

Thank you for purchasing the Wouxun KG-1000G Plus mobile GMRS radio.

Your feedback makes our products better. Please share your thoughts.

feedback@buytwowayradios.com

www.buytwowayradios.com

Contents

Safety Information	10
FCC Licensing Information.....	14
Installation and Setup	15
What's Included	15
Transceiver Installation.....	16
Connecting a Power Source.....	18
Replacing the Fuse.....	19
Connecting an Antenna.....	20
Front Panel Installation	21
External Speakers	26
Hand Microphone Installation.....	27
Getting Started	28
Feature Summary.....	28
Front Panel Guide	30

LCD Guide	31
Back Panel	32
Side Panels.....	32
Hand Microphone	33
Basic Operation	34
Introducing GMRS and the KG-1000G Plus.....	34
Power On/Off and Adjusting Volume	35
Your First Transmit.....	35
Dual Display: Using Areas “A” and “B”	37
Channel and Frequency Modes	39
Channels and Privacy Codes.....	41
Using the Repeater Channels	42
Channel Scan.....	45
Scanning CTCSS / DCS Codes	48



NOAA Weather Mode.....49

Hand Microphone Hotkeys49

Menu Functions 57

 [01: SQL] Squelch.....57

 [02: W/N] Bandwidth57

 [03: BACK-LT] Backlight Timeout.....57

 [04: REPEATER] Repeater Offset58

 [05: TX-POWER] Output Power.....58

 [06: TDR] Dual Display.....59

 [07: WORKMODE] Work Mode59


 [08: FM-RADIO] FM Radio60

 [09: RX-CTCSS] Receive CTCSS Tone61

 [10: TX-CTCSS] Transmit CTCSS Tone61

 [11: RX-DCS] Receive DCS Code.....61

[12: TX-DCS] Transmit DCS Code.....	62
[13: SCANMODE] Scan Mode	62
[14: SCAN-GRP] Scan Group	63
[15: SCAN-ADD] Scan Add / Delete.....	63
[16: SCAN-CTC] Scan CTCSS	63
[17: SCAN-DCS] Scan DCS	64
[18: TONESAVE] CTCSS/DCS Tone Save Options.....	65
[19: TONESCAN] CTCSS/DCS Scan Filter.....	65
[20: PRI-SCAN] Priority Scan	66
[21: PRI-SAVE] Set Priority Channel.....	66
[22: PRI-SEL] Priority Channel Select	67
[23: STEP] Frequency Step.....	67
[24: ROGER] Roger Beep	67
[25: TOT] Transmit Overtime Timer	68



[26: TOA] Transmit Overtime Alarm	68
[27: VOICE] Voice Guide.....	68
[28: BEEP] Button Beeps.....	69
[29: BUSYLOCK] Busy Channel Lockout.....	69
[30: CH-NAME] Channel Name.....	69
[31: CH-ADD] Add Memory Channel.....	70
[32: CH-DEL] Delete Memory Channel.....	70
[33: DESCRAMB] Descrambler	71
[34: COMPAND] Compander	71
[35: SP-MUTE] Speaker Mute	71
[36: ID-EDIT] Edit Radio ID.....	72
[37: DTMF-ID] Radio ID Settings.....	72
[38: DTMF-DLY] DTMF Delay	73
[39: DTMF-INT] DTMF Interval	73

[40: DTMF-DUR] DTMF Duration.....	74
[41: SIDETONE] Sidetone Setting	74
[42: RING] Ring Time	75
[43: ALERT] Tone Alert.....	75
[44: REM-CTRL] Remote Control	76
[45: AM-MODE] AM Mode.....	76
[46: AM-AUTO] Auto Detect AM	76
[47: AUTOLOCK] Auto Lock	77
[48: AUTO-OFF] Auto Power Off	77
[49: MED-PWR] Medium Power Setting	77
[50: VOLT-ALT] Low Voltage Alert.....	78
[51: FAN-SET] Fan Activation Setting.....	78
[52: SPEAKER] Speaker Setting.....	79
[53: RPT-TONE] Squelch Tone.....	79



[54: RPT-MODE] Repeater Mode	80
[55: RPT-SPK] Repeater Speaker Setting	80
[56: RPT-PTT] Repeater PTT Setting.....	81
[57: RPT-DLY] Repeater Hold Timer.....	81
[58: WT-LED] Standby LED Color	81
[59: RX-LED] Receive LED Color	82
[60: TX-LED] Transmit LED Color	82
[61: KEY-PF1] PF1 Side Key Assignment	82
[62: KEY-A] Key A Assignment	83
[63: KEY-B] Key B Assignment.....	83
[64: KEY-C] Key C Assignment.....	83
[65: KEY-D] Key D Assignment	84
[66: RESET] Factory Reset.....	84
Advanced Operation	85

Setting Non-Standard CTCSS or DCS.....	85
Adding and Removing Channels.....	87
Repeater Mode Operation.....	90
DTMF Encoding.....	95
Remote Control.....	98
Wire Clone.....	112
Troubleshooting.....	114
Technical Information.....	116
Specifications.....	116
Standard CTCSS and DCS Tones.....	117
Default GMRS Channels and Frequencies.....	119
Optional Accessories.....	122
Limited Warranty.....	123

Safety Information

The KG-1000G Plus is an electrical apparatus and a generator of RF (Radio Frequency) energy, and you should exercise all safety precautions as are appropriate of this type of device. These safety tips apply to any device installed in a well-designed radio station.

- ⚠ Explosive atmospheres (gases, dust, fumes, etc.). Turn OFF your mobile radio while taking on fuel or while parked in gasoline service stations. Do not carry spare fuel containers in the trunk of your vehicle if your mobile radio is mounted in the trunk area.
- ⚠ Injury from radio frequency transmissions. Do not operate your mobile radio when somebody is either standing near to or touching the antenna, to avoid the possibility of radio frequency burns or related physical injury.
- ⚠ Dynamite blasting caps. Operating the mobile radio within 150m (500 feet) of dynamite blasting caps may cause them to explode. Turn OFF your mobile radio when in areas where blasting is in progress, or where “TURN OFF TWO-WAY RADIO” signs have been posted. If you are transporting blasting caps in your vehicle, make sure they are carried in a closed metal box with a padded interior. Do not transmit while the caps are being placed into or removed from the container.

- ⚠ Never allow unsupervised children to play in the vicinity of your mobile radio or antenna installation.
- ⚠ Be certain to wrap any wire or cable splices thoroughly with insulating electrical tape, to prevent short circuits.
- ⚠ Do not route cables or wires through door jambs or other locations where, through wear and tear, they may become frayed and shorted to ground or to each other.
- ⚠ Do not stand in front of a directional antenna while you are transmitting into that antenna. Do not install a directional antenna in any location where humans or pets may be walking in the main directional lobe of the antenna's radiation pattern.
- ⚠ In mobile installations, it is preferable to mount your antenna on top of the roof of the vehicle, if feasible, so as to utilize the car body as a counterpoise for the antenna and raise the radiation pattern as far away from passengers as possible.
- ⚠ During vehicular operation when stopped (in a parking lot, for example), make it a practice to switch to Low power if there are people walking nearby.

Safety Information

- ⚠ Never wear dual-earmuff headphones while driving a vehicle.
- ⚠ Do not attempt to drive your vehicle while entering frequencies or accessing menu items using the DTMF microphone, front panel or the base unit. Pull over to the side of the road and put the vehicle in park before adjusting or programming the transceiver.

Notice

- These tips are important for safe operation of your KG-1000G Plus mobile radio and its accessories. If they do not function normally, please get in touch with your dealer immediately.
- If you use components or accessories not produced by the Wouxun Company, Wouxun will not guarantee the safety and usability of the transceiver.

Caution

Please read this manual before using, as it includes important instructions for the safe handling, use and operation of your radio.

FCC Compliance

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 US FEDERAL LAW.

Safety Information

Radio Operation and EME Exposure

Use only an antenna designed for use with this radio and its operating frequencies. Unauthorized modifications or attachments may damage the radio and violate FCC rules.

DO NOT hold the antenna while the radio is in use.

DO NOT attempt to use the radio with a damaged antenna or feed line.

FCC Licensing Information

The Wouxun KG-1000G Plus is FCC Part 95E type accepted for use on the GMRS. The KG-1000G Plus operates on General Mobile Radio Service (GMRS) frequencies according to the Federal Communications Commission (FCC) Rules in the United States. As such, a GMRS license is required to transmit on these frequencies. To obtain an FCC license for the GMRS, please go to the FCC's web site and complete the on-line application or request FCC Form 605.

What's Included

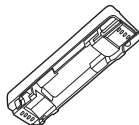
Carefully unpack the contents of the box and be sure that you have the items in the list below. If any items are missing, please contact your dealer.



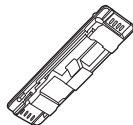
Mobile/Base
Transceiver



Hand
Microphone



Inclined Switchboard
Panel (Already Installed
on Mobile Transceiver)



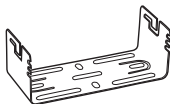
Flat Switchboard
Panel



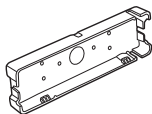
Screw Sets



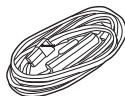
Hand
Microphone
Hangers



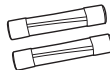
Mobile Mounting
Bracket



Remote Front
Panel Bracket



Mobile Power
Cord



Fuse



Extension
Cable



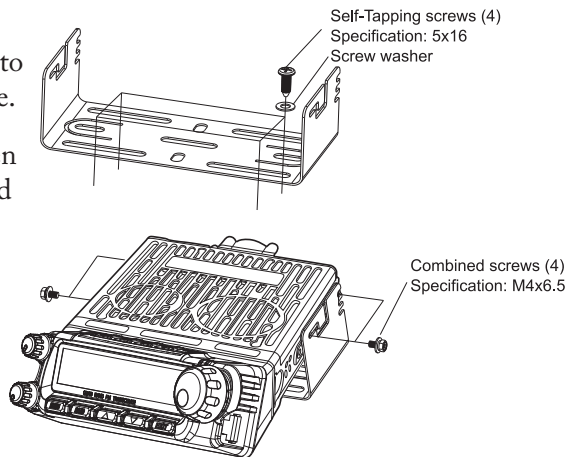
User Manual

Installation and Setup

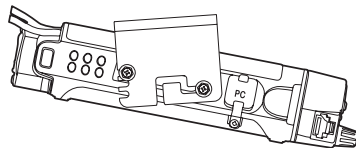
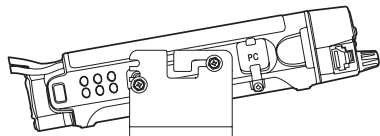
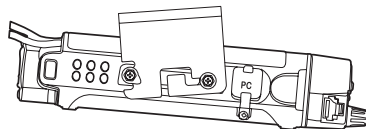
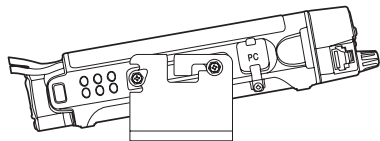
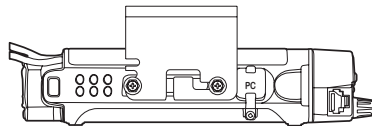
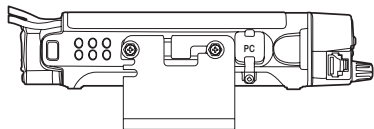
Transceiver Installation

Choose a safe place inside your vehicle to install the transceiver, considering a location that would not cause harm to passengers while the vehicle is in motion or in case of an accident or sudden braking. Install the transceiver in an area with good ventilation and away from direct exposure to the sun.

1. Use the supplied self-tapping screws to install the support bracket in the vehicle.
2. Set the transceiver in the bracket, then insert the supplied combined screws and tighten, ensuring that the screws are fastened tightly. This will ensure the support bracket and the transceiver do not become loose when the vehicle hits bumps or shakes.



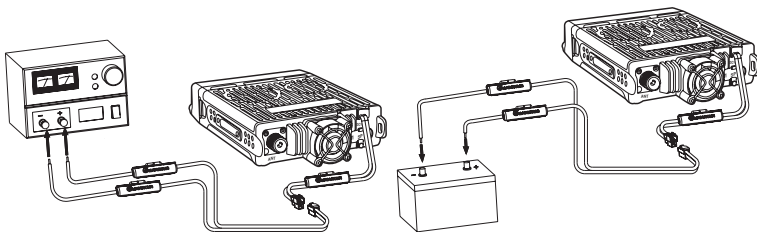
3. Several screw slots are provided along the side of the support bracket to allow for installing the transceiver at different angles.



