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

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

feedback@buytwowayradios.com www.buytwowayradios.com



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The KG-1000G is an electrical apparatus, as well as 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.

- 1 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.

### **Safety Information**

- Never allow unsupervised children to play in the vicinity of your mobile radio or antenna installation.
- A Be certain to wrap any wire or cable splices thoroughly with insulating electrical tape, to prevent short circuits.
- 1 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 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.

# Safety Information

#### Caution

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

### 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.

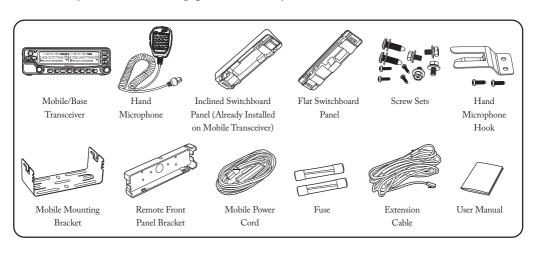
# **FCC Licensing Information**

The Wouxun KG-1000G is FCC Part 95E type accepted for use on the GMRS. The KG-1000G 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 at https://www.fcc.gov/wireless/support/fcc-form-605 and request FCC Form 605.

# Installation and Setup

#### 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.





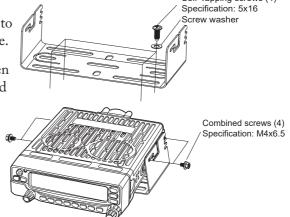
#### **Transceiver Installation**

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.

Self-Tapping screws (4)

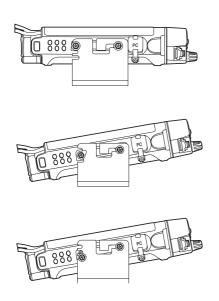
1. Use the supplied self-tapping screws to install the support bracket in the vehicle.

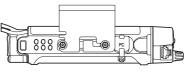
2. Set the transceiver in the bracket, then insert the supplied combined screws and tighten, ensuring that the screws are fastened tightly. This will ensure the support bracket and the transceiver do not become loose when the vehicle hits bumps or shakes.

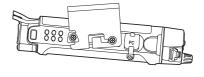


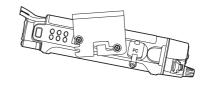
# Installation and Setup

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





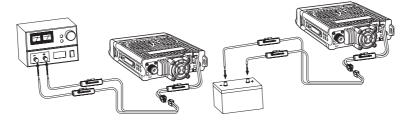






# Connecting a Power Source

The power requirement of the transceiver ranges from 13.8V±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 menu option 38.)



### **Important**

The transceiver's operating voltage is 13.8V±15% DC.

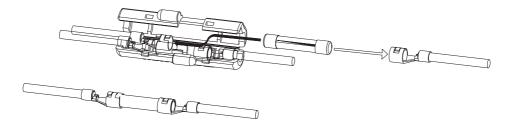
# Installation and Setup

# 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.

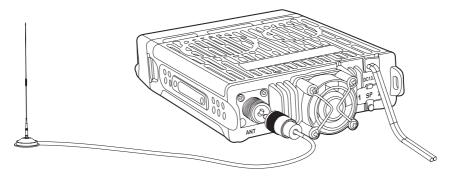
Refer to the following diagram for fuse installation. Be sure the fuse is properly seated and secured to the copper set.



# 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.

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.



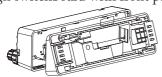
# Installation and Setup

#### Front Panel Installation

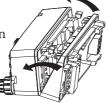
The transceiver includes two switchboard panels for the front display: an angled panel for an inclined display, and a flat panel for a traditional display. The angled panel is installed by default.

