectrum
-ETSI EN 300 086-1 V1.3.1(2008-09)
-ETSI EN 300 086-2 V1.2.1 (2008-09)

EMC Directive 2004/108/EC
-ETSI EN 301 489-1 V1.8.1 (2008-04)
-ETSI EN 301 489-5 V1.3.1 (2002-08)

Date: June 16, 2010
Place: Quanzhou,Fujian,China
Name: Danny Chen
Signature: Danny Chen

Quanzhou Wouxun Electronics Co.,Ltd.
Add:No.928 Nanhuan Road,Jiangnan High Technology Industry Park,Quanzhou,Fujian 362000,China
Tel:+86 595 28051265 Fax:+86 595 28051267
Http://www.wouxun.com

MEMO

MEMO