Installation and Setup

Connecting a Power Source

The power requirement of the transceiver ranges from $13.8V \pm 15\%$. If the power source exceeds 16V, TX will be disabled but RX will operate as normal. If the power source falls below 11.5V, the transceiver will automatically shut off to prevent it from draining the battery and affecting the normal operation of the vehicle (See VOLT-ALT, page 78).



Important

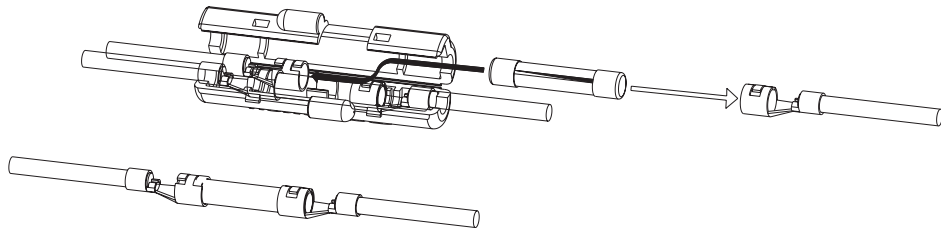
The transceiver's operating voltage is $13.8V \pm 15\%$ DC.

Replacing the Fuse

In the event that the transceiver blows a fuse, first determine the cause, then replace the fuse. If after installing the new fuse it blows again, disconnect the power source immediately and contact your authorized Wouxun dealer for assistance.

The specified fuse current is 15A. The specified power source current is 20A and above.

Refer to the following diagram for fuse installation. Be sure the fuse is properly seated and secured to the copper set.

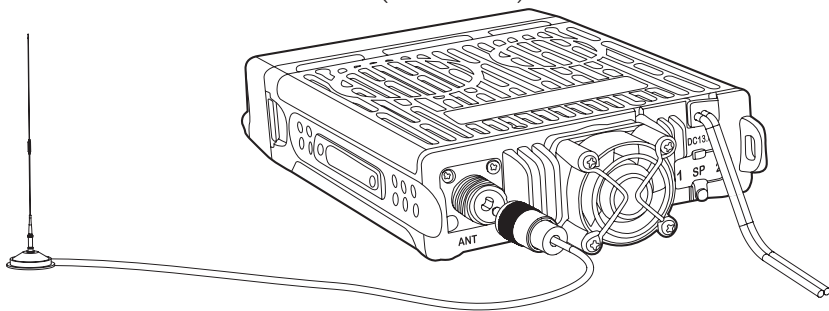


Installation and Setup

Connecting an Antenna

Before using the transceiver, you must correctly connect a properly tuned and installed antenna. To get the best results, be sure the antenna is tuned for the frequencies that you intend to use, and the antenna's impedance is 50 ohms. **Using an incorrect or improperly installed antenna could harm the transceiver. Never attempt to transmit without an antenna connected!**

The transceiver is equipped with an SO-239 (UHF female) antenna connector. It will require an antenna cable with a PL-259 (UHF male) connector.

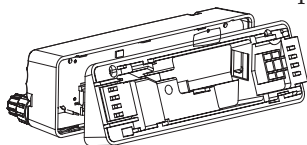


Front Panel Installation

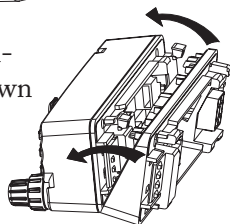
The transceiver includes two switchboard panels for the front display: an angled panel for an inclined display, and a flat panel for a traditional display. The angled panel is installed by default.

Install Inclined Switchboard Panel

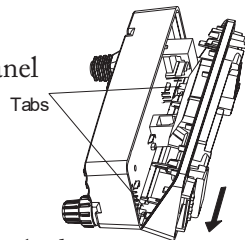
1. Align switchboard with front panel.



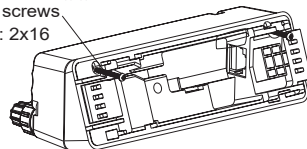
3. Close switchboard as shown



2. Insert tabs into base of front panel



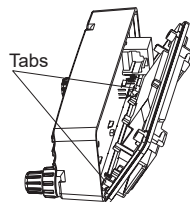
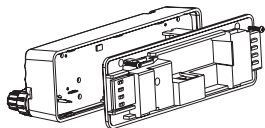
4. Fasten using supplied screws
Self-Tapping screws
Specification: 2x16



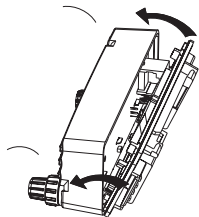
Installation and Setup

Install Flat Switchboard Panel

1. Align switchboard with front panel.
2. Insert tabs into base of front panel

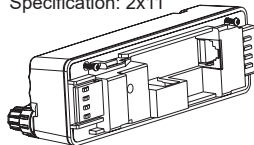


3. Close switchboard as shown



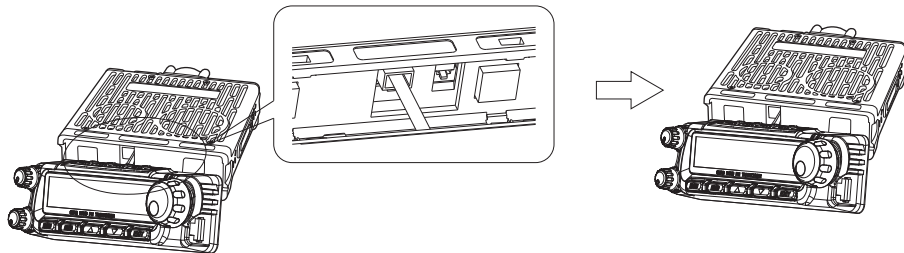
4. Fasten using supplied screws

Self-Tapping screws (2)
Specification: 2x11

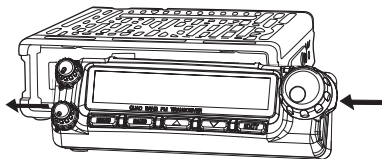


Connecting Front Panel to Transceiver

1. Connect the 8-pin front panel cable to both the transceiver and the front panel.



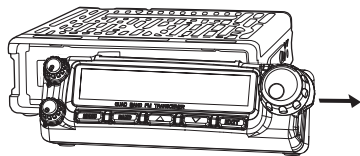
2. With the front panel slightly off-center to the right, hold the front panel flush with the transceiver and slide to the left to lock into place.



Installation and Setup

Removing Front Panel from Transceiver

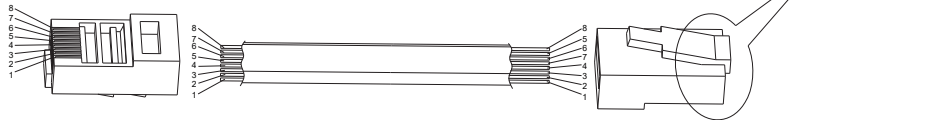
1. Press and hold tab on the right side of the switch-board / front panel while sliding the front panel in the direction of the arrow.



Front Panel to Transceiver Cable Specifications

The cable connecting the front panel to the transceiver uses 8-pin RJ-45 type connectors. A short cable is provided for installations where the front panel will be attached to the transceiver. A longer extension cable is also included for use in installations where the front panel will be mounted detached from the transceiver.

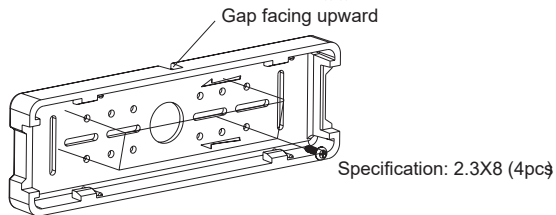
Please note, a standard ethernet cable cannot be used as a replacement for this cable. This cable requires that pins 5 and 7 be reversed on one of the connectors.



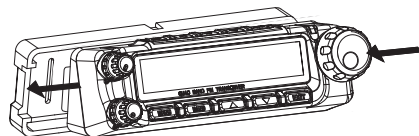
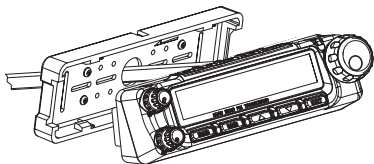
Installing the Front Panel Support Bracket

The front panel can be installed detached from the transceiver body. This allows for considerable flexibility when considering where to install the KG-1000G Plus. For an installation with a detached front panel, you will use the included support bracket.

1. Secure the support bracket using the supplied screws. Be sure to leave room for the front panel extension cable to be inserted through the back.



2. Feed the extension cable through the center of the support bracket, then connect to the front panel. Attach front panel to support bracket as shown.



Installation and Setup

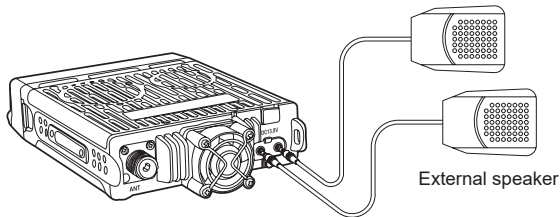
External Speakers

The KG-1000G Plus is equipped with two 3.5mm external speaker jacks on the back of the transceiver. Connecting speakers to one or both of these ports will direct audio to the external speaker instead of the speaker inside the radio body.

The sound from areas “A” and “B” are output separately, allowing you to install a different speaker for each area. The rubber speaker port cover has labels embedded over each port. The port labeled “1” corresponds to the audio output for Area “A” and the port labeled “2” corresponds to Area “B”.

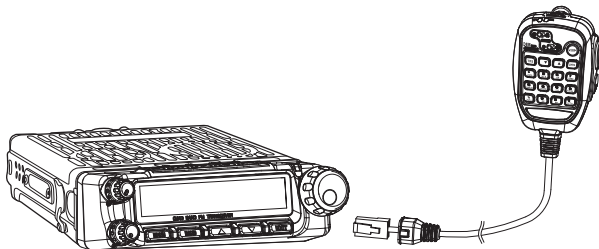
To have all audio directed to a single external speaker, a 3.5mm Y-adapter is required. The Y adapter will need two 3.5mm male connectors and one 3.5mm female connector.

The radio must be powered off/on after external speakers are connected before they will become active.



Hand Microphone Installation

To connect the included hand microphone to the transceiver, plug the microphone into the port on the right side of the front panel.



Installing the Magnetic Microphone Mount

The KG-1000G Plus includes a magnetic microphone mount kit. To install the mount, unscrew the round hook on the back of the mic, screw in the magnet and attach the magnetic hanger to the dash with the adhesive pad.

Getting Started

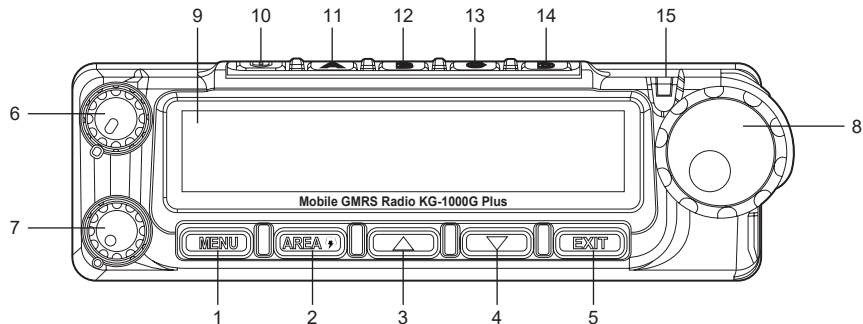
Feature Summary

- 30 GMRS Channels
- 8 Built-In GMRS Repeater Channels
- Up to 50W Output Power
- Built-in NOAA Weather Channels
- Simultaneous Dual Mode Operation
- Simultaneous Reception
- Tune Specific Frequencies Directly (Frequency Mode)
- Large LCD Dual Frequency Display
- Three Color Selectable LED
- Up to 999 Custom Channels
- Remote Front Panel Mounting
- PC Programming Software Support
- Repeater Mode (Requires 2nd Unit)
- Wide Receive (RX) Frequency Range:
50-53.995 & 108-179.995 MHz
320-349.995 & 400-479.995 MHz
700-985 MHz
- Transmit (TX) Frequency Range:
462.550-462.725MHz (GMRS Channels 1-7 and 15-22)
467.550-467.725MHz (GMRS Repeater Channels 23-30)
- 4 TX Power Levels (L/M1/M2/H)
- Standard and Non-Std CTCSS/DCS
- Split CTCSS/DCS Tone Support
- CTCSS/DCS Tone Scan
- Wide/Narrow Bandwidth Selectable