#### Install Inclined Switchboard Panel

1. Align switchboard with front panel.



3. Close switch-board as shown



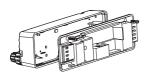
2. Insert tabs into base of front panel

4. Fasten using supplied screws





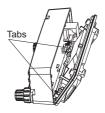
#### Install Flat Switchboard Panel



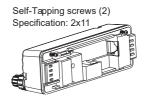
Close switchboard as shown



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



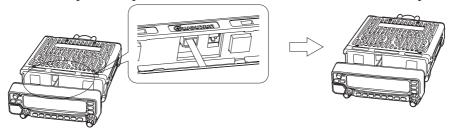
Fasten using supplied screws



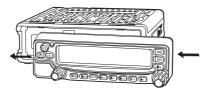
# Installation and Setup

### Connecting Front Panel to Transceiver

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



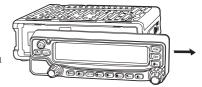
2. With the front panel slightly off-center to the right, hold the front panel flush with the transceiver and slide to the left to lock into place.





## 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 2 and 4 be reversed on one of the connectors.

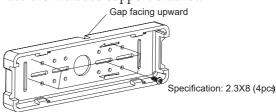


# Installation and Setup

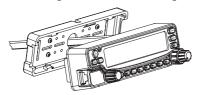
## Installing the Front Panel Support Bracket

The front panel can be installed detached from the transceiver body. This allows for considerable flexibility when considering where to install the KG-1000G. 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.



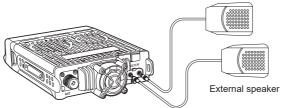
2. Feed the extension cable through the center of the support bracket, then connect to the front panel. Attach front panel to support bracket as shown.





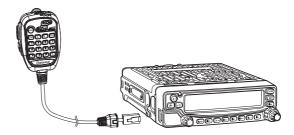
### **External Speakers**

The KG-1000G is equipped with two 3.5mm external speaker jacks on the back of the transceiver.



### 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.



# **Getting Started**

# **Feature Summary**

- 30 GMRS Channels
- 8 Built-In GMRS Repeater Channels
- 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 Backlight
- Up to 999 Custom Channels
- Remote Front Panel Mounting
- Programming Software Support
- Repeater Mode (Requires 2nd Unit)

- Wide Receive (RX) Frequency Range:
   50-54.995MHz&65-108MHz&
   108-180.995MH & 320-349.995 MHz
   400-479.995MHz & 700-824MHz&
   849-869MHz& 894-960 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)
- Standard and Non-Std CTCSS/DCS
- Split CTCSS/DCS Tone Support
- CTCSS/DCS Tone Scan

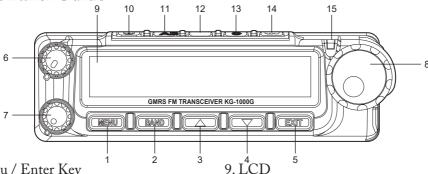
Getting Started @wouxun

- DTMF Hand Microphone with Speaker, TX/RX Indicator and Volume Control
- 3 Configurable Front Panel Buttons
- FM Radio Mode
- Compander
- Descrambler (8 Groups)
- APO Power Management
- English Voice Guide
- Offset Frequency Programmable
- 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 AB Areas
- Priority Channel Scanning
- Supports 10 Scan Groups
- Dual Speakers
- Multiple Speaker Output Settings
- External Speaker Support
- DTMF Encoding & Decoding
- Remote Control Settings
- Incoming Caller ID Display
- Group Call, All Call and Selective Call
- Stun and Kill Function

# Getting Started

#### Front Panel Guide

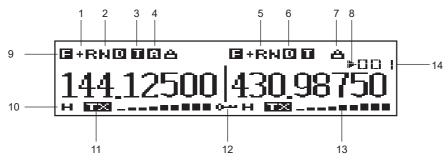


- 1. Menu / Enter Key
- 2. A/B Area Switch / Weather Mode
- 3. Up Key
- 4. Down Key
- 5. Exit / Cancel Key
- 6. "A" Area Volume Control
- 7. "B" Area Volume Control
- 8. Frequency / Channel Knob