- DTMF Hand Microphone with Speaker, TX/RX Indicator and Volume Control
- 4 Configurable Front Panel Buttons
- FM Radio Mode
- Comander
- Descrambler (8 Groups)
- Power Management
- English Voice Guide
- Repeater Offset Support
- Receive AM Transmissions
- Auto-Detect AM Transmissions
- Single Tone Pulse Frequency
- Minimum Operating Voltage Settings
- Adjustable Cooling Fan Control
- Automatic Temperature Testing
- Scan with CTCSS / DCS Detection
- Simultaneous Scanning on A/B Areas
- Priority Channel Scanning
- Supports 10 Scan Groups
- Dual Speakers
- Multiple Speaker Output Settings
- External Speaker Support
- DTMF Encoding & Decoding
- Incoming Caller ID Display
- Group Call, All Call and Select Call
- Stun and Kill Function
- Custom Display Message
- Priority Channel Hotkey
- Configurable Hand Mic Button

Getting Started

Front Panel Guide



1. Menu / Enter Key

2. A/B Area Switch / Weather Mode

3. Up Key

4. Down Key

5. Exit / Cancel Key

6. "A" Area Volume Control

7. "B" Area Volume Control

8. Frequency / Channel Knob

9. LCD

10. On / Off Button

11. Configurable Hotkey "A" (Page 83)

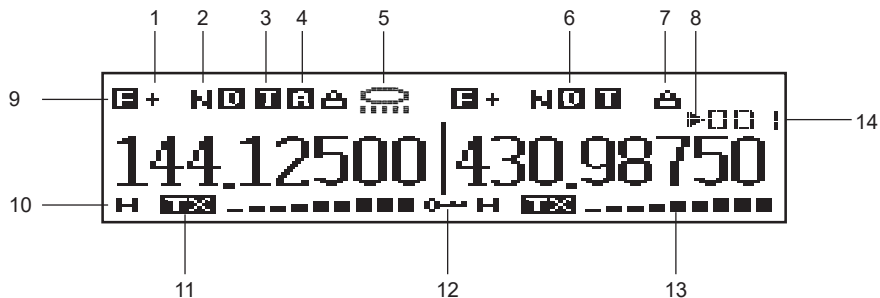
12. Configurable Hotkey "B" (Page 83)

13. Configurable Hotkey "C" (Page 83)

14. Configurable Hotkey "D" (Page 84)

15. Status Indicator Light

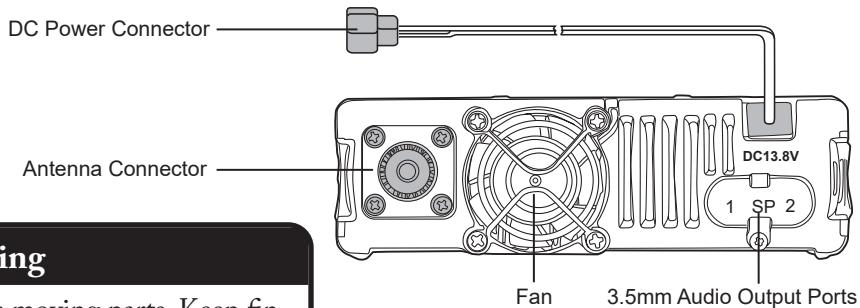
LCD Guide



- | | |
|--------------------------------------|-------------------------------------|
| 1. Repeater Channel Indicator | 8. Priority Channel Indicator |
| 2. Bandwidth Indicator (Wide/Narrow) | 9. Menu Setting Mode Indicator |
| 3. DTMF Mute | 10. TX Power Indicator (L/M/H) |
| 4. AM Mode Indicator | 11. Repeater Mode Indicator (RX/TX) |
| 5. Weather Mode Indicator | 12. Keypad Lock Indicator |
| 6. DCS/CTCSS Indicator (D/C) | 13. Signal Strength Indicator |
| 7. Descramble Indicator | 14. Channel Number / Menu Item |

Getting Started

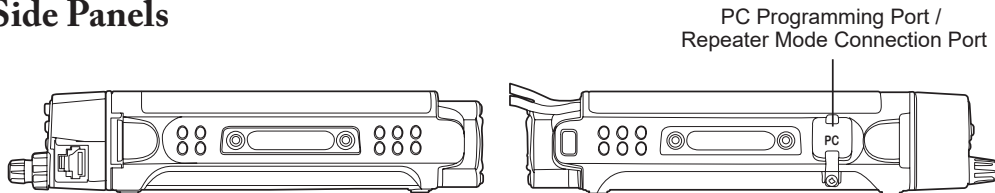
Back Panel



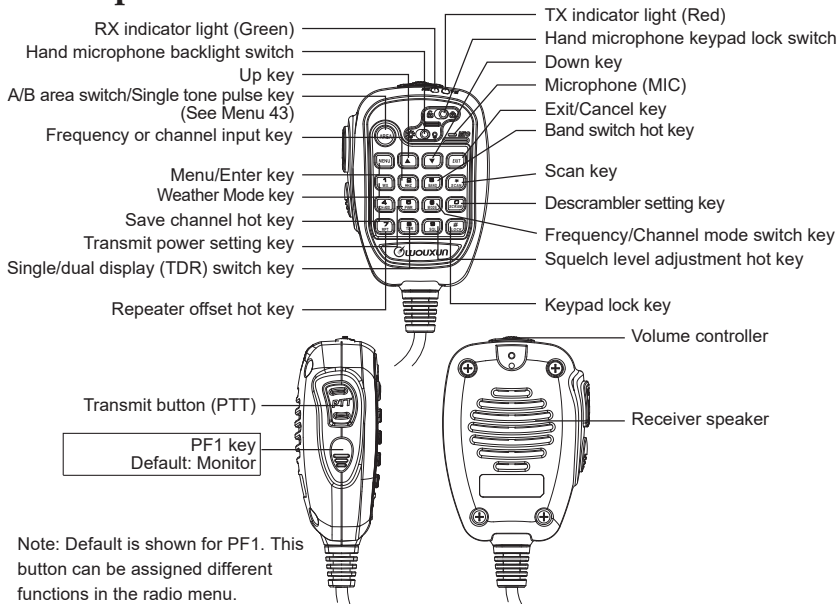
Warning

Fan has moving parts. Keep fingers and other body parts away.

Side Panels



Hand Microphone



Introducing GMRS and the KG-1000G Plus

The General Mobile Radio Service (GMRS) is a two way radio service that offers some powerful benefits. Users are allowed to transmit at high power, up to 50 watts, and use advanced equipment, such as repeaters that enable you to transmit over large areas. The GMRS requires the user to purchase a license, and a single license covers the user and their extended family for 10 years.

The KG-1000G Plus was designed to allow you to take advantage of all that GMRS has to offer and more. Right out of the box this radio is configured to allow you to transmit on the 15 high powered GMRS simplex channels, as well as the 8 repeater channels. (Channels 8-14 are only authorized for very low output power and are listen-only.) NOAA weather mode is available at the touch of a button, as well an FM radio.

Read this chapter to learn the basics of using your new KG-1000G Plus radio, such as selecting a channel, transmitting and receiving, using the dual display, scanning, and using frequency mode. Before continuing, be sure your radio is powered on and connected to an antenna!

Power On/Off and Adjusting Volume

Press the power button on the top left side of the front panel to power on the radio.

To adjust the volume, use one of the two volume knobs located on the left side of the front panel when the radio is powered on. The volume knob on top controls the volume on Area “A”. The volume knob on the bottom controls Area “B”. Turning the knob clockwise increases the volume, counter-clockwise decreases it.

Press the power button on the top left side of the front panel to power the off the radio.

Your First Transmit

Selecting a Channel

When you power on your KG-1000G Plus for the first time, the display will likely show “GMRS-01” on the left area. GMRS-01 is the name of the currently selected channel. Turn the Frequency / Channel Knob on the right side of the display to navigate through the list of channels.

Basic Operation

As a licensed GMRS user you are allowed to use any of the channels. The channel you choose isn't as important as making sure it's the same channel the rest of your group is using. Be sure the channel you select is also supported by the equipment everyone else in your group is using.

Most rules for GMRS are the same for all channels, but there are a few differences, particularly concerning output power. GMRS channels can be broken up into 4 groups, with the following differences:

- Transmitting on channels 1-7 is limited to 5 watts of output power.
- Transmitting on channels 8-14 is limited to a half watt of output power. The KG-1000G Plus is not capable of transmitting on these channels, as it is prohibited by the FCC for mobile radios to do so (although you can listen).
- Transmitting on channels 15-22 is limited to 50 watts of output power.
- Channels 23-30 receive on the same frequencies as channels 15-22, but transmit on a special offset frequency set aside for repeaters. See page 42 for more information about using the KG-1000G Plus with repeaters.

Transmitting and Receiving

With a channel selected, the radio is actively “listening” for an incoming signal on that channel. When a signal is detected, the transmission will be heard through the radio’s speaker. Please note, the Squelch setting (page 57) determines how strong a signal needs to be in order to be detected.

To transmit, first be sure the channel is clear and then hold the hand microphone a few inches from your mouth. Hold down the PTT button on the side of the microphone while talking and release the PTT when finished.

Dual Display: Using Areas “A” and “B”

The KG-1000G Plus is two radios in one! The dual display function allows you to monitor two channels at the same time. While this may sound complex, the KG-1000G Plus is designed to make this powerful feature easy to use.

The display is divided in half with the left side referred to as “Area A” and the right side referred to as “Area B”. Each area controls a separate radio. A down arrow indicator above the channel/frequency display indicates which area is primary. When you per-

Basic Operation

form an operation on the radio, such as changing channels or transmitting, that operation is performed on the currently active area.

Turning the Dual Display On and Off

The dual display is off by default on the KG-1000G Plus. By default, the text “KG-1000G+” will be displayed in the inactive area when the dual display is off. This text can also be customized with up to 8 characters using the programming software.

Use the TDR function to toggle between a single and dual display. By default, the TDR function is assigned to Hotkey “C”, but it can also be activated by pressing the number 8 key on the hand microphone (labeled TDR).

Changing the Primary Area

With Dual Display on, press the AREA key on the front panel or on the hand microphone to switch the primary area. You will see the down arrow indicator above the frequency or channel move from one area to the other.

With Dual Display off, pressing the AREA key will switch the currently active area as

well, but will also turn off the previously active area. For example, with Area “A” on and Area “B” off, pressing AREA would turn on Area “B” and turn off Area “A”.

Important!

When the A or B area of the screen displays an “▼” icon, this indicates that side is the Primary and the other area is the secondary side. This is very important, as all of the active operations will be performed on the Primary side.

Channel and Frequency Modes

The KG-1000G Plus supports tuning frequencies via two methods: channel and frequency modes.

In channel mode, frequencies that have been saved can be selected from the channel list. This is the default mode and is the most convenient way to access commonly used frequencies. The transceiver is pre-configured with 30 GMRS channels, but allows users to save custom channels as well (up to 999). In channel mode, turning the Channel/

Basic Operation

Frequency Knob or pressing an arrow key will tune to the next channel in the list.

Frequency mode (also referred to as VFO mode) allows you to tune directly to a specific frequency regardless of the frequency having been previously saved. In frequency mode, turning the Channel/Frequency Knob or pressing an arrow key will tune to a higher or lower frequency. The STEP menu option (page 67) allows you to adjust the step between each frequency. To enter a frequency directly, press the number 2 key on the hand microphone (labeled MHZ) and type the frequency using the keypad.

The KG-1000G Plus supports the following frequency bands:

KG-1000G Plus Frequency Bands	
50.000 - 53.995 MHz	108.000 - 179.995 MHz
320.000 - 349.995 MHz	400.000 - 479.995 MHz
700.000 - 985.000 MHz	

Switching Bands in Frequency Mode

In frequency mode, tuning frequencies using the Channel/Frequency Knob or arrow keys will not automatically move from one frequency band to another. To switch to a different frequency band, press the number 3 key on the hand microphone (labeled BAND) while in frequency mode.

Reminder

The KG-1000G Plus will only transmit on GMRS frequencies authorized for 5 watts and higher. Band and frequency support for other frequencies is provided for listening only.

Channels and Privacy Codes

The KG-1000G Plus supports 30 built-in GMRS channels and 155 privacy tones and codes. To successfully communicate between your stations or members of your group, all the connecting radios must be using the same channel and privacy (CTCSS or DCS) code.

The KG-1000G Plus supports both standard and non-standard CTCSS tones and

Basic Operation

DCS codes. These tones and codes can be enabled and configured in the [RX-CTCSS], [RX-DCS], [TX-CTCSS] and [TX-DCS] menu options (pp 61-62). Instructions for entering non-standard tones and codes can be found in the Advanced Operations section of this manual (page 85).

The KG-1000G Plus supports 999 customizable memory channels. Instructions for adding and deleting channels are located in the Advanced Operations section (page 87).

Using the Repeater Channels

The KG-1000G Plus is pre-configured with 8 GMRS repeater channels. The channels are numbered 23-30 and named RPT-15 through RPT-22.

What is a Repeater?

In basic terms, a repeater is a device that is commonly used to increase the range of two way radios. Repeaters will receive a transmission on one frequency and simultaneously rebroadcast that transmission on a different frequency. Repeaters are often set up in

a fixed location and connected to an antenna that is mounted at a higher elevation to provide better range than is normally available with radio-to-radio (simplex) communications.

Locating a Repeater

Using GMRS repeaters can significantly increase the range of your radio, but just tuning to one of the repeater channels isn't necessarily going to work. You first have to be sure there is a repeater listening on that channel's frequency, and you have to be within range of that repeater.

The best resource for locating GMRS repeaters is the website www.myGMRS.com. This site has an extensive database of GMRS repeaters throughout the United States. It is important to keep in mind that a GMRS repeater is not necessarily intended for public use. They are owned by individuals and are sometimes intended for private use or require permission to use. Before connecting to a GMRS repeater, be sure that you have permission or that the owner is fine with public use. The description on the myGMRS website usually indicates if permission is required and provides a way to get in touch with the owner.

Basic Operation

As a licensed GMRS user you can also operate your own repeater. The KG-1000G Plus can operate as a repeater when paired with a second unit and connected with a data cable. For more information, read the section on Repeater Mode on page 90.

KG-1000G Plus Repeater Channels

Channels 23-30 (RPT-15 through RPT-22) have the same receive frequency as channels 15-22 (GMRS-15 through GMRS-22). However, the transmit frequency for these channels is different, and is assigned to a frequency specifically designated as a GMRS repeater input frequency. The following are the default frequencies for these channels.

Number	Channel	Receive Frequency	Transmit Frequency
23	RPT-15	462.5500	467.5500
24	RPT-16	462.5750	467.5750
25	RPT-17	462.6000	467.6000
26	RPT-18	462.6250	467.6250
27	RPT-19	462.6500	467.6500

Number	Channel	Receive Frequency	Transmit Frequency
28	RPT-20	462.6750	467.6750
29	RPT-21	462.7000	467.7000
30	RPT-22	462.7250	467.7250

Channel Scan

The [*SCAN] key controls the scan function. To activate Channel Scan, press the [*SCAN] key. The radio will scan each channel for activity, starting from the current channel.

Pressing the [UP] / [DOWN] keys while scanning will change the direction of the scan from low to high ([UP]) or high to low ([DOWN]). Press the [*SCAN] key any other key to stop the scan. Refer to the Scan Mode menu item (page 62) for more information on the types of scans available.

The scan function can also be assigned to the PF1 or A-D programmable keys from the menu (pp. 82-84).

Basic Operation

Simultaneous Scanning on the A and B Areas

The A and B areas can perform a scan at the same time. To do this, press [SCAN] to activate the scan on the A Area, press [AREA] to go to the B area, then press [SCAN] to activate the scan on B area. Both areas should scan simultaneously.

- When the PTT is pressed to transmit on the Primary Frequency Area during a scan, the Secondary area will stop scanning temporarily. When the PTT is released at the end of transmission, scanning on the Secondary area will resume.
- During a scan, pressing the [SCAN] key will only stop the scan on the currently selected Area.

Important!

While scanning the Secondary frequency area, some settings on the Primary frequency area will be prohibited. These include Add Channel (CH-ADD), Scan Mode (SCANMODE), Delete Channel (CH-DEL), Channel Name (CH-NAME) and Repeater Mode Settings (RPT-MODE).

Priority Channel Scan

When the Priority Channel Scan function is activated using the PRI-SCAN menu option (page 66), the KG-1000G Plus will check the priority channel every 3 seconds for activity during normal operation.

The PRI-SCAN menu item has options ON-STBY and ON-ALWYS. If activity is detected on the priority channel with ON-STBY selected, the priority channel activity will be heard only if the radio is not receiving a transmission on the current channel. If ON-ALWYS is selected, the priority channel activity will be heard even if a transmission is already being received on the current channel.

The PRI-SAVE menu option (page 66) can be used to set the current channel as the priority channel.

The PRI-SEL menu option (page 67) can be used to quickly switch to the priority channel. This function can also be assigned to the PF1 or A-D programmable keys from the menu.

Scanning CTCSS / DCS Codes

The KG-1000G Plus is equipped with the ability to scan an incoming signal for a CTCSS or DCS tone and update the current channel's tone settings once the tone is identified.

To activate CTCSS / DCS scan, press the [MENU] key and navigate to the TONE-SCAN menu item. Press [MENU] again to enter the menu item and you will see "SEEK QT" on the screen.

The scan will begin when a signal is received. The scan will stop when the signal ends and resume from where it left off the next time the signal is received, until it identifies the correct tone. Use the [UP]/[DOWN] arrow keys to scan in a different direction. Use the [PF2] side key to toggle between scanning the standard CTCSS, positive DCS, and negative DCS tone list. See the TONESCAN menu item (page 65) for more information.

NOAA Weather Mode

NOAA Weather Mode allows you to quickly access weather information from a local NOAA broadcast station.

To activate NOAA Weather Mode, press and hold the AREA key on the front panel for 2 seconds or press the number 1 [WX] key on the hand microphone. The display will change to show a NOAA broadcast station frequency starting with 162 MHz. Use the Channel/Frequency Knob or the arrow keys to navigate to your preferred NOAA station. Your previously selected station will be recalled each time you enter this mode.

To locate the NOAA station closest to your location, visit the following site:

https://www.weather.gov/nwr/station_listing

Hand Microphone Hotkeys

(1) [WX] Weather Mode Hotkey

When the transceiver is in standby, press the [WX] key on the handset or press and

Basic Operation

hold the AREA key on the transceiver for 2 seconds to enter and exit Weather Mode.

(2) [MHZ] Frequency or Channel Selection Hotkey

When the transceiver is in frequency mode, press the [MHZ] key to enter a specific frequency. Eight hyphens will appear. Enter the 6 digit frequency. The last 2 digits will be automatically entered, based on the following:

- 1. When the 6th digit is 0 or 5, then the 7th and 8th digits will be 0.
- 2. When the 6th digit is not 0 or 5, the 7th and 8th digits will be 25, 50 or 75 according to the 6.25k step frequency of the 5th digit.

If any keys other than 0-9 are pressed while entering the 6-digit frequency, it will exit the frequency setting.

In channel mode, press the [MHZ] key to tune to a specific channel number. The first digit of the current channel number will begin flashing. Enter the desired channel number using 3 digits. For example, if you would like channel 9, enter 009.

(3) [BAND] Band Switching Hotkey

The KG-1000G Plus can receive signals on multiple bands and frequency ranges.

In frequency mode, press the [BAND] key on the hand microphone to switch the current band. Area A (left side) supports all available bands. Area B (right side) has 2 selectable bands: 136-174.995 MHz and 400-479.995 MHz.

(4) [CH-ADD] Add Memory Channel Hotkey

When in Channel mode, channel information can be cloned to the specified channel with the exception of Channel Name and Channel Scan settings.

When in Frequency (VFO) mode, you can set the repeater offset (see MENU 4, p 58) and other options, then save them to the specified channel.

For example, to save a channel in Frequency mode with a 462.550 receive frequency and a 467.550 transmit frequency and a 67.0 transmit CTCSS tone:

1. Tune to the frequency 462.550, press [MENU] + [1] + [0] to enter the Trans-

Basic Operation

mit CTCSS setting, press [UP] / [DOWN] to select the 67.0 tone, and then press [MENU] to confirm.

2. Press [7] on the hand microphone until a “+” appears on the display. This activates the GMRS repeater offset, indicating a 5 MHz offset will be added to the RX frequency to determine the TX frequency.

3. Press [4] on the hand microphone to enter the Add Channel function, enter the channel number, then press [MENU] to confirm the setting and return to standby mode.

(5) [PWR] Output Power Hotkey

When the radio is in standby, the [PWR] key toggles the power level. Every time the key is pressed, the power level changes from high, to medium, to low, then back to high again. Medium output power has two levels (See MENU 49, p 58). Note this function will not be available when tuned to GMRS frequencies legally limited to 5 watts.

(6) [MODE] Frequency/Channel Mode Hotkey

This key toggles between Channel (MR) and Frequency (VFO) modes every time the key is pressed. Channel mode has three different channel display types: Channel Number display mode, Frequency+Channel Number display mode, and Channel Name display mode.

(7) [RPT] Repeater Offset Hotkey

The REPEATER menu option (page 58) allows you to transmit to a repeater while in Frequency Mode. If you are tuned to a GMRS receive frequency that is valid for repeater use and turn the REPEATER menu option ON, the KG-1000G Plus will transmit to the repeater input frequency when the PTT is pressed. The REPEATER menu option is ignored when the radio is not tuned to one of the 8 GMRS repeater transmit frequencies.

NOTE: When switching frequencies, the frequency direction will be skipped if the frequency direction results in an error.

(8) [TDR] Single or Dual Display Hotkey

When in standby, press the [TDR] key to switch between single and dual display

Basic Operation

modes.

(9) [SQL] Squelch Level Hotkey

The SQL function allows adjustment of the squelch setting. Press the [SQL] key, then press the UP / DOWN arrow keys or enter 0-9 to choose the desired squelch level. Press [MENU] to confirm, then press [EXIT] to save the setting and exit the menu.

(0) [SCRAM] Descrambler Hotkey

The SCRAM function allows you to activate the descrambler function for the selected frequency or channel. Selecting this option prompts for the selection of a scrambling protocol (1-8), or OFF to disable the descrambler.

Please note, GMRS rules do not allow for frequency scrambling. Activating this feature is only useful when using the KG-1000G Plus to listen to scrambled transmissions on non-GMRS frequencies.

(*) [SCAN] Scanning Hotkey

In standby, press the [SCAN] key on the hand microphone to initiate a channel or frequency scan. In Frequency (VFO) mode, the radio will scan by the step frequency. In Channel (MR) mode, the radio will scan the channels programmed into it, starting from the current channel. Pressing the UP/DOWN keys while scanning will change the direction of the scan from low to high (UP) or high to low (DOWN). Press any key to stop the scan. Refer to MENU 13 (p 62) for more information on the types of scans available.

(#) [LOCK] Keypad Lock Hotkey

When the radio is in standby, pressing the [LOCK] key locks the keypad from the primary frequency area. When the keypad is locked, all keys on the keypad of the hand microphone and the front panel are locked, with an exception of the [AREA] key, which can switch to the secondary frequency area.

[ARROW UP] Up key

In frequency mode, press the [UP] key to go to a higher frequency in the next higher frequency step.

Basic Operation

In channel mode, press the [UP] key to go to the next higher channel.

[ARROW DOWN] Down key

In frequency mode, press the [DOWN] key to go to a lower frequency in the next lower frequency step.

In channel mode, press the [DOWN] key to go to the next lower channel.

[MENU] Confirmation key

Pressing this key enters the menu, selects menu options and saves them to the radio.

[01: SQL] Squelch

Function: The squelch function mutes the speaker when no signal is detected. Adjusting the squelch sensitivity allows you to control how strong of a signal is required in order to unmute the speaker. Selecting a lower number will allow weaker signals to be heard, higher numbers require a stronger signal. Selecting [0] will unmute the speaker at all times. Squelch is set independently for each area. The squelch adjustment can be heard while the setting is being changed.

Options: 0-9

Default: 5

[02: W/N] Bandwidth

Function: Adjusts the bandwidth settings. The KG-1000G Plus can operate on Wide (25KHz) or Narrow (12.5KHz) bandwidth.

Options: WIDE/NARR

Default: WIDE

[03: BACK-LT] Backlight Timeout

Menu Functions

Function: Sets the timeout of the LCD display backlight while the radio is in standby. The timer can be set from 1-20 seconds in one second increments. It can also be set to turn off immediately or always remain on.