- 10. On / Off Button
- 11. Configurable Hotkey "A" (Page 66)
- 12. Configurable Hotkey "B" (Page 66)
- 13. Configurable Hotkey "C" (Page 66)
- 14. Keypad Lock Button
- 15. Status Indicator Light



#### LCD Guide

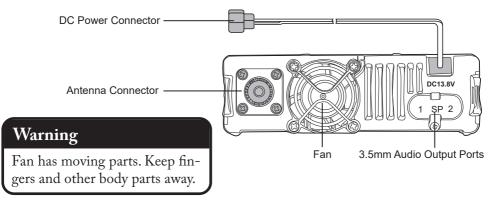


- 1. Offset Direction Indicator (+/-)
- 2. Bandwidth Indicator
- 3. DTMF Mute
- 4. AM Mode Indicator
- 5. Reverse Frequency
- 6. DCS/CTCSS Indicator (D/C)
- 7. Descramble Indicator

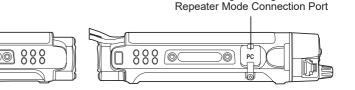
- 8. Priority Channel Indicator
- 9. Menu Setting Mode Indicator
- 10. TX Power Indicator (L/M/H)
- 11. Repeater Mode Indicator (RX/TX)
- 12. Keypad Lock Indicator
- 13. Signal Strength Indicator
- 14. Channel Number / Menu Item

# Getting Started

#### **Back Panel**



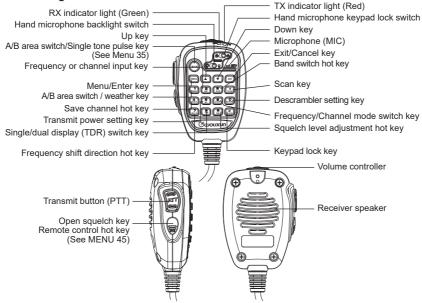
# **Side Panels**



PC Programming Port /



# Hand Microphone



### **Basic Operation**

# Introducing GMRS and the KG-1000G

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 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 an FM radio.

Read this chapter to learn the basics of using your new KG-1000G 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!



#### Your First Transmit

## Selecting a Channel

When you power on your KG-1000G for the first time, the display will likely show "GMRS-01" on the left side. 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.

As a licensed GMRS user you are allowed to use any of the channels. Which channel you choose isn't as important as being sure that everyone in your group is on the same channel, so be sure you select a channel that everyone in your group's equipment supports.

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.

### **Basic Operation**

- Transmitting on channels 8-14 is limited to a half watt of output power. The KG-1000G is not capable of transmitting at this low of power and does not allow transmitting on these channels (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 70 for more information about using the KG-1000G 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 43) 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 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 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 indicates which area is primary. When you perform 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

By default the dual display is off on the KG-1000G. When off, instead of a frequency or channel name the word "WOUXUN" will be displayed in the inactive area.

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).

### **Basic Operation**

## Changing the Primary Area

With Dual Display on, press the BAND key on the front panel or the number 1 key 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 BAND 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 BAND would turn on Area "B" and turn off Area "A".

# Frequency and Channel Modes

The KG-1000G 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/ Frequency Knob or pressing an arrow key will tune to the next channel in the list.

Basic Operation @wouxun

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 47) 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.

# Switching Bands in Frequency Mode

The KG-1000G supports the following frequency bands:

KG-1000G Frequency Bands		
50.000 - 54.995 MHz	320.000 - 349.995 MHz	
65.000 - 108 MHz	400.000 - 479.995 MHz	
108.000 - 180.995 MHz	700.000 - 824.000 MHz	
849.000 - 869.000MHz	894.000 - 960MHz	

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

## **Basic Operation**

different frequency band, press the number 8 key on the hand microphone (labeled B/ SW) while in frequency mode.

### NOAA Weather Mode

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

To activate NOAA Weather Mode, hold

#### Reminder

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

down the BAND key for 2 seconds. 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 most recently selected station will be remembered 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



# Using the Repeater Channels

The KG-1000G is pre-configured with 8 GMRS repeater channels. The channels are number 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 setup in a fixed location and connected to an antenna that can be mounted in a high location that can 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

### Basic Operation

range of that repeater.

Currently the best resource for locating GMRS repeaters is the following website:

### https://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 public. 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.

As a licensed GMRS user you can also operate your own repeater. The KG-1000G can operate as a repeater when paired with a 2nd unit and connected with a data cable. For more information, read the section on Repeater Mode on page 70.

#### KG-1000G 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	
28	RPT-20	462.6750	467.6750	
29	RPT-21	462.7000	467.7000	
30	RPT-22	462.7250	467.7250	

# Hand Microphone Hotkeys

#### (1) [BAND] Primary Frequency Selection Hotkey

When the transceiver is standby, press the [BAND] key on the handset or transceiver to switch between primary frequency and secondary frequency.

### 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.

### (2) [MHZ] Frequency or Channel Selection Hotkey

When the transceiver is in frequency mode, press the [MHZ] key to enter a specific frequency. 8 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 press any other keys except 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) [B/SW] Band Switching Hotkey

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

In frequency mode, press the [B/SW] 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) [MEMCH] Save Channel Hotkey

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

When in Frequency (VFO) mode, you can set the offset frequency (see MENU 4, p 48), frequency shift direction (see MENU 7, p 42) and other options, then save them 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 462.550. the frequency, press [MENU] + [2] + [8] to enter the Transmit CTCSS setting, press [UP] / [DOWN] to select the 67.0 tone, and then press [MENU] to confirm.
- 2. Press [MENU] + [4] and set the offset to 005.000 MHz. This is the the difference between the TX and RX frequencies.
- 3. Press [7] on the hand microphone until a "+" appears on the display. This sets the



Frequency shift direction as positive, indicating the offset should be added to the RX frequency to determine the TX frequency.

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

### (5) [H/L] Output Power Hotkey

When the radio is in standby, the [H/L] 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 3, p 47). Note this function will not be available when tuned to GMRS frequencies legally limited to 5 watts.

#### (6) [VFO/MR] 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) [SET-D] Frequency Shift Direction Hotkey

In Frequency (VFO) mode, pressing this key allows you to quickly change the direction of the frequency shift. Every time the key is pressed, the direction switches between one of 6 options: Positive (+), Negative (-), Reverse Frequency (R), Reverse Frequency & Positive Direction (R+), Reverse Frequency & Negative Direction (R-), and Cancel.

In Channel (MR) mode, pressing the [SET-D] key will only allow you to enable or disable Reverse Frequency (R).

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 modes.

## (9) [SQL] Squelch Level Hotkey

The SQL function allows adjusting 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.

### (10) [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 10 (p 50) for more information on the types of scans available.

#### Simultaneous Scanning on AB 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 [MAIN] 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 Secondary area will resume.
- During a scan, pressing the [SCAN] key will only stop the scan on the Area currently chosen.
- Pressing the [VFO/MR] key will also stop the scan in the currently chosen Area.

# Important!

While scanning the Secondary frequency area, some settings on the Primary frequency area will be prohibited. These include Save Channel (MEMCH), Scan Mode (SC-REV), Delete Channel (DEL-CH), Channel Name Edit (CH-NAME) and Repeater Mode Settings (RPT-SET).



### (11) [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 [BAND] key, which can switch to the secondary frequency area.

### (12) [ARROW UP] Up key

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

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

## (13) [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.

# (14) [MENU] Confirmation key

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



### Menu [1]: STEP

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

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

Default: 5K

### Menu [2]: N/W

Function: The KG-1000G can operate on Narrow (12.5KHz) /Wide (25KHz) bandwidth.

## Menu [3]: MPOWSET

Function: Sets the medium level power setting to MPOW1 (20W) or MPOW2 (10W).