Options: OFF/ALWAYS/1-20S

Default: ALWAYS

[04: REPEATER] Repeater Offset

Function: Sets the offset frequency for a repeater channel. When this option is activated the KG-1000G Plus will transmit to the repeater input frequency when the radio is tuned to a frequency that has a valid GMRS repeater offset. This option is only available in frequency mode and will be ignored on frequencies that do not have a GMRS repeater offset. The offset is fixed to 5.000 MHz.

Options: OFF/ON

Default: OFF

[05: TX-POWER] Output Power

Function: Sets the transmit power of the radio. The radio has the following power options: Low, Medium and High. Low power is 5 watts. Note, the transmit

power for GMRS channels 1-7 are restricted by the FCC to 5 watts and can be used on Low power only. The transmit power of channels 15-22 and RPT15-22 can be used on High power. The KG-1000G Plus will automatically adjust the power to the FCC limits. Note: Medium Power has two levels, 20-WATTS and 10-WATTS. This power level can be set in the MED-PWR menu option 49 (page 77). The additional MED-PWR setting gives the KG-1000G Plus a total of four power options.

Options: HIGH/MEDIUM/LOW

Default: (Varies by channel)

[06: TDR] Dual Display

Function: Toggles between a single and dual display. This feature can be enabled or disabled.

Options: OFF/ON

Default: OFF

[07: WORKMODE] Work Mode

Function: Changes the working mode of the radio. This is equivalent to pressing the

Menu Functions

[MODE] button on the keypad.

Options: CH-NAME/FREQ/CH-NUM/CH-FREQ

Default: CH-NAME

CH-NAME: Channel Mode. Displays the channel name (Example: GMRS-01)

FREQ: Frequency Mode. Allows directly tuning any frequency in the wide receive range of the KG-1000G Plus. The radio transmits on GMRS frequencies only.

CH-NUM: Channel Mode. Displays the channel number (Example: CH-001)

CH-FREQ: Channel Mode. Displays the channel frequency (Example: 462.56250)

[08: FM-RADIO] FM Radio

Function: Enables the FM Radio. Only available on “Area A”.

Options: ON/OFF

Default: OFF

Note: To access the FM Radio, Press [MENU] on the front panel or hand microphone to begin the FM Radio scanning function. Press the lock key to activate the radio storage function, and press the lock key again to enter the radio channel menu. Press the [UP] and [DOWN] keys to choose the radio channel, then

press [MENU] to confirm.

[09: RX-CTCSS] Receive CTCSS Tone

Function: Sets the receiving CTCSS tone for each channel. Use the arrow keys to select, or keypad to enter the tone. 50 standard tones are supported as well as non-standard tones. See page 85 to learn how to enter non-standard tones.

Options: OFF/standard CTCSS/Non-standard CTCSS

Default: OFF

[10: TX-CTCSS] Transmit CTCSS Tone

Function: Sets the transmit CTCSS tone for each channel. Use the arrow keys to select, or keypad to enter the tone. 50 standard tones are supported as well as non-standard tones. See page 85 to learn how to enter non-standard tones.

Options: OFF/Standard CTCSS/Non-standard CTCSS

Default: OFF

[11: RX-DCS] Receive DCS Code

Function: Sets the receiving DCS code for each channel. Use the arrow keys to select

Menu Functions

your preferred code and then MENU to confirm. See page 85 to learn how to enter non-standard DCS codes.

Options: OFF/Standard negative & positive DCS/Non-standard DCS

Default: OFF

[12: TX-DCS] Transmit DCS Code

Function: Sets the transmit DCS code for each channel. Use the arrow keys to select your preferred code and then MENU to confirm. See page 85 to learn how to enter non-standard DCS codes.

Options: OFF/Standard negative & positive DCS/Non-standard DCS

Default: OFF

[13: SCANMODE] Scan Mode

Function: Scan mode settings

Options: TO/CO/SE

Default: SE

TO: When a signal is detected, scanning stops. Scanning will resume if no operation is carried out within 5 seconds.

CO: When a signal is detected, scanning stops and resumes 3 seconds after the signal is lost.

SE: When a signal is detected, scanning stops.

[14: SCAN-GRP] Scan Group

Function: Categorizes the programmed channels into different scan groups. You can choose to scan one specific group or all groups. Not available in Repeater Mode.

Options: ALL/GROUP 01-10

Default: ALL

[15: SCAN-ADD] Scan Add / Delete

Function: Adds a channel to the list of channels to scan. Not available in Frequency Mode.

Options: ON/OFF

Default: ON

[16: SCAN-CTC] Scan CTCSS

Menu Functions

Function: Scans the incoming signal for CTCSS tones to identify or confirm the correct tone. This can be useful when your CTCSS tone does not match the tone used by other members of your group, or to determine which tone they are using. This function must be activated while receiving a signal.

Options: None. Choose the function and press [MENU] to activate the scan.

Note: The scan will stop when the signal ends and resume from where it left off the next time the signal is received, until it identifies the correct tone. Use the [UP]/[DOWN] arrow keys or channel knob to make it scan in a different direction.

[17: SCAN-DCS] Scan DCS

Function: Scans the incoming signal for DCS codes to identify or confirm the correct code. This can be useful when your DCS code does not match the code used by other members of your group, or to determine which code they are using. This function must be activated while receiving a signal.

Options: None. Choose the function and press [MENU] to activate the scan.

Note: The scan will stop when the signal ends and resume from where it left off the next time the signal is received, until it identifies the correct tone. Use the

[UP]/[DOWN] arrow keys or channel knob to make it scan in a different direction.

[18: TONESAVE] CTCSS/DCS Tone Save Options

Function: This item determines how a CTCSS or DCS tone is saved after a CTCSS/DCS scan. There are three save options. Note: Not available in Repeater Mode.

Options: RX/TX/TX-RX

Default: RX

RX: Saves the scanned tone to the RX-CTCSS/DCS setting

TX: Saves the scanned tone to the TX-CTCSS/DCS setting.

TX/RX: Saves the scanned tone to both.

[19: TONESCAN] CTCSS/DCS Scan Filter

Function: When ON, the channel scan will only stop on a channel when the signal matches the CTCSS tone or DCS code assigned to the channel. When OFF, CTCSS/DCS is ignored during the scan.

Options: ON/OFF

Menu Functions

Default: ON

[20: PRI-SCAN] Priority Scan

Function: Allows you to turn the priority channel function on or off. When enabled, the radio will scan the channel every 3 seconds. Read the “Priority Channel Scan” section on page 47 to learn more.

Options: OFF/ON-STBY/ON-ALWYS

Default: OFF

ON-STBY: Detects priority channel activity while the area is not receiving a signal.

ON-ALWYS: Activity on a priority channel will supercede all incoming transmissions.

[21: PRI-SAVE] Set Priority Channel

Function: Saves the current channel as the priority channel. Press Menu to save the current channel, and press Menu again to confirm. Press EXIT to cancel. Also available as a PF key option.

Options: 999 channels

Default: None

[22: PRI-SEL] Priority Channel Select

Function: Switches the active channel to the priority channel.

Options: 999 channels

Default: None

[23: STEP] Frequency Step

Function: Allows you to adjust the steps between frequencies. Available only in Frequency mode.

Options: 2.5K/5K/6.25K/10K/12.5K/20K/25K/30K/50K/100K

Default: 5K

[24: ROGER] Roger Beep

Function: Enables an audible roger beep prompt during transmission.

Options: OFF/BOT/EOT/BOTH

Default: OFF

BOT: Sets the roger beep prompt at the beginning of transmission

EOT: Sets the roger beep at the end of transmission

Menu Functions

BOTH: Sets the roger beep at the beginning and end of transmission

[25: TOT] Transmit Overtime Timer

Function: When the transmission time exceeds the time set by the Timeout Timer, the unit will emit an error tone and stop transmitting within 10 seconds. The radio will not be able to transmit if the [PTT] is pressed, and will emit an error prompt. Transmit will be enabled again after 10 seconds.

Options: 1MIN-60MIN

Default: 2MIN

[26: TOA] Transmit Overtime Alarm

Function: The Transmit Overtime Alarm warns when the transmit Timeout Timer (TOT) is about to be exceeded. The display screen flashes to indicate an alarm. The alarm can be set to a maximum time limit of 10 seconds.

Options: OFF/1S-10S

Default: 5S

[27: VOICE] Voice Guide

Function: Enables or disables voice prompts.

Selectable: ON/OFF

Default: ON

[28: BEEP] Button Beeps

Function: Enables an audio prompt to alert the operator of a key press, input or fault.

Selectable: ON/OFF

Default: ON

[29: BUSYLOCK] Busy Channel Lockout

Function: Enabling Busy Channel Lockout prevents the transceiver from transmitting on a selected channel or frequency while another station or group is transmitting on it.

Options: ON/OFF

Default: ON

[30: CH-NAME] Channel Name

Function: Allows you to enter and edit the name for each channel. To edit a channel

Menu Functions

name, press the [UP] key to choose each character, press [DOWN] key to edit the next character, and press the [*] to clear the character you are currently editing. Pressing the # key switches between special characters, numbers, upper, and lowercase letters. When you finish editing the name, press [MENU] to save it to the radio.

Note: Channel names can only be entered and edited in Channel Mode.

Options: 8 Characters

Default: None

[31: CH-ADD] Add Memory Channel

Function: Adds a channel to the memory channel list. Select the channel number of the channel you want to add. See Adding and Removing Channels (page 87).

Options: None

Default: None

[32: CH-DEL] Delete Memory Channel

Function: Allows you to delete a channel from the radio. Select this menu option and use the UP/DOWN arrow keys to choose the channel you want to delete.

Priority Channels are fixed channels and cannot be deleted.

Options: 999 channels

Default: CH-001

[33: DESCRAMB] Descrambler

Function: Activating this function will descramble incoming signals that are scrambled using one of 8 supported protocols.

Options: OFF/SCRAM 1-8

Default: OFF

[34: COMPAND] Comander

Function: The compander minimizes noise. Useful when transmitting over long distances.

Options: ON/OFF

Default: OFF

[35: SP-MUTE] Speaker Mute

Function: Selects the method to filter transmissions received on the current channel.

Menu Functions

Options: QT/QT+DTMF/QT*DTMF

Default: QT

QT: Only signals with a CTCSS tone/DCS code matching the selected channel will be heard through the speaker.

QT+DTMF: Transmissions will be filtered by either CTCSS/DCS tones OR a DTMF tone of the current radio ID (followed by a # sign).

QT*DTMF: Transmissions will be filtered by both CTCSS/DCS tones AND a DTMF tone of the current radio ID (followed by a # sign).

[36: ID-EDIT] Edit Radio ID

Function: Sets the numeric Radio ID that is sent during transmissions if the DTMF-ID option is enabled. This ID must be a number and contain at least 3 digits and no more than 6 digits. The first digit cannot be 0.

Options: 0-9

Default: 101

[37: DTMF-ID] Radio ID Settings

Function: Choose whether to transmit the ID at the beginning or end of transmission.

Options: OFF/BOT/EOT/BOTH

Default: OFF

BOT: Beginning of transmission

EOT: End of transmission

BOTH: Beginning and end of transmission

[38: DTMF-DLY] DTMF Delay

Function: Determines the amount of time in milliseconds to wait before sending the DTMF-ID. This only applies to the ID that is sent at the beginning of the transmission. It is ignored when DTMF-ID is set to EOT (end of transmission).

Options: 100~1000ms

Default: 100ms

[39: DTMF-INT] DTMF Interval

Function: Sets the interval between each tone in an automated DTMF sequence, such as the radio ID.

Options: 60~500ms

Menu Functions

Default: 80ms

[40: DTMF-DUR] DTMF Duration

Function: Sets the duration of each tone in an automated DTMF sequence, such as the radio ID.

Options: 80~500ms

Default: 80ms

[41: SIDETONE] Sidetone Setting

Function: Determines when DTMF tones transmitted by the radio are heard from the speaker. It can be configured if you want to hear all tones, only tones transmitted for a radio ID, or only tones other than those transmitted for a radio ID. Regardless of the setting, tones are still transmitted over the air and will be heard by other radios.

Options: OFF/DTMF/ID/DTMF+ID

Default: DTMF

DTMF: Only non-radio ID tones will be heard through the speaker.

ID: Only radio ID tones will be heard through the speaker. Tones entered manually

from the keypad will not be heard.

DTMF+ID: All tones transmitted will be heard from the speaker.

[42: RING] Ring Time

Function: Sets the amount of time a ring alert is emitted after receiving a DTMF tone that matches the radio ID. This is used when the SP-MUTE setting is QT+DTMF or QT*DTMF.