Options: MPOW-1/MPOW-2

Default: MPOW-1

#### Menu [4]: OFF-SET

Function: Sets the offset frequency (must be a valid GMRS frequency.

This feature is available in VFO mode only. Options: Ranges from 0 - 999.99500 MHz

Default: 0

#### Menu [5]: ROGER

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

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

# Menu [6]: BEEP

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

Selectable: ON/OFF



Default: ON

#### Menu [7]: VOICE

Function: Enables or disables voice prompts.

Selectable: ON/OFF

Default: ON

### Menu [8]: BCL

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

### Menu [9]: SP-MUTE

Function: Speaker Mute settings

Options: QT/QT+DTMF/QT\*DTMF

Default: QT

QT: All signals on the same CTCSS tone/DCS code will activate the speaker

QT+DTMF: Only those signals which include both the same CTCSS/DCS and dual-tone multi-frequency (DTMF) signal as the radio will activate the speaker.

QT\*DTMF: Only those signals which have either the same QT or DTMF codes as the radio will activate the speaker.

## Menu [10]: SC-REV

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. Press the PTT key or function key to store it.

# Menu [11]: TOT

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/2MINâ€"60MIN

Default: 2MIN

## Menu [12]: TOA

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

## Menu [13]: ANI-SW

Function: When activated, the radio will transmit the 3-6 digit Caller ID specified in menu option 15.

Options: ON/OFF

Default: OFF

# Menu [14]: RING

Function: Specifies the length of time to prompt when DTMF signals have been de-

coded.

Selectable: OFF/1S-10S

Default: 3S

#### Menu [15]: ANI-EDIT

Function: Sets the Caller ID. The caller ID is composed of numbers 0-9. The first digit cannot be 0. ID numbers must be at least 3 digits and a maximum of 6 digits.

Options: 0-9 Default: 101

## Menu [16]: DTMFST

Function: Actvates the Caller ID and keypad sidetone during transmission.

Options: OFF/DT-ST/ANI-ST/DT+ANT

Default: DT/ST

DT-ST: Activates keypad sidetone

ANI-ST: Activates Caller ID sidetone

DT+ANT: Activates both keypad and Caller ID sidetones

#### Menu [17]: PTT-ID

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

Options: BOT/EOT/BOTH

Default: BOT

BOT: Beginning of transmission

EOT: End of transmission

BOTH: Beginning and end of transmission

#### Menu [18]: TX-LED

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

Options: OFF/RED/ORG/GREEN

Default: RED

#### Menu [19]: WT-LED

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

Options: OFF/RED/ORG/GREEN

Default: ORG

## Menu [20]: RX-LED

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

Options: OFF/RED/ORG/GREEN

Default: GREEN

#### Menu [21]: DEL-CH

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

## Menu [22]: CH-NAME

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

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

#### Menu [23]: PRICH-SW

Function: Allows you to turn the priority channel function on or off. When enabled, the radio will scan the channel every 3 seconds.

Options: ON/OFF

Default: OFF

### Menu [24]: SPK-CONT

Function: Selects the active speaker for the radio. The KG-1000G has three speakers.

One is built into the hand microphone and two are built into the body of the

radio.

Options: SPK1/SPK2/SPK1+2

Default: SPK1

SPK1: Activates the speakers in the base of the radio only SPK2: Activates the speaker in the hand microphone only

SPK1+2: Activates all three speakers

### Menu [25]: AUTOLOCK

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

Options: ON/OFF

Default: OFF

### Menu [26]: RX-CTC

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 74 to learn how to enter non-standard tones.

Options: OFF/standard CTCSS/Non-standard CTCSS

Default: OFF

### Menu [27]: RX-DCS

Function: Sets the receiving DCS code for each channel. Use the arrow keys to select your preferred code and then MENU to confirm. See page 75 to learn how to enter non-standard DCS codes.

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

Default: OFF

## Menu [28]: TX-CTC

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 74 to learn how to enter non-standard tones.

Options: OFF/Standard CTCSS/Non-standard CTCSS

Default: OFF

# Menu [29]: TX-DCS

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 75 to learn how

to enter non-standard DCS codes.

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

Default: OFF

# Menu [30]: RPT-SPK

Function: When paired with another KG-1000G 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

### Menu [31]: RPT-PTT

Function: When paired with another KG-1000G 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

## Menu [32]: RPT-SET

Function: Enables Repeater Mode. Requires two KG-1000G transceivers connected with a data cable for this to function. See page 70 for more information.

Options: RADIO/RPT-RX/T-W RPT

Default: RADIO

RADIO: Sets the KG-1000G to operate as a normal transceiver RPT-RX: Sets the unit to operate as a repeater in receive mode

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

# Menu [33]: SCAN-ADD

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

Options: ON/OFF

Default: ON

# Menu [34]: APO-TIME

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/150MINOFF/30MIN/60MIN/90 MIN/120MIN/150MIN

Default: OFF

### Menu [35]: ALERT

Function: Activates the tone alert. 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 [MAIN] key on the microphone.

### Menu [36]: COMPAND

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

Options: ON/OFF

Default: OFF

# Menu [37]: FAN-SET

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

Options: TX / HI-TE/TX / ALWAYS

Default: HI-TE/TX

TX: The fan turns on when transmitting

HI-TE/TX: The fan turns on when the temperature of the radio is high during transmit.

ALWAYS: The fan is always on.

## Menu [38]: LOW-V

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 is installed in a car or connected to an unstable power source such as a vehicle battery.

Options: ON/OFF

Default: OFF

### Menu [39]: SCRAM

Function: Activating this function will descramble incoming signals that are scrambled using one of 8 supported protocols. Not available on GMRS frequencies.

Options: OFF/SCRAM 1-8

Default: OFF

# Menu [40]: SC-QT

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: DECODER/ENCODER/ALL

Default: DECODER

DECODER: Saves the scanned tone to the RX-CTC or RX-DCS setting ENCODER: Saves the scanned tone to the TX-CTC or TX-DCS setting.

ALL: Saves the scanned tone to both.

# Menu [41]: SC-CTC

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 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.

## Menu [42]: SC-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 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.

#### Menu [43]: SC-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

#### Menu [44]: RC-SW

Function: Enables the remote control functions of the radio. These functions can only be set through the programming software.

Options: ON/OFF

Default: OFF

### Menu [45]: PF1-SET

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/STUN/KILL/MONI/INSPEC

Default: OFF

STUN: Sends an ANI ID code to stun another radio set to the same code remotely. KILL: Sends an ANI ID code to kill another radio set to the same code remotely.

MONI: Sends an ANI ID code to activate the monitor of another radio set to the same code.

INSPEC: Sends an ANI ID code to activate inspection on another radio set to the same code.

## Menu [46]: RPT-TONE

Function: The repeater tone is the signal received by the radio when the repeater is offline.

Options: OFF/ON

Default: ON

# Menu [47]: RESET

Function: Resets the transceiver to factory defaults.

Options: VFO/ALL

Default: VFO

VFO: Resets only function settings to factory defaults. Channel parameters are not reset.

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

### Menu [48]: KEY-A

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

Options: OFF/B/SW/MENCH/ H/M/L/VFO/MR/SET-D/TDR/SQL/SCAN/ FM-RADIO/SC-CTC/SC-DCS

Default: FM RADIO

### Menu [49]: KEY-B

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

Options: OFF/B/SW/MENCH/H/M/L/VFO/MR/SET-D/TDR/SQL/SCAN/FM-RADIO/SC-CTC/SC-DCS

Default: SCAN

## Menu [50]: KEY-C

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

Options: OFF/B/SW/MENCH/H/M/L/VFO/MR/SET-D/TDR/SQL/SCAN/

FM-RADIO/SC-CTC/SC-DCS

Default: TDR

## Menu [51]: ABR

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

# Menu [52]: 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 radio channel

menu. Press the UP and DOWN keys to choose the radio channel, then press [MENU]to confirm.