Selectable: OFF/1S-10S

Default: 3S

[43: ALERT] Tone Alert

Function: Allows selection of the specific hertz of the tone burst. Some relay systems used for single-tone pulse transmissions need a single-tone pulse signal to activate.

Options: 1750Hz/2100Hz/1000Hz/1450Hz

Default: 1750Hz

Special Reminder: When in transmit mode, you can send the single-tone pulse frequency you've selected by pressing the [MENU] key on the panel or the

Menu Functions

[AREA] key on the microphone.

[44: REM-CTRL] Remote Control

Function: Allows some radio settings to be changed remotely, such as the channel, frequency, or CTCSS tones and DCS codes. Remote control requires configuration in the programming software. For details, refer to the Remote Control section (page 98).

Options: ON/OFF

Default: OFF

[45: AM-MODE] AM Mode

Function: Enables or disables the reception of signals in AM mode. Only available on “Area A”.

Options: ON/OFF

Default: OFF

[46: AM-AUTO] Auto Detect AM

Function: When activated, the KG-1000G Plus will automatically recognize AM fre-

quencies. Only available on “Area A”.

Options: ON/OFF

Default: ON

[47: AUTOLOCK] Auto Lock

Function: Automatically locks the buttons on the radio and hand microphone after 15 seconds.

Options: ON/OFF

Default: OFF

[48: AUTO-OFF] Auto Power Off

Function: The Automatic Power Off function automatically turns the radio off if it remains idle for a specified period of time.

Options: OFF/30MIN/60MIN/90MIN/120MIN/150MIN

Default: OFF

[49: MED-PWR] Medium Power Setting

Function: Sets the medium level power setting to 20W or 10W.

Menu Functions

Options: 20-WATTS/10-WATTS

Default: 20-WATTS

[50: VOLT-ALT] Low Voltage Alert

Function: When enabled, the radio emits a voice prompt every 10 seconds when the voltage drops below an acceptable level. The radio will power off when voltage is too low for the unit to operate (9.5V-10.5V) and disable transmission if the voltage is too high.

Note: It is advisable to enable this function when the KG-1000G Plus is installed in a car or connected to an unstable power source such as a vehicle battery.

Options: ON/OFF

Default: OFF

[51: FAN-SET] Fan Activation Setting

Function: The KG-1000G Plus has a built-in temperature detection system that will activate a cooling fan as needed. There are three options.

Options: TX / VHT+TX / ALWAYS

Default: VHT+TX

TX: The fan turns on when transmitting

VHT+TX: The fan turns on during transmit and when the temperature of the radio is high.

ALWAYS: The fan is always on.

[52: SPEAKER] Speaker Setting

Function: Selects the active speaker for the radio. The KG-1000G Plus has three speakers. One is built into the hand microphone and two are built into the body of the radio.

Options: RADIO/MIC/BOTH

Default: RADIO

RADIO: Activates the speakers in the base of the radio only

MIC: Activates the speaker in the hand microphone only

BOTH: Activates all three speakers

[53: RPT-TONE] Squelch Tone

Function: Enables or disables the squelch tail sent to the receiving radio at the end of a transmission.

Menu Functions

Options: OFF/ON

Default: ON

[54: RPT-MODE] Repeater Mode

Function: Enables Repeater Mode. Requires two KG-1000G Plus transceivers connected with a data cable for this to function. See page 90 for more information.

Options: OFF/RPT-RX/RPT-TX

Default: OFF

OFF: Sets the KG-1000G Plus to operate as a normal transceiver

RPT-RX: Sets the unit to operate as a repeater in receive mode

RPT-TX: Sets the unit to operate as a repeater in two-way receive/transmit mode

[55: RPT-SPK] Repeater Speaker Setting

Function: When paired with another KG-1000G Plus and configured as a repeater, enabling this option will unmute the speaker. This will allow you to hear any repeater activity.

Selectable: ON/OFF

Default: OFF

[56: RPT-PTT] Repeater PTT Setting

Function: When paired with another KG-1000G Plus and configured as a repeater, enabling this option will allow you to use the radio's Push-To-Talk button to transmit.

Selectable: ON/OFF

Default: OFF

[57: RPT-DLY] Repeater Hold Timer

Function: When paired with another KG-1000G Plus and configured as a repeater, enabling this option will allow you to use the Repeater Hold Timer to set a hold time to prevent the unit from transmitting while waiting for a response.

Options: OFF/100MS-5000MS

Default: OFF

[58: WT-LED] Standby LED Color

Function: Selects the color of the LED indicator light during Standby.

Options: OFF/RED/ORG/GREEN

Menu Functions

Default: ORG

[59: RX-LED] Receive LED Color

Function: Selects the color of the LED indicator light while receiving a signal.

Options: OFF/RED/ORG/GREEN

Default: GREEN

[60: TX-LED] Transmit LED Color

Function: Selects the color of the LED indicator light during transmit.

Options: OFF/RED/ORG/GREEN

Default: RED

[61: KEY-PF1] PF1 Side Key Assignment

Function: Assigns a function to the side key on the hand microphone. This key is located below the PTT button on the left side of the hand microphone.

Options: OFF/REVERSE/PRI-SEL/SQUELCH/TX-POWER/SCAN/SCAN-CTC/SCAN-DCS/FM-RADIO/WEATHER/CH-ADD/W-N/TDR/WORKMODE/BAND/REPEATER/LOCK/MONITOR

Default: MONITOR

[62: KEY-A] Key A Assignment

Function: Assigns a function to the A key on the display panel

Options: OFF/REVERSE/PRI-SEL/SQUELCH/TX-POWER/SCAN/SCAN-CTC/SCAN-DCS/FM-RADIO/WEATHER/CH-ADD/W-N/TDR/WORKMODE/BAND/REPEATER/LOCK/MONITOR

Default: FM RADIO

[63: KEY-B] Key B Assignment

Function: Assigns a function to the B key on the display panel

Options: OFF/REVERSE/PRI-SEL/SQUELCH/TX-POWER/SCAN/SCAN-CTC/SCAN-DCS/FM-RADIO/WEATHER/CH-ADD/W-N/TDR/WORKMODE/BAND/REPEATER/LOCK/MONITOR

Default: SCAN

[64: KEY-C] Key C Assignment

Function: Assigns a function to the C key on the display panel

Menu Functions

Options: OFF/REVERSE/PRI-SEL/SQUELCH/TX-POWER/SCAN/SCAN-CTC/SCAN-DCS/FM-RADIO/WEATHER/CH-ADD/W-N/TDR/WORKMODE/BAND/REPEATER/LOCK/MONITOR

Default: TDR

[65: KEY-D] Key D Assignment

Function: Assigns a function to the D key on the display panel

Options: OFF/REVERSE/PRI-SEL/SQUELCH/TX-POWER/SCAN/SCAN-CTC/SCAN-DCS/FM-RADIO/WEATHER/CH-ADD/W-N/TDR/WORKMODE/BAND/REPEATER/LOCK/MONITOR

Default: LOCK

[66: RESET] Factory Reset

Function: Resets the transceiver to factory defaults.

Options: VFO/ALL

Default: VFO

VFO: Resets only function settings to factory defaults. Channel data is not reset.

ALL: Resets all of the function settings and channel parameters to factory defaults.

Setting Non-Standard CTCSS or DCS

How to Set Non-Standard CTCSS

The KG-1000G Plus supports non-standard CTCSS codes in the range of 65.0-255.0Hz with a minimum spacing of 0.1Hz.

After selecting the CTCSS menu setting (RX-CTCSS or TX-CTCSS), enter the desired CTCSS code via the keyboard and then press [MENU] to confirm.

For example, to set the receiving CTCSS tone to 100.5Hz:

In standby, press [MENU] + [9], the screen will display: RX-CTCSS, press MENU, and input [1] + [0] + [0] + [5], then press [MENU] to confirm, and [EXIT] to return to standby.

How to Set Non-Standard DCS

The KG-1000G Plus supports non-standard DCS codes ranging from 000-766, except any code with the digit 8 or 9. For example, 680.719 is not a legitimate non-standard

Advanced Operation

DCS code.

After setting a non-standard DCS code, press the [LOCK] key to set it as a Positive or Negative code, or press the [SCAN] key to select OFF.

After selecting the DCS menu setting (RX-DCS or TX-DCS), enter the desired DCS code from the keypad on the hand microphone, press [LOCK] to select the Positive or Negative code, and then press MENU to confirm.

Example 1: Set the receive DCS as D105N

In standby, press [MENU] + [1] + [1] and the screen will display: RX-DCS. Press [MENU] and input [1] + [0] + [5], then press [LOCK] to select the Positive code. The screen will display D105N. Press [MENU] to confirm, and then press [LOCK] to return to standby.

Example 2: Set the receive DCS as D105I

In standby, press [MENU] + [1] + [1] and the screen will display: RX-DCS. Press [MENU] and input [1] + [0] + [5], then press [LOCK] to select the Negative code. The

screen will display D105I. Press [MENU] to confirm, and then press [EXIT] to return to standby.

Adding and Removing Channels

The KG-1000G Plus allows you to add and delete channels directly from the keypad of the radio using the CH-ADD and CH-DEL options in the menu. New channels can be created from scratch in Frequency mode or cloned from existing channels in Channel mode.

How to Clone an Existing Channel

When creating a new channel, it is often easier to start by cloning an existing channel. This is particularly true with GMRS repeater channels. To clone an existing channel:

1. Be sure that your radio is in Channel mode by using the WORKMODE menu option (page 59).
2. Tune to the channel that you would like to clone.

Advanced Operation

3. Press [MENU] + [3] + [1] to enter the CH-ADD function.
4. Turn the channel knob or press the [UP] and [DOWN] keys to select an available channel number, then press [MENU] to save it and return to standby mode. Channels that are unassigned or available to program will have the letter N next to the channel name.

Channel name and channel scan settings will not be cloned. To modify settings for the cloned channel, select the channel and then use the menu settings to select the options you wish to change.

How to Add a Channel in Frequency Mode

New channels can also be created from scratch, including a “Receive-Only” channel. To create a new channel:

1. Be sure that your radio is in Frequency mode by using the WORKMODE menu option (page 59).
2. Tune to the desired channel by entering the receive frequency.

3. Update any settings that you would like applied to the channel by updating the menu options.
4. Once the frequency is working as desired, save the new channel by pressing [MENU] + [3] + [1] to enter the CH-ADD function.
5. Turn the channel knob or press the [UP] and [DOWN] keys to select an available channel number, then press [MENU] to save it and return to standby mode. Channels that are unassigned or available to program will have the letter N next to the channel name.

For example, to save a GMRS simplex channel in Frequency mode with a 462.550 receive frequency and a 67.0 receive CTCSS tone:

1. While in Frequency mode, tune to the frequency 462.550 or type it into the radio from the keypad of the speaker microphone, press [MENU] + [9] to enter the Receive CTCSS setting, press [UP] / [DOWN] to select the 67.0 tone, and then press [MENU] to confirm.
2. Press [MENU] + [3] + [1] to enter the CH-ADD function, turn the channel knob or

Advanced Operation

press the [UP] and [DOWN] keys to select an available channel, then press [MENU] to save it and return to standby mode.

How to Delete a Channel

1. Select the CH-DEL menu option by pressing [MENU] + [3] + [2], and then press [MENU] to confirm.
2. Turn the channel knob or press the [UP] and [DOWN] keys to select the desired channel number, then press [MENU] to delete it and return to standby mode. Channels that are unassigned or available to program will have the letter N next to the channel name.

Repeater Mode Operation

In addition to its capabilities as a powerful mobile GMRS transceiver, two Wouxun KG-1000G Plus radios can be physically connected together to create a fully functional GMRS repeater.

How to Configure Two Radios Into a Repeater

Through the RPT-MODE function [MENU 54, p 80], you can set up the two individual units to communicate between each other to operate in tandem as one repeater transceiver.

Through RPT-MODE, you can set the two transceivers as a directional repeater.

1. Using the RPT-MODE menu option, set one transceiver as the repeater receiver by selecting the RPT-RX option. Set the other transceiver as the repeater transmitter by selecting the RPT-TX option.
2. Connect these two transceivers with the 8 pin data cable (model SCO-002) supplied with the radios to the PC (programming) interface port located on the left side of each radio. This is the port with a rubber cover marked PC.
3. Connect an antenna to each unit, with ample distance between the two aerials to prevent signal cancellation or cross interference. Alternatively a duplexer and single antenna can be used.