### Menu [53]: AUT. AM

Function: When activated, the KG-1000G will automatically recognize AM frequencies. Only available on "Area A".

Options: ON/OFF

Default: ON

## Menu [54]: AM-SW

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

Options: ON/OFF

Default: OFF

# **DTMF Encoding**

The KG-1000G features dual-tone multi-frequency (DTMF) encoding. The number pad on the hand microphone corresponds to DTMF codes as follows:

MENU			EXIT	•	AB		CD	
1 BAND	2 MHz	(T/OT)	* scan	<b>→</b>	1	2	3	*
4 MEMCH	5 <sub>H</sub> L	G VF0/MR	SCRAM	<b>→</b>	4	5	6	0
7 SET-D	8 TDR	9 sql	# LOCK	<b>→</b>	7	8	9	#

#### 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.

## Advanced Operation

# Repeater Mode Operation

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

#### How to configure two radios into a repeater

Through the RPT-SET function [MENU 32, p 58], you can set up the two individual units to communicate between each other to operate in tandem as one repeater transceiver.

Through MENU 32 RPT-SET, you can set the two transceivers as Repeater transceivers.

1. Set both radios to operate as a repeater in two-way receive/transmit mode (T-W RPT), or set one as the repeater receiver (RPT-RX) and the other as the repeater transceiver (T-W RPT).

RPT-TX: Receive only mode. Set one radio to this mode and the other to T-W-

RPT to create a directional repeater.

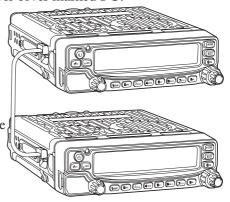
T-W RPT: Two way (transmit/receive) mode. Set both radios into this mode to operate as a two-way repeater.

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.

The two radios can now operate as together as one repeater.

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



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#### 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 30]. The option to transmit using the PTT on the hand microphone can while the radios are in repeater RX/TX mode be enabled or disabled by configuring the RPT-PTT option [MENU 31].

#### Repeater speaker switch (RPT-SPK) - Menu 30

When the transceiver is standby, press the [MENU] + [3] + [0] 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 31

When the transceiver is standby, press the [MENU] + [3] + [1] 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 Tone (RPT-TONE) – Menu 46

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 46, p.65). The repeater receipt reports the working status of the repeater to the operator who is attempting to access it.

When the transceiver is standby, press the [MENU] + [4] + [6] 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 [MENU] key to confirm, and press the [EXIT] key to return to standby.

## Repeat Hold Timer (Programming Software Only)

The Repeating 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 predermined interval while waiting for a response. If no valid QT/DQT is detected within the hold time,

## **Advanced Operation**

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 100 ms- 5000 ms (5 seconds) after the received QT/QDT signal disappears. This function is only accessible and configured through the KG-1000G programming software.

#### 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, and the other area will act as the transmitter.

## Setting Non-Standard CTCSS or DCS

#### How to Set Non-Standard CTCSS

The KG-1000G 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-CTC or TX-CTC), 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] + [2] + [6], the screen will display: RX-CTC, 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 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 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

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Negative code, and then press MENU to confirm.

Example 1: Set the receive DCS as D105N

In standby, press [MENU] + [2] + [7] 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] + [2] + [7] 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.



Before assuming your KG-1000G 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	Check volume level.
no sound is heard.	■ Disable CTCSS/DCS or be sure setting matches
	incoming transmission.
	■ Check squelch settings.
Keypad is unresponsive	■ Check if keypad has been locked.
	Check if other keys are currently pressed
Unwanted interference is	■ Enable CTCSS or DCS tone to filter out unwanted
being received.	transmissions.
	■ Use a different channel
Voice pause ever 3 seconds	Check if the "PRICH-SW" (Priority scanning switch)
	is turned on.