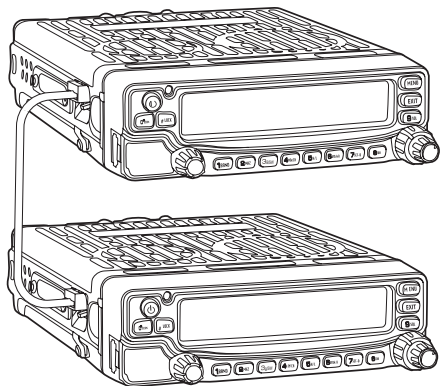
Advanced Operation

The two radios can now operate together as one repeater.

When the KG-1000G Plus is operating in repeater mode, the screen will display the repeater icon.

Additional Repeater Settings

When the radios are in repeater mode, selected features can be enabled or disabled. You can turn the speaker on or off by configuring the RPT-SPK option [MENU 55]. The option to transmit using the PTT on the hand microphone while the radios are in repeater RX/TX mode can be enabled or disabled by configuring the RPT-PTT option [MENU 56].



Repeater Speaker Switch (RPT-SPK) - Menu 55

When the transceiver is in standby, press the [MENU] + [5] + [5] keys and the screen will display RPT-SPK. Press the [MENU] key to access the settings, and after pressing

the [UP] / [DOWN] keys to activate (ON) or deactivate (OFF) the speaker, press the [MENU] key to confirm, and press the [EXIT] key to return to standby.

Repeater PTT Switch (RPT-PTT) - Menu 56

When the transceiver is in standby, press the [MENU] + [5] + [6] keys and the screen will display RPT-PTT. Press the [MENU] key to access the settings, and after pressing the [UP] / [DOWN] key to activate (ON) or deactivate (OFF) PTT transmit, press the [MENU] key to confirm, and press the [EXIT] key to return to standby.

Repeater Squelch Tone (RPT-TONE) – Menu 53

The repeater can transmit a tone after a signal is received to acknowledge receipt of the incoming transmission. This tone can be enabled or disabled in the RPT-TONE option (MENU 53, page 79). The repeater receipt reports the working status of the repeater to the operator who is attempting to access it.

When the transceiver is in standby, press the [MENU] + [5] + [3] keys and the screen will display RPT-TONE. Press the [MENU] key to access the settings, and after pressing the [UP] / [DOWN] key to activate (ON) or deactivate (OFF) the tone, press the

Advanced Operation

[MENU] key to confirm, and press the [EXIT] key to return to standby.

Repeater Hold Time (RPT-DLY) – Menu 57

The Repeater Hold Timer is used to prevent the PTT from being used to transmit too frequently. When the PTT on the radio is released after transmitting in repeater mode, the hold time prevents the unit from transmitting for a predetermined interval while waiting for a response. If no valid QT/DQT is detected within the hold time, the transmitter will release the hold and allow the PTT to transmit. The repeating hold timer sets the hold time for the transmitter to resume transmitting 100ms-5000ms (5 seconds) after the received QT/DQT signal disappears.

Note

When the radios are in repeater mode, both primary and secondary areas of the radios are the receiver. The area that receives the signal first will be the receiver.

DTMF Encoding

The KG-1000G Plus features dual-tone multi-frequency (DTMF) encoding. This enables the radio to perform a number of useful signaling operations.

Using the DTMF Keypad

The speaker microphone for the KG-1000G Plus has a full function DTMF keypad. While pressing the [PTT] key to transmit, press the key on the keypad that corresponds to the DTMF tone that you wish to send. The number pad on the hand microphone corresponds to DTMF codes as follows:

MENU	▲	▼	EXIT	▶	A	B	C	D
1 BAND	2 MHz	3 (I/O)	* SCAN	→	1	2	3	*
4 MEME	5 H/L	6 W/M	□ SCRAM	→	4	5	6	0
7 SET-D	8 TDR	9 SQL	# LOCK	→	7	8	9	#

Advanced Operation

Usage:

While pressing the [PTT] key to transmit, press the key on the hand microphone that corresponds to the DTMF tone that you wish to send.

Sending a Radio ID

The KG-1000G Plus is capable of automatically sending a radio ID number using DTMF functionality. When activated, the radio ID will be sent during a transmission. When the radio ID is transmitted, radios capable of displaying a radio ID will typically show the ID number on the display while receiving the transmission. A radio ID could be referred to as an ANI or a PTT ID.

The KG-1000G Plus has three menu options related to configuring the radio ID: DTMF-ID (page 72), ID-EDIT (page 72), and DTMF-DLY (page 73).

To set a radio ID, press [MENU] + [3] + [6]. The screen will display: ID-EDIT (page 72). Press [MENU], input the desired number, then press [MENU] to confirm and [EXIT] to return to standby.

To transmit the radio ID, press [MENU] + [3] + [7]. The screen will display: DTMF-ID (page 72). Press [MENU], choose whether to transmit the ID at the beginning of transmission (BOT), end of transmission (EOT), or both beginning and end (BOT). Press [MENU] to confirm and [EXIT] to return to standby.

You can delay transmission of the radio ID for a specific time using the ID-DLY menu option (page 73). This delay time can be set to one of 30 levels in 100ms increments.

Calling a specific radio using an ID

The KG-1000G Plus also supports the ability to call another radio directly, using its Radio ID. To enable this function, you must activate and configure all radios in your fleet to transmit the Radio ID (see Sending a Radio ID on page 96) and select either the QT+DTMF or QT*DTMF filter option in SP-MUTE (page 71).

To call a specific radio, you must know its radio ID. After pressing PTT and allowing your radio time to transmit its radio ID, use the keypad on the hand mic to enter the radio ID that you are calling. If the radio ID is less than six characters, enter a # after the ID.

Advanced Operation

Once a KG-1000G Plus receives a DTMF signal matching its radio ID, it will play a ring sound and then open the speaker to allow the incoming transmission to be heard. The length of the ring sound can be set using the RING option (page 75).

Alert Tone (Single-Tone Pulse Frequency)

Some repeaters require a tone burst to be transmitted to signal the repeater to transmit. This is not often used in the United States and is more common in Europe.

The KG-1000G Plus supports this functionality. Use the ALERT menu option (page 75) to select the specific hertz of the tone that is needed (1750Hz is most common and is the default). To send the tone, press the [PF1] side key while transmitting.

Remote Control

The Remote Control function allows some settings of the KG-1000G Plus to be modified remotely. The remote control function must be configured using the PC programming software, and the radio used to control the KG-1000G Plus remotely must have DTMF support.

Programming Software Settings

Open the Wouxun PC programming software and select the Remote Settings tab. You will see the following configuration information:

The RC POWER section determines if the radio will allow a remote power on/off request.

RC OPEN - If selected, the radio will accept remote power on/off requests.

RC STOP - If selected, remote power on/off requests will not be accepted.

The MCC-EDIT, SCC-EDIT and CTRL-EDIT values are control codes that determine if the radio has the authority to control other radios remotely, if the radio will allow requests to be controlled remotely, and if settings should be allowed to be changed remotely. The control code is a value that you determine. The number is only important in that it must match on the controlling and the controlled radios. The control code must be between 3-6 digits and cannot begin with 0.

DTMF ID: The ID of the radio. This setting has uses other than within the remote

Advanced Operation

control function and can be changed via the radio menu also (see DTMF-ID, page 72). Generally when using radio IDs, each radio in your group should have a unique value.

MCC-EDIT: If the radio will have the authority to control other radios, enter a control code in this field. To disable this radio from controlling other radios, enter 000000. The radio to be controlled must have the same code entered into its SCC-EDIT and/or CTRL-EDIT fields.

SCC-EDIT: If the radio will accept requests to be controlled remotely, enter a control code in this field. The controlling radio must have the same code entered into its MCC-EDIT field.

RC POWER			
<input type="radio"/>	RC STOP	<input checked="" type="radio"/>	RC OPEN
DTMF ID	<input type="text" value="123456"/>		
MCC-EDIT	<input type="text" value="654321"/>		
SCC-EDIT	<input type="text" value="654321"/>		
CTRL-EDIT	<input type="text" value="654321"/>		
Kill	<input type="text" value="AB"/>	MONITOR	<input type="text" value="DA"/>
Stun	<input type="text" value="CB"/>	Inspection	<input type="text" value="DB"/>
TYP-SW CO	<input type="text" value="AA"/>	RC SW-CO	<input type="text" value="BB"/>
RESET CO	<input type="text" value="AD"/>	RC-CO CO	<input type="text" value="AC"/>

CTRL-EDIT: If the radio will accept requests to have settings changed remotely, enter a control code in this field. The controlling radio must have the same code entered into its MCC-EDIT field.

In the example configuration in the graphic above, the radio is configured to allow all remote control functions and to perform remote control, as the control code is set to the same valid value (654321) for all three fields.

Stun, Kill, Monitor and Inspect

The following details how to perform the Stun, Kill, Monitor, and Inspect remote control functions. These functions cannot be activated while a transceiver is in repeater mode.

In the following example, assume an SCC of 654321 and a DTMF ID of 123456 have been configured in the programming software.

Stun

Stun prevents a radio from transmitting.

Advanced Operation

To activate the stun function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: MCC + CB (DTMF stun code) +DTMF ID. Using our example, the transmitted sequence would be: 654321 CB 123456. On the controlled radio, if the received MCC matches the SCC and the DTMF ID matches, the stun function will be activated.

To reactivate a stunned radio, send the stun sequence again.

Kill

Kill prevents a radio from transmitting or receiving.

To activate the kill function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: MCC + AB (DTMF kill code) +DTMF ID. Using our example, the transmitted sequence would be: 654321 AB 123456. On the controlled radio, if the received MCC matches the SCC and the DTMF ID matches, the kill function will be activated.

To reactivate a killed radio, send the kill sequence again.

Monitor

Monitor opens the microphone on a remote radio, forcing the radio to transmit for 15 seconds. No input is needed on the remote radio.

To activate the monitor function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: MCC + DA (DTMF monitor code) +DTMF ID. Using our example, the transmitted sequence would be: 654321 DA 123456. On the controlled radio, if the received MCC matches the SCC and the DTMF ID matches, the monitor function will be activated for 15 seconds.

Inspect

Inspect forces the remote radio to transmit a DTMF sequence. This is useful for confirming that the radio is in range and is responding to commands.

To activate the monitor function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: MCC + DB (DTMF inspect code) +DTMF ID. Using our example, the transmitted sequence

Advanced Operation

would be: 654321 CB 123456. On the controlled radio, if the received MCC matches the SCC and the DTMF ID matches, the inspect function will be activated.

Remote Power On/Off

The KG-1000G Plus can be powered on and off using remote control. To enable the transceiver to be powered on and off remotely, the RC OPEN setting must be selected in the programming software, a control code entered into the SCC-EDIT field and a DTMF ID must be configured.

In the following example, assume a SCC of 654321 and a DTMF ID of 123456 have been configured in the programming software.

Remote Power Off

Remote power off can be activated by manually sending the DTMF sequence: SCC + BB (DTMF power on/off code) + DTMF ID. Using our example, the transmitted sequence would need to be: 654321 BB 123456.

After powered off remotely, the standby orange indicator LED will be activated. To

manually power on the radio after it has been powered off remotely, press the front panel power button twice.

Remote Power On

The transceiver can be powered on remotely by manually sending the DTMF sequence: SCC + BB (DTMF power on/off code) + DTMF ID. Using our example, the transmitted sequence would need to be: 654321 BB 123456.

Please Note! If using a control code or DTMF ID that is less than six characters, it will need to be terminated using a '#'. For example, if the SCC above were 654 and the DTMF ID were 123, the following would need to be sent instead: 654# BB 123#.

Remote Setting Changes

The KG-1000G Plus provides the ability to change several settings remotely including the frequency or channel number of the non-active area, the transmit power, and the RX CTCSS tone or DCS code.

To enable the transceiver to have these settings changed remotely, remote control mode

Advanced Operation

must be activated through the radio menu (see REM-CTRL, p. 76), a control code entered into the CTRL-EDIT field of the programming software and a DTMF ID must be configured.

In the following examples, assume a CTRL code of 654321 and a DTMF ID of 123456 have been configured in the programming software.

Activating Remote Control

To activate remote control mode on the radio to be controlled, go to the REM-CTRL menu option (page 76) and select ON. The radio will reboot and the keypad will be locked.

From the controlling radio, transmit a DTMF sequence matching the following: CTRL + AC (DTMF remote control code) then release the PTT. Using our example, the transmitted sequence would be: 654321 AC.

A beep should be heard on the controlling radio confirming that remote control has been activated.

Note: If the controlled radio does not receive a DTMF tone from the controller within 30 seconds, the connection will be automatically exited. The controlling radio can also exit the connection by transmitting 9+9.

Changing the frequency remotely

The KG-1000G Plus will allow the frequency of the non-active area to be changed remotely, provided the new frequency is not in the same band as the active area frequency. For example, if the active area frequency is UHF, the new frequency sent remotely must be VHF.

To change frequencies remotely, first refer to the Activating the Remote Control sub-section (page 106) to activate remote control mode.

With remote control mode successfully activated, hold the controlling radio's PTT, press 0 + 1 + Frequency (total of 8 digits) and then release the PTT. For example, to change to frequency 162.450, enter: 0 1 16245000.

A beep should be heard on the controlling radio confirming that the command was received. The controlled radio will reboot and adjust the frequency to match the com-

Advanced Operation

mand. If no beep was heard, the command failed.

Changing the channel remotely

The KG-1000G Plus will allow the channel of the non-active area to be changed remotely, provided the new channel is not in the same band as the active area frequency. For example, if the active area frequency is UHF, the frequency of the new channel sent remotely must be VHF.

To change channels remotely, first refer to the Activating the Remote Control sub-section (page 106) to activate remote control mode.

With remote control mode successfully activated, hold the controlling radio's PTT, press 0 + 2 + Channel number (total of 3 digits) and then release the PTT. For example, to change to channel 22, enter: 0 2 022.

A beep should be heard on the controlling radio confirming that the command was received. The controlled radio will reboot and adjust the frequency to match the command. If no beep was heard, the command failed.

Changing the transmit power remotely

The KG-1000G Plus will allow the transmit power of both areas to be changed remotely. The power change is only temporary. After the radio is rebooted the power will return to the original setting.

To change transmit power remotely, first refer to the Activating the Remote Control sub-section (page 106) to activate remote control mode.

With remote control mode successfully activated, hold the controlling radio's PTT, press 0 + 4 + 1 (low power) / 2 (medium) / 3 (high) and then release the PTT. For example, to change to high power, enter: 0 4 3.

A beep should be heard on the controlling radio confirming that the command was received. If no beep was heard, the command failed.

After changing the setting, you will need to exit remote control mode on the controlled radio. Hold the controlling radio's PTT and press 9+9 and then release the PTT. The controlling radio will beep and show the DTMF ID of the controlled radio, confirming remote control mode has been successfully exited.

Advanced Operation

Changing the CTCSS tone remotely

The KG-1000G Plus will allow the RX CTCSS tone of both areas to be changed remotely. The tone change is only temporary. After the radio is rebooted the tone will return to the original setting.

To change the RX CTCSS tone remotely, first refer to the Activating the Remote Control sub-section (page 106) to activate remote control mode.

With remote control mode successfully activated, hold the controlling radio's PTT, press 0 + 5 + (four digit CTCSS tone) and then release the PTT. For three digit tones, add a leading 0. For example, to change to tone 67.0, enter: 0 5 0670.

A beep should be heard on the controlling radio confirming that the command was received. If no beep was heard, the command failed.

After changing the setting, you will need to exit remote control mode on the controlled radio. Hold the controlling radio's PTT, press 9+9 and then release the PTT. The controlling radio will beep and show the DTMF ID of the controlled radio, confirming remote control mode has been successfully exited.

Changing the DCS code remotely

The KG-1000G Plus will allow the RX DCS code of both areas to be changed remotely. The code change is only temporary. After the radio is rebooted the code will return to the original setting.

To change the RX DCS code remotely, first refer to the Activating the Remote Control sub-section (page 106) to activate remote control mode.

With remote control mode successfully activated, hold the controlling radio's PTT, press 0 + 6 + (four digit DCS code) and then release the PTT. The first digit should be 0 for a positive code and 1 for a negative code. For example, to change to code D023N, enter: 0 6 0023. To change to code D023I, enter: 0 6 1023.

A beep should be heard on the controlling radio confirming that the command was received. If no beep was heard, the command failed.

After changing the setting, you will need to exit remote control mode on the controlled radio. Hold the controlling radio's PTT, press 9+9 and then release the PTT. The controlling radio will beep and show the DTMF ID of the controlled radio, confirming

Advanced Operation

remote control mode has been successfully exited.

Wire Clone

Settings can be cloned from one KG-1000G Plus to another using wire clone mode.

Cloning settings from one KG-1000G Plus to another

1. Connect one end of the SCO-002 interface cable (included) into the PC programming port of each KG-1000G Plus.
2. Be sure the power is OFF on the source transceiver and the power is ON on the transceiver to be programmed.
3. With the source transceiver powered OFF, hold down the 6 key on the hand microphone and turn the power on. Release the 6 key when the power-on message (default is “KG-1000G+”) appears during the boot-up sequence.

The display will change to indicate the data is copying. After copying is complete, the transceivers will reboot. If copying failed, the radios will return to standby mode.

Warning!

When using wire clone mode, the settings of the non-source radio will be overwritten. It is recommended to always make a backup of your settings using the programming software before cloning the radio.

Troubleshooting

Before assuming your KG-1000G Plus is defective, please check the following list of possible problems and solutions. Using the RESET option provided in the menu can also be used to reset the transceiver back to factory standard settings and programming.

Problem	Solution
Receive indicator is on but no sound is heard.	<ul style="list-style-type: none">■ Check volume level.■ Disable CTCSS/DCS or be sure setting matches incoming transmission.■ Check squelch settings.
Keypad is unresponsive	<ul style="list-style-type: none">■ Check if keypad has been locked.■ Check if other keys are currently pressed
Unwanted interference is being received.	<ul style="list-style-type: none">■ Enable CTCSS or DCS tone to filter out unwanted transmissions.■ Use a different channel
Voice pause every 3 seconds	Check if the “PRICH-SW” (Priority scanning switch) is turned on.

Problem	Solution
Cannot activate Scan	Check if the scan group channel or Scan Add function is turned on.
Transceiver automatically shuts off	<ul style="list-style-type: none"> ■ Check if your power source is below 11.5 volts. ■ Check if APO menu setting is activated.
Transceiver does not transmit or receive	Check if transceiver has been stunned or killed.
Repeater mode not working	Be sure the A/B area is set for the repeater's correct operating frequency.
Cannot transmit in repeater mode	Check to see if the receiver's squelch and CTCSS / DCS settings are correct.

Technical Information

Specifications

General		Receiver	Wide bandwidth	Narrow bandwidth
Frequency Range	Frequency Range for US: RX: 50.000-53.995MHz & 108.000-179.995MHz 320.000-349.995MHz & 400.000-479.995MHz 700-985MHz TX: 462.550-462.725MHz (GMRS Frequencies) 467.550-467.725MHz (GMRS Repeater Frequencies)	Adjacent Channel Selectivity	≤ 70dB	≤ 60dB
		Intermodulation	≤ 65dB	≤ 60dB
		Spurious Response	≤ 70dB	≤ 70dB
		Audio Response	+1~-3dB(0.3~3KHz)	+1~-3dB(0.3~2.55KHz)
Step Frequency	2.5KHz / 5KHz / 6.25KHz / 10KHz / 12.5KHz / 20KHz / 25KHz / 30KHz / 50KHz / 100KHz	Signal to Noise Ratio	≥ 45dB	≥ 40dB
Memory Channels	999	Audio Distortion	≤ 5%	
Work Mode	F2D / F3E	Audio Power	Transceiver ≤ 3W Hand Microphone ≤ 1W	
Operating Temperature	-20°C~+40°C	Sensitivity	400.000-479.995MHz:0.25uV(13dB SINAD) 136.000-174.995MHz:0.25uV(13dB SINAD) 50.000-53.995MHz:0.25uV(13dB SINAD) 320.000-349.995MHz:0.25uV(13dB SINAD) 700.000-985.995MHz:-97.0dBm(13dB SINAD)	
Antenna Impedance	50Ω			
Power Requirement	13.8VDC ± 15% (Negative Grounded)			
Weight	1437.8g (including microphone)			
Dimensions	140 x 44 x 207 (mm)			

Transmitter	Wide bandwidth	Narrow bandwidth	Transmitter	Wide bandwidth	Narrow bandwidth
Type of Modulation	16K F3E	11K F3E	Max. Frequency Deviation	± 5KHz	± 2.5KHz
Adjacent Channel Power	≥ 70dB	≥ 60dB	Frequency Stability	± 5ppm	
Spurious	≥ 60dB	≥ 60dB	Audio Distortion	≤ 5%	
Audio Response	+1~-3dB(0.3~3KHz)	+1~-3dB(0.3~2.55KHz)	Output Power	50W/20W/10W/5W(UHF)	

Standard CTCSS and DCS Tones

The following is a list of the standard CTCSS and DCS tones supported by the KG-1000G Plus. Many FRS or GMRS radios display a number instead of a specific tone. The number to the left of the tone matches what is used by most manufacturers.

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

Technical Information

DCS (positive code)

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

Default GMRS Channels and Frequencies

Simplex Channels

Ch.	Frequency	Max Power	Ch.	Frequency	Max Power
1	462.5625	5 Watts	12	467.6625	RX Only
2	462.5875	5 Watts	13	467.6875	RX Only
3	462.6125	5 Watts	14	467.7125	RX Only
4	462.6375	5 Watts	15	462.5500	50 Watts
5	462.6625	5 Watts	16	462.5750	50 Watts
6	462.6875	5 Watts	17	462.6000	50 Watts
7	462.7125	5 Watts	18	462.6250	50 Watts
8	467.5625	RX Only	19	462.6500	50 Watts
9	467.5875	RX Only	20	462.6750	50 Watts
10	467.6125	RX Only	21	462.7000	50 Watts
11	467.6375	RX Only	22	462.7250	50 Watts

Technical Information

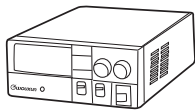
Repeater Channels

Ch.	Name	Receive Frequency	Transmit Frequency	Max Power
23	RPT-15	462.5500	467.5500	50 Watts
24	RPT-16	462.5750	467.5750	50 Watts
25	RPT-17	462.6000	467.6000	50 Watts
26	RPT-18	462.6250	467.6250	50 Watts
27	RPT-19	462.6500	467.6500	50 Watts
28	RPT-20	462.6750	467.6750	50 Watts
29	RPT-21	462.7000	467.7000	50 Watts
30	RPT-22	462.7250	467.7250	50 Watts

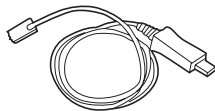
NOAA Weather Channels

Ch.	Frequency	Ch.	Frequency
1	162.4000	5	162.5000
2	162.4250	6	162.5250
3	162.4500	7	162.5500
4	162.4750		

Optional Accessories



Switching Power
Supply (30A)



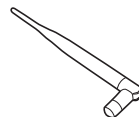
USB Programming
Cable



Mobile
Speaker / Mic



Omni-antenna



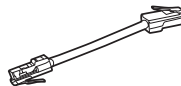
Omni-antenna



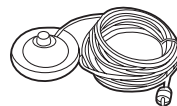
Directional-Antenna



Clamps Install
Mount



Connection Cable



Strong Magnetic Mount

Shop Wouxun Accessories:

www.buytwowayradios.com/accessories/by-radio-brand/wouxun-radio-accessories.html

We warrant this product against defects in material and workmanship as follows:

Radio and its original primary components for a period of one (1) year from date of purchase.

Accessories (including battery, charger, belt clip, antenna and adapter) for a period of six (6) months from date of purchase.

This warranty is limited to the repair and replacement of the defective components and is not valid if the radio has been tampered with, misused, abused, used with unapproved accessories, subjected to unauthorized disassembly, unauthorized repair, replacement of unauthorized parts, unavoidable conditions, human destruction, water damage or environmental damage. This warranty is void if the serial number is defaced or altered.

If service, repair or replacement is required within the warranty period, such repair or replacement will be made free of charge by the dealer through whom the equipment was purchased. If the owner requires any service or repair from any dealer through whom the equipment was not purchased, the cost of repair must be made by the owner.

This warranty is valid for the original purchaser or owner of the product and is not

Limited Warranty

transferable.

THIS LIMITED WARRANTY IS THE ENTIRE WARRANTY FOR THIS PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF ANY DAMAGES, INCLUDING INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATED TO THE USE OF THIS PRODUCT. Some states do not allow this exclusion or limitation of damages so the above limitation or exclusion may not apply to you. This warranty is valid only within the United States of America.

Note: Product features, specifications and warranty terms are subject to revision by the manufacturer without notice. We are not responsible for unintentional errors or omissions on product packaging.

Version: KG-1000G-Plus-2209-V1.0