# Troubleshooting

Problem	Solution
Cannot activate Scan	Check if the scan group channel or Scan Add function is turned on.
Transceiver automatically shuts off	Check if your power source is below 11.5 volts.
Siluts oii	■ Check if APO menu setting is activated.
Transceiver does not transmit or receive	Check if transceiver has been stunned or killed.
Repeater mode not work-	Be sure the A/B area is set for the repeater's correct
ing	operating frequency.
Cannot transmit in repeat-	Check to see if the receivers squelch and CTCSS /
er mode	DCS settings are correct.



Genera	al	Receiver	Narrow bandwidth		
Frequency	Frequency Range for US: RX: 50.000-54.995MHz, 65.000-108MHz, 108.000-180.995MHz &	Adjacent Channel Selectivity	≤ 60dB		
Range	320.000-349.995MHz, 400.000-479.995MHz,700-824MHz,	Intermodulation	≤ 60dB		
	849-869MHz,894-960MHz TX: 462.550-462.725MHz (GMRS Frequencies)	Spurious Response	≤ 70dB		
	467.550-467.725MHz (GMRS Repeater Frequencies)	Audio Response	+1~-3dB(0.3~3KHz)	+1~-3dB(0.3~2.55KHz)	
Step Frequency	2.5KHz / 5KHz / 6.25KHz / 1QKHz / 12.5KHz / 20KHz / 25KHz / 30KHz / 50KHz / 100KHz	Signal to Noise Ratio	≥45dB	≥40dB	
Memory Channels	999	Audio Distortion	≤ 5%		
Work Mode	F3E	Audio Power	Transceiver≤3W		
Operating Temperature	-20°C~+40°C	7 dato i owei	Hand Mic	rophone≤1W	
Antenna Impedance	50Ω				
Power Requirement	13.8VDC ±15% (Negative Grounded)				
Weight	1437.8g (including microphone)				
Dimensions	140 x 44 x 207 (mm)				

Transmitter		
Type of Modulation	FM	
Adjacent Channel Power	≥60dB	
Spurious	≽60dB	
Audio Response	+1~-3dB(0.3~2.55KHz)	

#### Technical Information

#### **Standard CTCSS and DCS Tones**

The following is a list of the standard CTCSS and DCS tones supported by the KG-1000G. 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.

СТС	SS								
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



DC	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

#### **Technical Information**

## **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	467.5675	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



# Repeater Channels

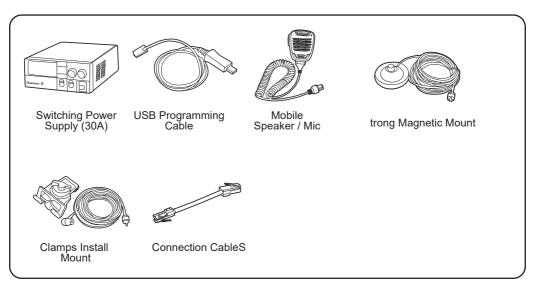
Ch.	Name	Receive Frequency	Transmit Frequency	Max Power
23	RPT-15	462.5500	467.5500	50 Watts
24	RPT-16	462.5750	467.5750	50 Watts
25	RPT-17	462.6000	467.6000	50 Watts
26	RPT-18	462.6250	467.6250	50 Watts
27	RPT-19	462.6500	467.6500	50 Watts
28	RPT-20	462.6750	467.6750	50 Watts
29	RPT-21	462.7000	467.7000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

## Technical Information

#### 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		





Note: Antenna gain including cable loss must not exceed 4.14 dBi for satisfying FCC RF exposure limit.

#### FCC Statement:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment's antenna should be installed and operated with 40 cm for 462/467 MHz main channels and 462 MHz interstitial channels between the radiator & your body.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.